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<b>Table 1. The Colorado Model Content Standards and Subcontent Areas</b>		
<b>Reading</b>		
<b>Content Standards</b>		
CS	Grades	
1	3-10	Reading Comprehension
4	4-10	Thinking Skills
5	4-10	Use of Literary Information
6	4-10	Literature
<b>Subcontent Areas</b>		
SA	Grades	
1	7-10	Fiction
2	3-10	Nonfiction
3	3-10	Vocabulary
4	7-10	Poetry
1/4	3-6	Fiction and Poetry
<b>Writing</b>		
<b>Content Standards</b>		
CS	Grades	
2	3-10	Write for a Variety of Purposes
3	3-10	Write Using Conventions
<b>Subcontent Areas</b>		
SA	Grades	
5	3-10	Paragraph Writing
6	4-10	Extended Writing
7	3-10	Grammar and Usage
8	3-10	Mechanics
<b>Mathematics</b>		
<b>Content Standards</b>		
CS	Grades	
1	3-6	Number Sense
2	4-10	Algebra, Patterns, and Functions
2/3	3	Algebra, Patterns, and Functions / Statistics and Probability
3	4-10	Statistics and Probability
4/5	3-10	Geometry and Measurement
6	3-6	Computational Techniques
1/6	7-10	Number Sense and Computational Techniques



<b>Table 1. The Colorado Model Content Standards and Subcontent Areas (Concluded)</b>		
<b>Mathematics (Continued)</b>		
<b>Subcontent Areas</b>		
SA	Grades	
1	4-6	Number and Operation Sense
1	7	Number Sense
1	8	Linear Pattern Representation
1	9	Multiple Representations of Linear/Nonlinear Functions
1	10	Multiple Representations of Functions
2	4-6	Patterns
2	7	Area and Perimeter Relationships
2	8-9	Proportional Thinking
2	10	Probability and Counting Techniques
3	4	Measurement
3	5	Data Displays
3	6 and 8	Geometry
<b>Science</b>		
<b>Content Standards</b>		
CS	Grades	
1/5	5, 8, and 10	Scientific Investigation and the Nature of Science
2	5, 8, and 10	Physical Science
3	5, 8, and 10	Life Science
4	5, 8, and 10	Earth and Space Science
<b>Subcontent Areas</b>		
SA	Grades	
1	5, 8, and 10	Experimental Design and Investigations
2	5, 8, and 10	Results and Data Analysis
3	8	Physics Concepts
4	10	Chemistry Concepts
5	8 and 10	Life Processes
6	8 and 10	Geology and Astronomy



**Table 2. Configuration of 2008 CSAP Assessments**

Content Area	Grade	Maximum Possible Points	Total # of Items			Frequency of CR Items with the Given Number of Maximum Points			
			MC	CR	Total	1	2	3	4
Reading	3	52	32	8	40		4	4	
Reading	4	91	56	14	70		8	5	1
Reading	5	91	56	14	70		8	5	1
Reading	6	91	56	14	70		8	5	1
Reading <sup>*1</sup>	7	90	55	14	69		8	5	1
Reading	8	91	56	14	70		7	7	
Reading <sup>*1</sup>	9	94	55	14	69		3	11	
Reading <sup>*3</sup>	10	92	53	14	67		5	7	2
Writing	3	56	35	18	53	15	3		
Writing	4	69	40	13	53	7	1		5
Writing	5	69	40	13	53	7	1		5
Writing	6	69	40	13	53	7	1		5
Writing	7	69	40	13	53	7	1		5
Writing	8	69	40	13	53	7	1		5
Writing	9	69	40	13	53	7	1		5
Writing	10	69	40	13	53	7	1		5
Spanish Reading	3	52	32	8	40		4	4	
Spanish Reading	4	91	56	14	70		7	7	
Spanish Writing	3	56	35	18	53	15	3		
Spanish Writing	4	69	40	13	53	7	1		5
Mathematics <sup>*4</sup>	3	48	32	7	39		5	2	
Mathematics <sup>*4</sup>	4	94	54	14	68		5	6	3
Mathematics	5	96	54	15	69		6	6	3
Mathematics	6	87	45	15	60		6	6	3
Mathematics	7	87	45	15	60		6	6	3
Mathematics	8	87	45	15	60		6	6	3
Mathematics <sup>*1</sup>	9	86	44	15	59		6	6	3
Mathematics	10	87	45	15	60		6	6	3
Science <sup>*2</sup>	5	86	55	18	73	5	13		
Science	8	100	60	23	83	9	12	1	1
Science <sup>*2</sup>	10	98	58	23	81	10	10	2	1

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. 1 MC item removed

2. 2 MC items removed

3. 3 MC items removed

4. 1 CR item removed



**Table 3. Configuration of 2008 CSAP Reading Assessments by Grade, Content Standard, Subcontent Area, and Item Type**

Grade	Content Area	Item Type	Content Standard								Subcontent Area									
			1		4		5		6		1		1/4		2		3		4	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
3	Reading	MC	32	32									14	14	8	8	10	10		
		CR	8	20									4	9	4	11				
4	Reading	MC	27	27	13	13	12	12	4	4			19	19	15	15	10	10		
		CR	4	10	2	5	3	6	5	14			8	20	3	9				
5	Reading	MC	20	20	12	12	15	15	9	9			23	23	8	8	10	10		
		CR	5	11	3	8	2	5	4	11			7	16	5	14				
6	Reading	MC	25	25	9	9	14	14	8	8			20	20	9	9	13	13		
		CR	2	6	5	11	2	6	5	12			8	20	4	9				
7	Reading <sup>*1</sup>	MC	14	14	14	14	15	15	12	12	5	5			10	10	10	10	15	15
		CR	6	17	3	6	2	5	3	7	5	13			6	13			2	7
8	Reading	MC	16	16	18	18	12	12	10	10	4	4			21	21	10	10	9	9
		CR	6	15	1	2	3	8	4	10	1	2			6	15			4	10
9	Reading <sup>*2</sup>	MC	21	21	13	13	14	14	7	7	9	9			16	16	10	10	6	6
		CR	4	11	3	8	2	6	5	14	4	11			5	14			3	8
10	Reading <sup>*3</sup>	MC	18	18	10	10	18	18	7	7	12	12			4	4	10	10	9	9
		CR	4	12	4	11	1	2	5	14	6	16			3	9			4	12
3	Spanish Reading	MC	32	32									13	13	7	7	12	12		
		CR	8	20									5	11	3	9				
4	Spanish Reading	MC	27	27	11	11	10	10	8	8			18	18	17	17	11	11		
		CR	4	10	3	7	3	8	4	10			8	20	3	7				

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. Removed one MC item from calibration in CS6–SA4

2. Removed one MC item from calibration in CS5

3. Removed three MC items from calibration (one in CS5 and two in CS1–SA3)



**Table 4. Configuration of 2008 CSAP Writing Assessments by Grade,  
Content Standard, Subcontent Area, and Item Type**

Grade	Content Area	Item Type	Content Standard				Subcontent Area							
			2		3		5		6		7		8	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
3	Writing	MC	12	12	23	23	5	5			10	10	13	13
		CR	9	12	9	9	12	15			3	3	3	3
4	Writing	MC	15	15	25	25	6	6			17	17	8	8
		CR	6	21	7	8	3	12	4	11	3	3	3	3
5	Writing	MC	15	15	25	25	4	4			25	25	6	6
		CR	6	21	7	8	3	12	4	11	2	2	4	4
6	Writing	MC	15	15	25	25	5	5			19	19	14	14
		CR	6	21	7	8	3	12	4	11	3	3	3	3
7	Writing	MC	15	15	25	25	6	6			18	18	14	14
		CR	6	21	7	8	3	12	4	11	2	2	4	4
8	Writing	MC	15	15	25	25	8	8			15	15	14	14
		CR	6	21	7	8	3	12	4	11	2	2	4	4
9	Writing	MC	15	15	25	25	6	6			13	13	16	16
		CR	6	21	7	8	3	12	4	11	3	3	3	3
10	Writing	MC	15	15	25	25	7	7			18	18	11	11
		CR	6	21	7	8	3	12	4	11	2	2	4	4
3	Spanish Writing	MC	12	12	23	23					17	17	7	7
		CR	9	12	9	9	12	15			3	3	3	3
4	Spanish Writing	MC	13	13	27	27	6	6			15	15	12	12
		CR	6	21	7	8	3	12	4	11	4	4	2	2



**Table 5. Configuration of 2008 CSAP Mathematics Assessments by Grade, Content Standard, Subcontent Area, and Item Type**

Grade Content Area Item Type			Content Standard														Subcontent Area					
			1		1/6		2		2/3		3		4/5		6		1		2		3	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
3	Mathematics <sup>*1</sup>	MC	6	6					9	9			12	12	5	5						
		CR	1	2					2	4			2	5	2	5						
4	Mathematics <sup>*2</sup>	MC	10	10			6	6			9	9	17	17	12	12	10	10	5	5	4	4
		CR	3	8			3	8			2	5	4	12	2	7	3	8	3	8	2	7
5	Mathematics	MC	14	14			8	8			7	7	11	11	14	14	12	12	5	5	3	3
		CR	2	5			4	11			4	12	3	9	2	5	1	2	3	9	4	12
6	Mathematics	MC	10	10			7	7			7	7	12	12	9	9	7	7	6	6	4	4
		CR	2	7			4	12			3	9	4	10	2	4	2	6	3	9	3	8
7	Mathematics	MC			15	15	9	9			9	9	12	12			5	5	6	6		
		CR			4	11	3	8			3	9	5	14			4	13	2	5		
8	Mathematics	MC			11	11	11	11			9	9	14	14			6	6	9	9	4	4
		CR			4	11	4	11			3	8	4	12			4	11	2	7	3	9
9	Mathematics <sup>*3</sup>	MC			10	10	11	11			11	11	12	12			2	2	8	8		
		CR			3	7	5	14			4	11	3	10			5	15	4	11		
10	Mathematics	MC			11	11	12	12			11	11	11	11			5	5	5	5		
		CR			2	5	5	14			4	11	4	12			3	9	2	4		

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. Removed one CR item from calibration in CS1
2. Removed one CR item from calibration in CS1–SA1
3. Removed one MC item from calibration in CS2



**Table 6. Configuration of 2008 CSAP Science Assessments by Grade, Content Standard, Subcontent Area, and Item Type**

Grade	Content Area	Item Type	Content Standard								Subcontent Area											
			1/5		2		3		4		1		2		3		4		5		6	
			No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.	No. of Items	Total Pts.
5	Science <sup>*1</sup>	MC	21	21	12	12	10	10	12	12	10	10	9	9								
		CR	9	14	3	6	3	6	3	5	5	7	3	5								
8	Science	MC	23	23	11	11	13	13	13	13	11	11	10	10	7	7			9	9	9	9
		CR	9	17	6	9	4	7	4	7	6	10	3	7	4	6			3	5	3	5
10	Science <sup>*2</sup>	MC	17	17	12	12	15	15	14	14	10	10	5	5			10	10	8	8	10	10
		CR	13	23	4	7	3	5	3	5	8	13	4	7			3	5	2	4	2	4

\*Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

1. Removed two MC items from calibration in CS3

2. Removed two MC item from calibration (one in CS2 and one in CS4–SA6)



**Table 7. Previously Administered Items Selected for 2008 Test Forms  
that were Flagged for DIF or Fit**

Language	Content Area	Grade	Item Type	2008 Item	2008 Anchor	Year Flagged	DIF Flag*	Fit Flag*
English	Mathematics	5	CR	16		2002	G	0
English	Mathematics	5	CR	34		2006	0	1
English	Mathematics	5	CR	53		2002	G	0
English	Mathematics	6	CR	7		2002	G	0
English	Mathematics	6	MC	9		2006	0	1
English	Mathematics	7	CR	35		2004	0	1
English	Mathematics	7	CR	35		2006	0	1
English	Mathematics	7	CR	44		2004	0	1
English	Mathematics	7	CR	44		2006	0	1
English	Mathematics	8	MC	33	anchor	2004	0	1
English	Mathematics	8	CR	34		2006	0	1
English	Mathematics	8	CR	40		2006	0	1
English	Mathematics	9	CR	12		2006	0	1
English	Mathematics	10	CR	4		2006	0	1
English	Mathematics	10	MC	13		2006	0	1
English	Mathematics	10	MC	52	anchor	2004	0	1
English	Reading	3	CR	6		2006	0	1
English	Reading	4	CR	30		2006	0	1
English	Reading	8	CR	40		2006	0	1
English	Reading	9	MC	37		2006	0	1
English	Reading	9	MC	100		2006	0	1
English	Reading	9	MC	107		2004	0	1
English	Reading	10	MC	100	anchor	2006	0	1
English	Reading	10	MC	101	anchor	2006	0	1
English	Reading	10	MC	105	anchor	2006	0	1
English	Writing	4	CR	3A		2004	0	1
English	Writing	4	CR	3A		2006	0	1
English	Writing	6	CR	92		2004	0	1
English	Writing	6	CR	92		2002	G	0
English	Writing	7	CR	47		2004	0	1
English	Writing	7	CR	47		2006	0	1
English	Writing	7	CR	2C		2002	G	0
English	Writing	7	CR	2F		2006	0	1
English	Writing	7	CR	3A		2004	0	1
English	Writing	7	CR	3A		2006	0	1
English	Writing	8	CR	88		2002	0	1
English	Writing	8	CR	88		2004	0	1
English	Writing	8	CR	88		2006	0	1
English	Writing	9	CR	90		2004	0	1
English	Writing	9	CR	2C		2004	0	1
English	Writing	9	CR	2C		2006	0	1
English	Writing	9	CR	3A		2006	0	1
English	Writing	10	CR	96		2005	0	1
English	Writing	10	CR	96		2003	0	1

\* 0=No Flag; E=Flagged for Ethnicity; G=Flagged for Gender; 1=Flagged for Fit



**Table 7. Previously Administered Items Selected for 2008 Test Forms  
that were Flagged for DIF or Fit (Concluded)**

Language	Content Area	Grade	Item Type	2008 Item	2008 Anchor	Year Flagged	DIF Flag*	Fit Flag*
English	Writing	10	CR	96		2006	0	1
English	Writing	10	CR	3A		2004	0	1
Spanish	Reading	3	CR	1		2007	0	1
Spanish	Reading	3	MC	7	anchor	2004	0	1
Spanish	Reading	3	MC	14		2007	0	1
Spanish	Reading	3	MC	20	anchor	2007	0	1
Spanish	Reading	3	CR	26		2006	0	1
Spanish	Reading	3	CR	26		2002	0	1
Spanish	Reading	3	CR	26		2003	0	1
Spanish	Reading	4	MC	15	anchor	2005	0	1
Spanish	Reading	4	MC	23		2004	0	1
Spanish	Reading	4	MC	26		2003	0	1
Spanish	Reading	4	MC	28		2005	0	1
Spanish	Reading	4	MC	28		2007	0	1
Spanish	Reading	4	CR	44		2004	0	1
Spanish	Reading	4	MC	48		2004	0	1
Spanish	Reading	4	MC	92		2004	0	1
Spanish	Reading	4	MC	92		2003	0	1
Spanish	Reading	4	MC	94		2003	0	1
Spanish	Reading	4	MC	107		2005	0	1
Spanish	Reading	4	MC	113		2004	0	1
Spanish	Writing	3	MC	34		2004	0	1
Spanish	Writing	3	CR	27A		2007	0	1
Spanish	Writing	4	MC	52		2005	0	1
Spanish	Writing	4	MC	55		2005	0	1
Spanish	Writing	4	MC	61		2005	0	1
Spanish	Writing	4	MC	71		2004	0	1
Spanish	Writing	4	MC	74		2004	0	1
Spanish	Writing	4	MC	76		2005	0	1
Spanish	Writing	4	MC	79		2004	0	1
Spanish	Writing	4	MC	85		2004	0	1
Spanish	Writing	4	CR	3A		2005	0	1

\* 0=No Flag; E=Flagged for Ethnicity; G=Flagged for Gender; 1=Flagged for Fit



**Table 8. Lowest and Highest Obtainable Scale Scores for the CSAP Assessments**

Grade	Content Area	LOSS	HOSS
3	Reading	150	795
4	Reading	180	940
5	Reading	220	955
6	Reading	260	970
7	Reading	300	980
8	Reading	330	990
9	Reading	350	995
10	Reading	370	999
3	Spanish Reading	300	740
4	Spanish Reading	300	790
3	Writing	150	680
4	Writing	190	730
5	Writing	220	780
6	Writing	230	840
7	Writing	240	890
8	Writing	250	910
9	Writing	260	930
10	Writing	270	950
3	Spanish Writing	250	750
4	Spanish Writing	300	790
3	Mathematics	150	700
4	Mathematics	180	780
5	Mathematics	220	800
6	Mathematics	240	830
7	Mathematics	280	860
8	Mathematics	310	890
9	Mathematics	340	920
10	Mathematics	370	950
5	Science	300	900
8	Science	300	900
10	Science	300	900



**Table 9. Rater Reliability Statistics -- Mathematics**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	4	2928	2	1.01	1.01	0.89	0.89	0.95	95.1	4.7	99.8
3	9	2934	2	1.48	1.48	0.65	0.64	0.88	91.8	8.2	100.0
3	16	2910	2	0.95	0.93	0.90	0.89	0.87	86.0	13.3	99.3
3	20	2935	3	1.54	1.54	1.00	1.00	0.93	91.5	8.3	99.8
3	24	2934	2	1.06	1.05	0.69	0.69	0.92	94.5	5.4	99.9
3	26	2930	2	1.45	1.45	0.68	0.68	0.88	91.2	8.8	100.0
3	33	2935	2	1.58	1.59	0.62	0.62	0.93	96.3	3.7	99.9
3	40	2934	3	1.88	1.87	0.90	0.90	0.90	88.2	11.3	99.5
4	5	2932	2	1.47	1.47	0.75	0.75	0.95	97.0	2.9	99.9
4	11	2915	2	0.84	0.84	0.77	0.77	0.92	95.5	4.4	100.0
4	15	2939	3	2.24	2.23	0.79	0.80	0.90	91.3	8.6	99.9
4	18	2941	3	1.84	1.84	0.96	0.96	0.96	95.7	4.2	99.9
4	23	2935	4	2.69	2.70	1.24	1.24	0.93	90.1	9.3	99.4
4	27	2937	2	1.19	1.19	0.68	0.68	0.90	92.8	7.2	100.0
4	31	2901	2	1.58	1.58	0.71	0.71	0.90	96.9	2.9	99.8
4	35	2935	3	1.31	1.30	1.17	1.17	0.94	90.3	8.7	99.0
4	40	2934	3	0.98	0.98	1.14	1.14	0.93	91.3	7.4	98.7
4	46	2940	4	2.76	2.76	1.23	1.23	0.94	89.3	10.0	99.3
4	49	2938	2	1.56	1.55	0.58	0.58	0.82	89.6	10.5	100.0
4	55	2938	3	2.19	2.20	0.87	0.87	0.89	88.1	11.6	99.6
4	60	2936	2	1.70	1.70	0.54	0.54	0.93	97.8	2.3	100.0
4	65	2936	3	1.73	1.72	1.15	1.15	0.94	89.9	9.7	99.6
4	69	2933	4	2.52	2.52	1.31	1.31	0.95	93.3	6.4	99.7
5	6	2868	2	1.39	1.37	0.66	0.66	0.89	91.7	8.2	100.0
5	14	2858	3	2.21	2.17	0.81	0.81	0.79	80.0	19.1	99.0
5	16	2869	2	0.96	0.97	0.97	0.96	0.96	95.3	4.5	99.8
5	20	2861	3	1.15	1.15	1.10	1.10	0.85	74.4	24.0	98.4
5	23	2868	4	3.19	3.20	1.03	1.02	0.92	90.0	9.5	99.5
5	27	2865	2	1.36	1.36	0.83	0.83	0.94	94.0	5.9	100.0
5	32	2865	3	1.45	1.46	1.04	1.04	0.95	93.4	6.4	99.8
5	34	2728	2	1.83	1.84	0.47	0.47	0.68	98.4	1.6	100.0
5	39	2871	3	1.81	1.80	1.03	1.03	0.91	87.2	12.1	99.2
5	46	2864	4	2.43	2.43	1.06	1.06	0.86	78.3	20.8	99.1
5	49	2866	2	1.20	1.20	0.93	0.93	0.93	91.4	8.2	99.7
5	53	2868	3	2.07	2.06	1.06	1.06	0.90	86.2	12.3	98.5
5	57	2858	2	1.38	1.37	0.74	0.74	0.90	92.0	7.9	99.9
5	66	2870	3	2.06	2.07	1.09	1.09	0.94	91.1	8.2	99.3
5	69	2871	4	2.82	2.81	1.22	1.23	0.95	89.7	10.2	99.8



**Table 9. Rater Reliability Statistics – Mathematics (Continued)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
6	4	2850	2	1.74	1.75	0.49	0.50	0.87	97.2	2.6	99.8
6	7	2853	3	2.43	2.44	0.71	0.71	0.79	85.7	13.5	99.2
6	11	2842	2	0.69	0.70	0.79	0.79	0.90	92.3	7.5	99.8
6	16	2808	3	1.46	1.45	1.27	1.27	0.86	80.4	17.6	98.0
6	20	2857	4	1.93	1.93	1.07	1.07	0.89	84.4	15.4	99.8
6	26	2853	2	1.18	1.18	0.95	0.95	0.94	94.4	4.9	99.3
6	29	2854	3	1.66	1.66	1.03	1.03	0.95	95.0	4.9	99.9
6	33	2847	2	1.31	1.31	0.85	0.85	0.83	88.3	8.6	97.0
6	37	2852	3	1.03	1.03	1.02	1.03	0.88	90.9	5.8	96.6
6	40	2852	4	3.39	3.38	0.96	0.96	0.78	80.4	16.3	96.7
6	43	2851	2	1.51	1.51	0.72	0.72	0.89	91.3	8.7	99.9
6	46	2846	2	1.15	1.15	0.87	0.87	0.94	95.9	3.9	99.8
6	48	2853	3	2.07	2.08	0.93	0.94	0.89	86.6	13.1	99.7
6	57	2839	3	1.04	1.03	0.87	0.86	0.80	81.1	18.3	99.3
6	60	2852	4	2.53	2.51	1.16	1.17	0.90	85.6	13.5	99.1
7	3	2826	2	0.83	0.84	0.84	0.84	0.92	93.6	6.2	99.7
7	8	2826	3	1.01	1.02	0.83	0.83	0.80	82.6	16.8	99.4
7	12	2765	2	1.09	1.10	0.88	0.88	0.77	80.0	18.0	97.9
7	14	2820	3	1.50	1.50	1.08	1.08	0.88	84.5	14.7	99.2
7	20	2769	4	1.24	1.23	1.20	1.20	0.82	88.9	10.1	99.0
7	25	2833	2	1.29	1.29	0.82	0.82	0.85	89.9	7.9	97.8
7	29	2813	3	0.92	0.93	0.77	0.77	0.77	83.7	15.7	99.4
7	33	2826	2	1.24	1.23	0.66	0.66	0.84	90.6	9.2	99.8
7	35	2827	3	1.96	1.95	0.90	0.89	0.89	92.0	7.9	99.9
7	40	2814	4	1.13	1.13	0.99	0.99	0.83	92.7	5.3	98.0
7	44	2831	2	1.13	1.13	0.79	0.79	0.90	93.5	6.3	99.8
7	48	2832	3	0.78	0.77	0.91	0.90	0.86	87.2	12.3	99.6
7	51	2801	2	0.46	0.46	0.79	0.79	0.87	94.4	4.6	99.0
7	55	2778	3	0.45	0.45	0.74	0.74	0.69	83.8	14.5	98.3
7	60	2805	4	2.14	2.13	1.42	1.43	0.84	78.3	16.8	95.1
8	3	2846	3	2.22	2.20	0.83	0.83	0.85	86.0	13.3	99.3
8	5	2772	2	1.26	1.26	0.85	0.84	0.79	82.8	16.0	98.8
8	7	2752	2	0.51	0.50	0.83	0.83	0.85	94.9	4.5	99.5
8	13	2807	3	1.08	1.09	0.97	0.97	0.82	84.6	13.9	98.5
8	20	2780	4	1.47	1.47	1.33	1.34	0.85	90.0	8.9	98.8
8	24	2824	2	0.95	0.95	0.70	0.70	0.90	96.3	3.6	99.9
8	26	2805	3	0.94	0.95	0.81	0.81	0.78	84.7	15.0	99.7
8	30	2838	2	1.44	1.44	0.64	0.64	0.86	92.4	7.5	100.0
8	34	2815	3	1.54	1.53	1.13	1.12	0.83	79.0	18.2	97.2
8	40	2838	4	2.44	2.45	0.93	0.94	0.84	85.2	14.4	99.7
8	44	2792	2	0.81	0.81	0.87	0.86	0.89	93.5	6.2	99.8
8	46	2831	3	1.75	1.76	0.94	0.93	0.92	96.1	3.8	99.9
8	49	2818	2	0.84	0.85	0.78	0.78	0.80	80.6	19.3	99.9
8	55	2820	3	1.13	1.13	0.90	0.90	0.80	78.9	20.6	99.5
8	60	2815	4	1.93	1.93	1.65	1.65	0.89	81.5	15.3	96.7



**Table 9. Rater Reliability Statistics – Mathematics (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
9	3	2908	2	0.48	0.49	0.74	0.74	0.83	94.3	5.6	99.9
9	7	2875	3	1.10	1.10	1.26	1.27	0.82	87.3	10.0	97.3
9	12	2924	2	0.89	0.89	0.79	0.79	0.76	79.3	20.4	99.7
9	15	2915	3	0.42	0.41	0.73	0.74	0.75	92.4	7.5	99.9
9	20	2927	4	2.11	2.11	1.06	1.05	0.76	81.0	18.2	99.2
9	23	2921	2	0.97	0.97	0.71	0.71	0.86	97.0	3.0	100.0
9	26	2909	3	0.92	0.92	0.87	0.88	0.74	83.4	16.1	99.5
9	32	2916	2	0.82	0.82	0.79	0.79	0.86	95.9	4.1	99.9
9	35	2922	3	1.49	1.48	0.94	0.94	0.70	70.9	26.6	97.5
9	40	2889	4	0.62	0.62	1.19	1.19	0.77	87.1	11.9	99.0
9	43	2801	2	0.34	0.35	0.57	0.57	0.69	95.3	4.7	100.0
9	46	2889	3	0.79	0.80	1.01	1.01	0.77	86.2	12.6	98.7
9	50	2898	2	0.96	0.95	0.74	0.74	0.80	92.3	7.3	99.6
9	54	2904	3	1.08	1.08	0.78	0.79	0.63	75.5	22.3	97.8
9	60	2889	4	1.38	1.38	1.02	1.02	0.64	70.6	25.0	95.6
10	4	2754	2	1.44	1.45	0.81	0.80	0.78	88.5	10.0	98.5
10	7	2765	3	1.08	1.07	1.07	1.07	0.86	96.6	3.2	99.8
10	14	2745	2	0.05	0.05	0.28	0.27	0.57	98.0	1.8	99.9
10	18	2749	3	0.52	0.53	0.74	0.74	0.72	90.7	8.8	99.5
10	20	2739	4	0.70	0.70	1.24	1.24	0.78	89.1	9.5	98.7
10	25	2727	2	0.79	0.80	0.82	0.82	0.78	86.0	13.8	99.9
10	28	2736	3	1.04	1.04	0.75	0.75	0.70	88.0	11.6	99.6
10	32	2728	2	0.74	0.74	0.59	0.58	0.63	85.0	14.4	99.4
10	34	2683	3	1.20	1.20	1.31	1.31	0.82	89.8	8.9	98.7
10	40	2742	4	1.55	1.57	1.46	1.47	0.81	81.6	15.2	96.8
10	45	2742	2	0.51	0.51	0.76	0.76	0.80	91.3	8.4	99.7
10	48	2717	3	0.82	0.82	1.09	1.10	0.78	84.1	15.2	99.3
10	54	2735	2	1.27	1.26	0.54	0.54	0.66	88.7	11.3	100.0
10	57	2698	3	0.88	0.89	1.09	1.10	0.76	86.4	11.5	97.9
10	60	2747	4	1.51	1.50	0.93	0.92	0.64	75.3	22.6	97.9



**Table 10. Rater Reliability Statistics -- Reading**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	1	2863	3	1.39	1.40	1.11	1.12	0.76	71.7	21.6	93.3
3	6	2867	2	1.32	1.32	0.71	0.71	0.83	88.0	11.3	99.3
3	7	2841	2	1.19	1.20	0.85	0.84	0.90	93.5	6.1	99.7
3	13	2826	2	0.92	0.92	0.89	0.89	0.88	92.0	7.4	99.4
3	24	2866	3	1.11	1.09	0.97	0.95	0.76	68.6	29.5	98.1
3	26	2858	3	1.52	1.51	1.35	1.34	0.96	97.3	2.5	99.8
3	29	2849	2	0.93	0.93	0.85	0.85	0.90	91.9	7.7	99.6
3	35	2844	3	1.92	1.93	1.13	1.14	0.89	86.5	13.2	99.7
4	10	2859	2	1.04	1.04	0.86	0.87	0.79	79.3	18.3	97.6
4	11	2843	3	1.00	0.97	0.86	0.85	0.70	71.6	26.1	97.7
4	14	2816	4	1.75	1.76	1.24	1.25	0.75	64.1	31.2	95.3
4	18	2820	2	0.78	0.77	0.75	0.74	0.72	79.2	19.7	98.9
4	21	2826	2	0.91	0.91	0.95	0.95	0.92	96.8	3.0	99.8
4	25	2847	3	1.36	1.36	1.12	1.10	0.82	76.1	21.0	97.1
4	30	2862	2	1.44	1.43	0.67	0.67	0.82	88.3	11.4	99.6
4	33	2839	2	0.68	0.67	0.59	0.59	0.69	83.4	16.3	99.7
4	40	2844	3	1.00	1.02	0.88	0.89	0.62	71.4	22.9	94.3
4	45	2848	2	1.20	1.20	0.85	0.86	0.77	79.9	16.7	96.7
4	103	2869	2	1.72	1.72	0.60	0.59	0.79	90.2	9.0	99.2
4	104	2859	3	2.48	2.48	0.87	0.86	0.86	89.1	10.5	99.6
4	115	2864	3	1.53	1.54	0.99	0.98	0.86	84.1	14.7	98.8
4	116	2834	2	1.07	1.06	0.67	0.67	0.79	87.9	12.0	99.9
5	4	2820	2	1.68	1.67	0.60	0.60	0.83	90.3	9.6	99.9
5	9	2810	2	0.53	0.54	0.72	0.72	0.87	91.4	8.2	99.6
5	10	2815	3	1.16	1.15	1.08	1.08	0.92	89.2	10.3	99.4
5	11	2795	3	1.42	1.41	1.14	1.13	0.85	80.1	18.2	98.3
5	12	2798	3	1.05	1.06	0.95	0.95	0.80	78.0	20.5	98.5
5	22	2795	4	1.88	1.89	1.27	1.28	0.79	64.0	31.1	95.2
5	28	2810	2	0.25	0.26	0.63	0.64	0.70	91.2	4.4	95.6
5	35	2750	3	0.94	0.97	0.97	0.99	0.63	69.9	22.3	92.2
5	47	2798	3	1.17	1.17	0.92	0.93	0.68	71.5	24.1	95.6
5	52	2815	2	1.32	1.32	0.80	0.80	0.73	77.4	19.2	96.6
5	95	2800	2	1.36	1.39	0.89	0.88	0.83	88.2	8.7	96.8
5	96	2811	2	1.33	1.34	0.76	0.76	0.87	89.5	10.2	99.6
5	105	2806	2	1.38	1.39	0.79	0.79	0.89	91.7	7.9	99.6
5	106	2809	2	1.38	1.38	0.67	0.67	0.84	90.6	9.0	99.6



**Table 10. Rater Reliability Statistics – Reading (Continued)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
6	4	2861	2	1.74	1.74	0.52	0.53	0.77	91.3	7.8	99.1
6	10	2857	2	0.61	0.61	0.75	0.76	0.85	88.6	10.6	99.1
6	11	2848	3	1.06	1.07	0.83	0.84	0.65	61.6	36.2	97.7
6	12	2842	2	0.44	0.47	0.69	0.71	0.64	74.5	22.9	97.4
6	18	2834	2	1.13	1.12	0.68	0.66	0.65	72.0	27.7	99.7
6	19	2805	3	0.77	0.79	0.92	0.93	0.72	73.8	23.6	97.3
6	29	2854	2	0.59	0.59	0.85	0.85	0.73	82.8	10.7	93.5
6	35	2843	3	2.54	2.54	0.85	0.86	0.89	94.2	5.6	99.8
6	36	2796	3	2.67	2.65	0.76	0.79	0.80	96.6	3.1	99.7
6	93	2841	3	0.94	0.92	1.04	1.02	0.79	75.0	21.7	96.7
6	94	2843	2	1.13	1.13	0.84	0.84	0.89	89.8	9.7	99.5
6	106	2838	4	1.40	1.40	1.10	1.10	0.79	75.8	21.0	96.8
6	110	2812	2	0.59	0.57	0.69	0.67	0.69	77.7	21.6	99.3
6	111	2822	2	0.93	0.93	0.53	0.52	0.51	75.4	24.1	99.5
7	4	2819	3	2.17	2.17	1.03	1.03	0.84	82.8	15.5	98.4
7	5	2830	3	2.29	2.28	0.84	0.84	0.77	79.1	19.5	98.6
7	6	2819	3	1.17	1.16	0.78	0.78	0.70	73.6	25.6	99.2
7	11	2784	2	0.45	0.45	0.78	0.77	0.86	94.2	5.5	99.6
7	12	2798	2	1.13	1.13	0.69	0.69	0.64	72.2	27.2	99.4
7	13	2806	2	1.42	1.42	0.81	0.82	0.89	94.4	4.9	99.3
7	21	2789	3	1.14	1.14	0.89	0.90	0.68	72.0	24.6	96.6
7	36	2812	3	1.19	1.19	0.76	0.77	0.65	70.4	27.9	98.2
7	37	2832	2	1.08	1.07	0.70	0.69	0.71	76.6	22.8	99.3
7	90	2794	2	0.89	0.88	0.80	0.79	0.71	74.5	23.6	98.1
7	99	2796	4	1.52	1.52	1.10	1.09	0.77	76.0	21.9	97.9
7	103	2815	2	1.55	1.55	0.63	0.63	0.69	79.5	20.2	99.6
7	111	2761	2	0.61	0.61	0.63	0.65	0.62	76.7	22.8	99.5
7	112	2779	2	0.97	0.96	0.53	0.53	0.49	73.3	26.4	99.7
8	9	2825	2	1.10	1.09	0.76	0.77	0.75	80.4	18.8	99.1
8	13	2847	3	1.58	1.59	0.89	0.89	0.70	72.1	24.7	96.7
8	14	2846	2	1.76	1.76	0.52	0.52	0.76	92.6	7.3	99.9
8	22	2864	3	0.79	0.79	0.98	0.98	0.78	78.5	17.7	96.3
8	23	2800	2	1.29	1.29	0.63	0.62	0.60	75.7	23.8	99.6
8	29	2817	3	1.76	1.77	1.03	1.03	0.82	85.0	14.4	99.3
8	30	2763	3	1.61	1.61	1.28	1.28	0.84	86.3	13.4	99.6
8	39	2827	3	1.32	1.32	0.80	0.81	0.66	72.3	26.1	98.4
8	40	2846	2	1.08	1.07	0.71	0.70	0.67	74.8	24.1	98.9
8	89	2805	2	1.03	1.05	0.81	0.82	0.71	73.2	25.3	98.5
8	101	2757	2	0.79	0.78	0.65	0.64	0.70	86.5	13.3	99.8
8	102	2758	3	1.04	1.02	0.72	0.71	0.60	85.7	10.4	96.1
8	108	2757	3	2.10	2.11	1.08	1.07	0.79	88.0	11.4	99.4
8	116	2716	2	1.34	1.33	0.87	0.87	0.79	90.1	9.4	99.4



**Table 10. Rater Reliability Statistics – Reading (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
9	4	2929	3	1.68	1.68	0.86	0.86	0.67	73.9	22.8	96.7
9	5	2931	2	1.84	1.84	0.43	0.44	0.70	94.6	5.4	100.0
9	11	2920	3	1.61	1.59	0.82	0.81	0.55	55.8	41.4	97.2
9	12	2748	3	1.04	1.05	1.01	1.01	0.59	72.3	20.1	92.4
9	19	2859	3	1.42	1.42	1.14	1.13	0.77	80.9	17.3	98.2
9	27	2873	3	1.60	1.60	0.87	0.87	0.69	80.9	17.9	98.9
9	41	2829	3	1.75	1.73	1.12	1.12	0.67	67.5	27.0	94.5
9	42	2833	3	1.78	1.77	0.75	0.74	0.57	72.9	25.8	98.7
9	91	2847	2	0.86	0.85	0.66	0.66	0.69	85.8	14.1	99.9
9	92	2825	3	1.15	1.14	0.75	0.75	0.59	86.4	8.8	95.1
9	98	2822	3	1.80	1.78	0.99	1.00	0.60	62.4	32.0	94.4
9	102	2888	2	0.85	0.83	0.71	0.70	0.65	76.6	22.3	98.9
9	105	2833	3	2.12	2.14	0.99	0.98	0.74	93.4	5.8	99.2
9	114	2896	3	2.03	2.01	0.83	0.84	0.55	57.1	39.9	96.9
10	4	2477	2	0.58	0.60	0.78	0.78	0.51	69.9	24.6	94.5
10	5	2635	4	2.55	2.56	1.14	1.14	0.59	60.7	29.3	90.0
10	13	2656	3	1.77	1.74	0.81	0.81	0.57	62.3	36.2	98.5
10	24	2636	3	1.53	1.52	0.99	0.97	0.61	61.7	34.7	96.4
10	31	2636	2	0.92	0.92	0.75	0.75	0.61	76.2	20.8	97.0
10	37	2427	4	1.57	1.57	1.29	1.29	0.61	83.3	13.4	96.8
10	39	2616	3	1.64	1.64	0.92	0.92	0.66	76.0	23.0	98.9
10	46	2624	3	2.41	2.40	0.90	0.90	0.68	84.4	14.4	98.8
10	47	2593	3	1.72	1.74	0.90	0.91	0.59	66.5	30.8	97.3
10	54	2540	2	1.14	1.12	0.85	0.86	0.66	79.0	18.9	97.9
10	97	2593	3	1.87	1.85	1.00	1.01	0.63	67.9	28.4	96.3
10	103	2628	2	0.93	0.93	0.69	0.70	0.63	78.9	20.2	99.2
10	107	2614	3	1.62	1.64	0.92	0.92	0.64	70.2	29.1	99.3
10	110	2576	2	0.93	0.93	0.87	0.87	0.66	79.5	17.0	96.5



**Table 11. Rater Reliability Statistics -- Writing**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	1A	2899	1	0.75	0.74	0.43	0.44	0.91	97.2	2.8	100.0
3	1B	2900	1	0.27	0.27	0.44	0.44	0.91	97.1	2.9	100.0
3	1C	2901	1	0.60	0.60	0.49	0.49	0.93	97.0	3.0	100.0
3	1D	2902	1	0.98	0.98	0.15	0.15	0.80	99.4	0.6	100.0
3	1E	2898	1	0.87	0.87	0.34	0.34	0.87	97.6	2.5	100.0
3	1F	2900	1	0.13	0.13	0.34	0.34	0.93	98.9	1.1	100.0
3	13A	2898	2	1.07	1.06	0.29	0.27	0.43	91.1	8.9	100.0
3	13B	2898	1	0.99	0.99	0.12	0.12	0.48	98.6	1.4	100.0
3	13C	2898	1	0.80	0.80	0.40	0.40	0.53	85.4	14.7	100.0
3	13D	2898	1	0.87	0.87	0.34	0.33	0.52	89.3	10.7	100.0
3	30A	2900	2	1.09	1.09	0.36	0.37	0.46	86.0	14.0	100.0
3	30B	2901	1	0.97	0.97	0.16	0.17	0.52	97.6	2.5	100.0
3	30C	2901	1	0.82	0.82	0.39	0.39	0.52	85.9	14.1	100.0
3	30D	2901	1	0.83	0.82	0.38	0.38	0.46	84.7	15.3	100.0
3	39A	2894	2	1.04	1.04	0.32	0.30	0.42	89.3	10.6	99.9
3	39B	2894	1	0.97	0.97	0.18	0.17	0.50	97.1	2.9	100.0
3	39C	2894	1	0.78	0.79	0.41	0.41	0.56	85.6	14.4	100.0
3	39D	2895	1	0.88	0.89	0.32	0.32	0.51	90.2	9.9	100.0
4	1	2895	1	0.97	0.97	0.17	0.17	0.89	99.3	0.7	100.0
4	2A	2861	1	0.58	0.59	0.49	0.49	0.95	98.8	1.2	100.0
4	2B	2861	1	0.29	0.29	0.45	0.45	0.95	99.1	0.9	100.0
4	2C	2864	1	0.36	0.36	0.48	0.48	0.95	98.8	1.2	100.0
4	2D	2864	1	0.75	0.75	0.43	0.43	0.91	97.5	2.6	100.0
4	2E	2863	1	0.70	0.70	0.46	0.46	0.94	98.5	1.5	100.0
4	2F	2862	1	0.80	0.80	0.40	0.40	0.92	98.6	1.4	100.0
4	3A	2877	4	2.87	2.89	0.82	0.82	0.66	65.6	33.3	98.9
4	3B	2877	4	2.87	2.89	0.75	0.76	0.63	64.4	34.7	99.1
4	3C	2877	2	1.89	1.89	0.31	0.31	0.40	88.1	11.9	100.0
4	24	2817	4	2.30	2.31	0.77	0.75	0.58	65.9	32.7	98.6
4	75	2862	4	2.32	2.32	0.72	0.72	0.60	67.8	31.3	99.1
4	95	2843	4	2.38	2.37	0.77	0.77	0.62	66.9	32.2	99.1
5	1	2838	1	0.98	0.99	0.13	0.12	0.84	99.5	0.5	100.0
5	2A	2821	1	0.73	0.73	0.44	0.45	0.88	95.9	4.2	100.0
5	2B	2821	1	0.48	0.48	0.50	0.50	0.97	98.9	1.1	100.0
5	2C	2820	1	0.31	0.31	0.46	0.46	0.94	98.3	1.7	100.0
5	2D	2820	1	0.78	0.78	0.41	0.42	0.92	97.8	2.2	100.0
5	2E	2821	1	0.56	0.57	0.50	0.50	0.94	97.9	2.1	100.0
5	2F	2819	1	0.52	0.52	0.50	0.50	0.91	96.2	3.8	100.0
5	3A	2821	4	2.73	2.73	0.84	0.85	0.71	73.1	25.4	98.4
5	3B	2821	4	2.77	2.78	0.75	0.76	0.69	70.9	28.4	99.3
5	3C	2821	2	1.91	1.92	0.29	0.28	0.45	91.0	8.9	100.0
5	67	2804	4	2.63	2.62	0.70	0.69	0.56	66.7	32.6	99.3
5	94	2767	4	2.31	2.30	0.73	0.72	0.58	67.9	31.3	99.1
5	116	2809	4	2.52	2.52	0.75	0.78	0.66	70.7	28.1	98.8



**Table 11. Rater Reliability Statistics – Writing (Continued)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
6	1	2879	1	0.99	0.99	0.11	0.11	0.96	99.9	0.1	100.0
6	2A	2858	1	0.69	0.69	0.46	0.46	0.94	98.3	1.8	100.0
6	2B	2858	1	0.60	0.60	0.49	0.49	0.96	99.0	1.0	100.0
6	2C	2860	1	0.76	0.76	0.43	0.43	0.93	98.2	1.8	100.0
6	2D	2855	1	0.71	0.71	0.45	0.45	0.95	98.6	1.4	100.0
6	2E	2857	1	0.24	0.24	0.43	0.43	0.94	98.6	1.4	100.0
6	2F	2860	1	0.86	0.86	0.35	0.35	0.94	99.2	0.8	100.0
6	3A	2867	4	2.89	2.88	0.73	0.73	0.73	77.4	22.0	99.4
6	3B	2867	4	2.89	2.87	0.72	0.72	0.68	72.0	27.2	99.1
6	3C	2867	2	1.94	1.94	0.25	0.25	0.49	94.0	6.0	100.0
6	27	2800	4	2.69	2.69	0.74	0.75	0.59	67.3	32.2	99.5
6	77	2854	4	2.75	2.73	0.71	0.70	0.66	72.0	27.8	99.8
6	92	2831	4	2.53	2.53	0.70	0.70	0.63	73.3	26.1	99.5
7	1	2864	1	0.98	0.98	0.13	0.14	0.96	99.9	0.1	100.0
7	2A	2845	1	0.37	0.38	0.48	0.48	0.91	96.2	3.8	100.0
7	2B	2846	1	0.44	0.44	0.50	0.50	0.93	97.4	2.6	100.0
7	2C	2845	1	0.38	0.38	0.49	0.49	0.92	97.0	3.0	100.0
7	2D	2847	1	0.45	0.45	0.50	0.50	0.96	98.5	1.5	100.0
7	2E	2844	1	0.74	0.73	0.44	0.44	0.89	96.3	3.7	100.0
7	2F	2846	1	0.36	0.37	0.48	0.48	0.96	98.7	1.3	100.0
7	3A	2843	4	2.85	2.84	0.71	0.71	0.70	76.7	22.9	99.6
7	3B	2843	4	2.83	2.84	0.70	0.69	0.67	74.3	25.4	99.6
7	3C	2843	2	1.93	1.94	0.25	0.24	0.46	93.4	6.5	100.0
7	47	2820	4	2.65	2.64	0.72	0.71	0.61	68.6	31.1	99.7
7	68	2820	4	2.38	2.36	0.64	0.64	0.62	75.9	23.9	99.8
7	89	2790	4	2.42	2.43	0.74	0.74	0.65	76.6	23.3	99.9
8	1	2910	1	0.98	0.98	0.13	0.13	0.87	99.6	0.4	100.0
8	2A	2874	1	0.65	0.65	0.48	0.48	0.95	99.1	0.9	100.0
8	2B	2869	1	0.58	0.58	0.49	0.49	0.91	96.8	3.2	100.0
8	2C	2870	1	0.24	0.24	0.43	0.43	0.92	98.5	1.5	100.0
8	2D	2873	1	0.67	0.67	0.47	0.47	0.89	96.5	3.6	100.0
8	2E	2871	1	0.25	0.25	0.43	0.43	0.95	99.3	0.7	100.0
8	2F	2876	1	0.61	0.61	0.49	0.49	0.95	98.6	1.4	100.0
8	3A	2877	4	2.73	2.74	0.68	0.66	0.65	77.6	22.2	99.7
8	3B	2876	4	2.72	2.73	0.66	0.66	0.63	75.5	24.2	99.7
8	3C	2876	2	1.93	1.94	0.25	0.24	0.42	92.6	7.4	100.0
8	21	2851	4	2.51	2.53	0.69	0.70	0.59	69.9	29.7	99.6
8	73	2861	4	2.54	2.54	0.69	0.69	0.59	69.3	30.2	99.5
8	88	2841	4	2.58	2.56	0.68	0.69	0.59	71.1	28.8	99.9



**Table 11. Rater Reliability Statistics – Writing (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
9	1	3031	1	0.96	0.96	0.19	0.19	0.92	99.4	0.6	100.0
9	2A	2965	1	0.78	0.78	0.41	0.41	0.92	99.2	0.8	100.0
9	2B	2964	1	0.90	0.90	0.30	0.30	0.84	98.9	1.1	100.0
9	2C	2963	1	0.39	0.38	0.49	0.49	0.92	98.1	1.9	100.0
9	2D	2966	1	0.82	0.82	0.39	0.38	0.85	97.2	2.8	100.0
9	2E	2954	1	0.47	0.47	0.50	0.50	0.90	97.1	2.9	100.0
9	2F	2954	1	0.94	0.94	0.23	0.24	0.67	97.7	2.3	100.0
9	3A	2965	4	2.44	2.43	0.70	0.69	0.65	78.3	21.7	99.9
9	3B	2965	4	2.44	2.44	0.68	0.66	0.63	77.0	22.9	99.9
9	3C	2965	2	1.91	1.92	0.30	0.28	0.50	92.0	8.0	100.0
9	26	2895	4	2.50	2.49	0.70	0.70	0.56	71.2	28.5	99.7
9	69	2914	4	2.43	2.44	0.72	0.72	0.57	68.8	31.0	99.8
9	90	2886	4	2.47	2.46	0.79	0.78	0.59	71.7	28.0	99.7
10	1	2827	1	0.95	0.95	0.22	0.22	0.96	99.7	0.4	100.0
10	2A	2724	1	0.55	0.55	0.50	0.50	0.90	98.3	1.7	100.0
10	2B	2724	1	0.59	0.59	0.49	0.49	0.90	98.4	1.7	100.0
10	2C	2723	1	0.37	0.36	0.48	0.48	0.88	97.8	2.3	100.0
10	2D	2723	1	0.51	0.51	0.50	0.50	0.90	98.5	1.5	100.0
10	2E	2721	1	0.60	0.60	0.49	0.49	0.89	98.2	1.8	100.0
10	2F	2724	1	0.80	0.80	0.40	0.40	0.87	98.8	1.2	100.0
10	3A	2723	4	2.68	2.67	0.73	0.70	0.60	75.8	24.0	99.8
10	3B	2724	4	2.67	2.65	0.72	0.70	0.58	71.4	28.2	99.6
10	3C	2724	2	1.91	1.90	0.30	0.30	0.45	89.8	10.2	100.0
10	74	2655	4	2.48	2.49	0.68	0.69	0.53	70.4	29.3	99.7
10	96	2623	4	2.70	2.68	0.68	0.68	0.52	73.2	26.4	99.6
10	116	2664	4	2.52	2.53	0.81	0.81	0.57	67.9	31.6	99.5



**Table 12. Rater Reliability Statistics -- Science**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
5	6	2787	2	0.72	0.73	0.71	0.72	0.79	81.6	17.8	99.4
5	21	2797	1	0.80	0.79	0.40	0.41	0.76	92.6	7.4	100.0
5	22	2788	1	0.58	0.58	0.49	0.49	0.87	94.4	5.6	100.0
5	23	2788	2	1.17	1.18	0.75	0.75	0.86	87.3	12.2	99.5
5	24	2792	2	1.34	1.35	0.71	0.70	0.85	87.9	11.9	99.8
5	25	2782	1	0.57	0.57	0.49	0.49	0.85	93.6	6.4	100.0
5	28	2788	2	0.92	0.93	0.83	0.83	0.69	74.1	21.1	95.1
5	33	2787	1	0.56	0.56	0.50	0.50	0.81	91.1	8.9	100.0
5	38	2780	1	0.49	0.49	0.50	0.50	0.92	96.7	3.3	100.0
5	42	2787	2	1.74	1.73	0.58	0.58	0.83	92.6	6.7	99.4
5	46	2773	2	1.47	1.47	0.75	0.75	0.80	83.9	14.9	98.8
5	48	2795	2	1.55	1.55	0.57	0.57	0.95	98.5	1.4	99.9
5	53	2793	2	1.73	1.73	0.63	0.63	0.95	98.7	1.2	99.8
5	55	2791	2	0.61	0.61	0.75	0.75	0.83	84.1	15.4	99.5
5	58	2794	2	0.12	0.13	0.36	0.36	0.75	94.7	5.3	100.0
5	65	2762	2	1.21	1.21	0.61	0.60	0.89	97.6	2.4	100.0
5	71	2793	2	0.83	0.84	0.62	0.61	0.76	85.0	14.4	99.3
5	75	2790	2	1.60	1.60	0.62	0.62	0.88	93.5	6.5	99.9
8	9	2750	2	1.00	0.99	0.81	0.81	0.79	90.0	10.0	100.0
8	13	2857	1	0.56	0.56	0.50	0.50	0.87	94.9	5.1	100.0
8	15	2873	1	0.10	0.10	0.31	0.30	0.71	95.6	4.4	100.0
8	20	2848	1	0.48	0.48	0.50	0.50	0.75	88.8	11.2	100.0
8	21	2861	1	0.77	0.79	0.42	0.41	0.41	79.9	20.1	100.0
8	22	2838	2	1.21	1.21	0.81	0.81	0.85	88.6	11.0	99.6
8	23	2842	1	0.72	0.72	0.45	0.45	0.62	85.9	14.1	100.0
8	24	2859	4	2.19	2.20	1.46	1.48	0.80	64.5	28.0	92.4
8	25	2802	2	1.16	1.17	0.83	0.83	0.77	82.5	16.4	99.0
8	34	2819	2	0.49	0.50	0.53	0.53	0.75	93.6	6.4	100.0
8	36	2851	2	0.28	0.27	0.52	0.51	0.77	92.9	7.0	99.9
8	42	2836	2	0.57	0.57	0.59	0.59	0.77	90.7	9.2	99.9
8	47	2775	2	0.57	0.58	0.57	0.58	0.59	79.4	20.5	99.8
8	50	2692	2	0.50	0.51	0.78	0.78	0.73	89.7	9.1	98.8
8	54	2804	2	0.89	0.89	0.71	0.71	0.76	86.5	12.9	99.4
8	56	2825	2	0.51	0.50	0.72	0.72	0.74	85.8	12.3	98.0
8	57	2655	1	0.37	0.37	0.48	0.48	0.82	99.1	0.9	100.0
8	61	2856	2	0.83	0.81	0.79	0.78	0.83	87.0	12.5	99.4
8	63	2782	2	0.58	0.58	0.65	0.65	0.82	97.5	2.5	100.0
8	64	2844	3	1.24	1.23	1.12	1.11	0.88	88.1	11.2	99.3
8	66	2723	1	0.42	0.42	0.49	0.49	0.77	93.3	6.7	100.0
8	71	2756	1	0.18	0.18	0.38	0.39	0.68	93.8	6.2	100.0
8	76	2847	1	0.83	0.83	0.38	0.38	0.90	99.0	1.0	100.0



**Table 12. Rater Reliability Statistics – Science (Concluded)**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
10	7	2746	1	0.10	0.10	0.31	0.30	0.62	95.1	4.9	100.0
10	21	2781	4	2.21	2.19	1.31	1.32	0.76	74.9	21.2	96.1
10	22	2738	2	0.71	0.71	0.80	0.80	0.79	90.7	8.9	99.5
10	23	2725	1	0.56	0.56	0.50	0.50	0.70	89.2	10.8	100.0
10	24	2709	3	2.27	2.26	0.93	0.94	0.68	81.0	17.1	98.1
10	25	2738	1	0.35	0.35	0.48	0.48	0.57	82.6	17.4	100.0
10	26	2729	1	0.69	0.67	0.46	0.47	0.48	78.7	21.3	100.0
10	27	2700	1	0.61	0.60	0.49	0.49	0.62	85.4	14.6	100.0
10	29	2687	1	0.07	0.07	0.25	0.25	0.66	99.1	0.9	100.0
10	31	2717	2	0.93	0.93	0.70	0.69	0.64	78.7	20.7	99.4
10	34	2733	1	0.51	0.50	0.50	0.50	0.75	91.5	8.5	100.0
10	38	2632	3	0.81	0.80	0.85	0.85	0.57	70.4	27.5	97.9
10	41	2747	1	0.66	0.67	0.47	0.47	0.61	85.1	14.9	100.0
10	44	2717	2	1.32	1.31	0.73	0.74	0.59	71.4	26.3	97.6
10	47	2674	2	0.55	0.55	0.68	0.67	0.66	86.0	13.4	99.4
10	52	2632	2	0.71	0.71	0.77	0.77	0.65	82.0	16.6	98.6
10	59	2583	2	0.78	0.78	0.76	0.77	0.63	81.0	18.3	99.3
10	62	2433	2	0.39	0.39	0.62	0.62	0.56	92.8	7.2	100.0
10	66	2725	1	0.66	0.67	0.47	0.47	0.72	91.5	8.5	100.0
10	69	2717	2	0.31	0.31	0.60	0.60	0.69	91.6	8.3	99.8
10	74	2719	2	1.29	1.29	0.77	0.78	0.71	82.0	17.2	99.2
10	78	2753	2	0.78	0.79	0.75	0.75	0.76	87.7	12.1	99.8
10	82	2637	1	0.71	0.71	0.45	0.45	0.74	95.6	4.5	100.0



**Table 13. Rater Reliability Statistics – Spanish Reading**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	1	294	3	1.72	1.73	1.25	1.24	0.97	96.3	3.7	100.0
3	2	295	3	2.02	2.01	1.27	1.28	0.95	92.2	7.1	99.3
3	8	294	2	1.21	1.21	0.83	0.84	0.93	93.2	6.8	100.0
3	17	282	3	1.68	1.60	1.11	1.11	0.77	75.5	23.1	98.6
3	25	294	2	1.39	1.44	0.75	0.73	0.85	88.1	11.2	99.3
3	26	293	2	0.94	0.91	0.89	0.89	0.83	84.6	12.6	97.3
3	32	293	3	1.20	1.19	0.96	0.95	0.94	98.0	2.1	100.0
3	36	294	2	1.06	1.06	0.77	0.78	0.81	81.0	18.4	99.3
4	13	31	3	1.06	1.06	1.12	1.15	0.97	93.6	6.5	100.0
4	14	31	2	0.52	0.45	0.63	0.51	0.59	83.9	12.9	96.8
4	29	31	3	2.03	2.06	1.22	1.24	0.99	96.8	3.2	100.0
4	31	31	2	0.45	0.58	0.72	0.72	0.87	87.1	12.9	100.0
4	33	31	3	1.16	1.19	1.04	1.01	0.89	77.4	22.6	100.0
4	34	31	3	1.35	1.48	1.20	1.18	0.93	80.7	19.4	100.0
4	42	31	2	0.55	0.57	0.77	0.73	0.84	93.3	6.7	100.0
4	44	30	2	1.23	1.23	0.90	0.86	0.88	93.3	6.7	100.0
4	45	29	3	1.07	1.03	0.88	0.85	0.58	65.5	34.5	100.0
4	97	31	2	0.94	0.94	0.73	0.77	0.94	93.6	6.5	100.0
4	98	30	3	0.87	0.83	0.97	0.91	0.82	90.0	10.0	100.0
4	100	31	2	0.45	0.48	0.62	0.63	0.79	83.9	16.1	100.0
4	108	31	2	1.35	1.42	0.75	0.72	0.82	90.3	6.5	96.8
4	116	29	3	1.59	1.66	1.05	1.11	0.79	93.1	6.9	100.0



**Table 14. Rater Reliability Statistics – Spanish Writing**

Grade	Item	N	Max Score	Mean		SD		Weighted Kappa	Agreement		
				Rater 1	Rater 2	Rater 1	Rater 2		Exact	Adjacent	Exact + Adjacent
3	4A	296	1	0.78	0.78	0.41	0.41	0.92	98.3	1.7	100.0
3	4B	296	1	0.24	0.23	0.43	0.42	0.93	98.3	1.7	100.0
3	4C	296	1	0.61	0.62	0.49	0.49	0.96	99.0	1.0	100.0
3	4D	296	1	0.63	0.62	0.48	0.49	0.96	99.0	1.0	100.0
3	4E	295	1	0.54	0.54	0.50	0.50	0.93	98.0	2.1	100.0
3	4F	296	1	0.82	0.84	0.38	0.37	0.91	98.3	1.7	100.0
3	16A	296	2	1.21	1.22	0.59	0.57	0.62	77.6	22.0	99.7
3	16B	296	1	0.66	0.62	0.48	0.49	0.42	73.6	26.4	100.0
3	16C	296	1	0.75	0.76	0.44	0.43	0.71	89.8	10.2	100.0
3	16D	296	1	0.89	0.89	0.32	0.31	0.55	91.5	8.5	100.0
3	27A	296	2	1.04	1.03	0.68	0.66	0.85	88.9	11.2	100.0
3	27B	296	1	0.49	0.42	0.50	0.50	0.57	78.7	21.3	100.0
3	27C	296	1	0.67	0.65	0.47	0.48	0.79	90.9	9.1	100.0
3	27D	296	1	0.79	0.79	0.41	0.40	0.74	91.9	8.1	100.0
3	39A	297	2	1.08	1.02	0.58	0.58	0.59	76.0	23.3	99.3
3	39B	297	1	0.37	0.37	0.48	0.48	0.34	69.6	30.4	100.0
3	39C	297	1	0.64	0.63	0.48	0.48	0.72	87.5	12.5	100.0
3	39D	297	1	0.84	0.85	0.37	0.36	0.61	90.2	9.8	100.0
4	1	31	1	0.94	1.00	0.25	0.00	0.00	93.6	6.5	100.0
4	2A	31	1	0.87	0.87	0.34	0.34	1.00	100.0	0.0	100.0
4	2B	31	1	0.42	0.42	0.50	0.50	0.87	93.6	6.5	100.0
4	2C	31	1	0.58	0.55	0.50	0.51	0.80	90.3	9.7	100.0
4	2D	31	1	0.35	0.29	0.49	0.46	0.85	93.6	6.5	100.0
4	2E	31	1	0.74	0.71	0.44	0.46	0.92	96.8	3.2	100.0
4	2F	31	1	0.03	0.03	0.18	0.18	1.00	100.0	0.0	100.0
4	3A	31	4	1.39	1.39	1.15	1.15	0.92	80.7	19.4	100.0
4	3B	31	4	1.87	1.81	0.72	0.79	0.54	58.1	38.7	96.8
4	3C	31	2	1.19	1.16	0.48	0.52	0.40	71.0	29.0	100.0
4	25	29	4	1.72	1.55	1.07	1.09	0.67	69.0	31.0	100.0
4	63	31	4	1.84	1.81	0.69	0.79	0.73	71.0	29.0	100.0
4	90	31	4	1.94	2.06	0.96	1.00	0.66	61.3	35.5	96.8



**Table 15. Rater Severity/Leniency Study Results**

Content Area	Grade	2006 Item Number	2008 Item Number	Valid N	Mean 2006	Mean 2008	Mean Difference	STD 2006	STD 2008	% Adjacent	% Precise	% Discrepant	Corr	Intra Class Corr	Weighted Kappa
Mathematics	3	9	9	993	1.61	1.60	0.01	0.62	0.61	6.45	93.35	0.20	0.91	0.95	0.90
Mathematics	3	34	33	986	1.62	1.62	0.00	0.59	0.59	2.33	97.36	0.30	0.95	0.97	0.95
Mathematics	4	15	15	996	2.27	2.27	0.00	0.79	0.79	16.87	82.23	0.90	0.84	0.92	0.84
Mathematics	4	23	23	995	2.81	2.80	0.01	1.15	1.20	15.88	82.31	1.81	0.91	0.95	0.90
Mathematics	4	59	60	997	1.66	1.67	-0.01	0.60	0.59	3.01	96.69	0.30	0.94	0.97	0.94
Mathematics	5	13	14	986	2.13	2.16	-0.03	0.85	0.75	20.28	79.11	0.61	0.83	0.91	0.82
Mathematics	5	57	57	990	1.47	1.43	0.04	0.72	0.72	15.76	83.64	0.61	0.83	0.91	0.83
Mathematics	5	23	23	997	3.39	3.34	0.05	0.96	0.98	13.84	85.16	1.00	0.91	0.95	0.90
Mathematics	6	48	48	997	2.20	2.28	-0.08	0.89	0.87	18.66	80.74	0.60	0.87	0.93	0.86
Mathematics	6	4	4	996	1.73	1.73	0.00	0.52	0.50	3.92	95.28	0.80	0.86	0.93	0.86
Mathematics	6	20	20	995	2.15	2.09	0.06	1.03	1.04	18.99	80.10	0.90	0.90	0.95	0.90
Mathematics	7	3	3	993	0.90	0.90	0.00	0.88	0.87	6.04	93.76	0.20	0.96	0.98	0.95
Mathematics	7	48	48	994	0.82	0.87	-0.05	0.91	0.96	16.00	83.20	0.80	0.89	0.94	0.89
Mathematics	7	60	60	986	2.34	2.26	0.08	1.36	1.39	24.14	69.98	5.88	0.87	0.94	0.87
Mathematics	8	6	5	973	1.24	1.32	-0.08	0.87	0.84	16.34	81.81	1.85	0.84	0.92	0.84
Mathematics	8	55	55	983	1.27	1.28	-0.01	0.99	0.93	33.16	64.39	2.44	0.77	0.88	0.77
Mathematics	8	60	60	988	1.92	2.01	-0.09	1.68	1.62	19.84	76.52	3.64	0.94	0.97	0.94
Mathematics	9	27	26	968	0.80	0.91	-0.11	0.83	0.87	17.98	81.61	0.41	0.87	0.93	0.86
Mathematics	9	60	60	963	1.61	1.39	0.22	0.98	0.96	39.25	55.45	5.30	0.70	0.84	0.69
Mathematics	9	12	12	987	1.08	1.01	0.07	0.81	0.78	20.77	78.93	0.30	0.83	0.91	0.83
Mathematics	10	48	48	981	0.76	0.78	-0.02	1.08	1.10	18.04	81.24	0.71	0.91	0.96	0.91
Mathematics	10	4	4	982	1.43	1.48	-0.05	0.81	0.78	9.57	88.29	2.14	0.86	0.93	0.86
Mathematics	10	60	60	986	1.58	1.57	0.01	0.89	0.90	32.25	65.11	2.64	0.73	0.87	0.73



**Table 15. Rater Severity/Leniency Study Results (Continued)**

Content Area	Grade	2006 Item Number	2008 Item Number	Valid N	Mean 2006	Mean 2008	Mean Difference	STD 2006	STD 2008	% Adjacent	% Precise	% Discrepant	Corr	Intra Class Corr	Weighted Kappa
Reading	3	27	29	894	1.01	1.00	0.01	0.85	0.85	6.38	93.29	0.34	0.95	0.97	0.95
Reading	3	14	13	874	0.78	0.86	-0.08	0.86	0.88	10.07	89.59	0.34	0.93	0.96	0.92
Reading	4	115	115	986	1.48	1.51	-0.03	0.96	0.97	12.98	86.31	0.71	0.91	0.96	0.91
Reading	4	17	14	971	1.91	1.86	0.05	1.21	1.24	28.22	68.28	3.50	0.86	0.93	0.86
Reading	5	25	22	977	2.04	1.95	0.09	1.22	1.21	28.56	66.53	4.91	0.84	0.92	0.84
Reading	5	94	96	983	1.48	1.52	-0.04	0.69	0.69	15.87	83.93	0.20	0.83	0.91	0.83
Reading	6	4	4	994	1.76	1.77	-0.01	0.52	0.49	11.27	88.33	0.40	0.75	0.87	0.75
Reading	6	99	94	985	1.18	1.18	0.00	0.83	0.82	10.05	89.75	0.20	0.92	0.96	0.92
Reading	7	10	12	971	1.04	1.18	-0.14	0.84	0.69	38.93	58.39	2.68	0.61	0.79	0.58
Reading	7	37	37	985	1.10	1.06	0.04	0.69	0.71	23.76	75.53	0.71	0.73	0.86	0.73
Reading	8	38	40	974	1.06	1.04	0.02	0.72	0.74	21.36	77.72	0.92	0.76	0.88	0.76
Reading	8	99	101	933	0.72	0.78	-0.06	0.63	0.67	11.58	88.21	0.21	0.86	0.93	0.85
Reading	9	43	41	912	1.55	1.57	-0.02	1.10	1.15	34.10	59.21	6.69	0.75	0.87	0.75
Reading	9	93	91	934	0.76	0.84	-0.08	0.60	0.65	14.56	85.44	0.00	0.82	0.91	0.81
Reading	10	35	31	968	0.94	0.95	-0.01	0.80	0.78	20.76	76.65	2.58	0.75	0.88	0.75
Reading	10	41	37	884	1.45	1.44	0.01	1.25	1.27	11.76	86.65	1.58	0.94	0.97	0.94
Science	8	77	76	990	0.85	0.85	0.00	0.36	0.36	0.61	99.39	0.00	0.98	0.99	0.98
Science	8	9	9	934	0.87	0.89	-0.02	0.81	0.82	12.63	87.37	0.00	0.91	0.95	0.91
Science	8	47	47	948	0.72	0.79	-0.07	0.62	0.63	25.32	73.95	0.74	0.64	0.82	0.64
Science	10	77	59	801	0.64	0.63	0.01	0.71	0.71	23.10	76.53	0.37	0.75	0.88	0.75



**Table 15. Rater Severity/Leniency Study Results (Concluded)**

Content Area	Grade	2006 Item Number	2008 Item Number	Valid N	Mean 2006	Mean 2008	Mean Difference	STD 2006	STD 2008	% Adjacent	% Precise	% Discrepant	Corr	Intra Class Corr	Weighted Kappa
Writing	3	12A	13A	997	1.04	1.18	-0.14	0.22	0.41	18.86	81.04	0.10	0.24	0.57	0.18
Writing	3	12B	13B	997	0.99	0.99	0.00	0.08	0.09	0.90	99.10	0.00	0.40	0.70	0.40
Writing	3	12C	13C	997	0.89	0.90	-0.01	0.31	0.30	10.83	89.17	0.00	0.42	0.71	0.42
Writing	3	12D	13D	997	0.98	0.93	0.05	0.14	0.26	6.92	93.08	0.00	0.30	0.62	0.25
Writing	4	95	95	988	2.31	2.46	-0.15	0.88	0.82	37.96	59.11	2.94	0.66	0.82	0.65
Writing	5	62	67	982	2.63	2.78	-0.15	0.63	0.67	33.40	65.89	0.71	0.59	0.79	0.58
Writing	6	97	92	984	2.44	2.64	-0.20	0.68	0.76	36.38	61.99	1.63	0.62	0.79	0.59
Writing	7	118	47	964	2.47	2.49	-0.02	0.78	0.78	28.22	71.37	0.41	0.75	0.87	0.75
Writing	8	86	88	977	2.47	2.51	-0.04	0.69	0.75	35.82	63.77	0.41	0.64	0.82	0.64
Writing	9	24	26	963	2.49	2.57	-0.08	0.68	0.72	27.52	72.17	0.31	0.72	0.86	0.71
Writing	10	95	96	955	2.59	2.62	-0.03	0.65	0.72	23.77	76.23	0.00	0.75	0.87	0.75
Sp. Reading	3	26	26	246	0.77	0.70	0.07	0.82	0.79	20.73	78.05	1.22	0.81	0.90	0.80
Sp. Reading	3	8	8	248	1.23	1.20	0.03	0.83	0.81	8.06	91.53	0.40	0.93	0.96	0.93
Sp. Reading	4	28	29	251	2.22	2.17	0.05	1.09	1.09	11.95	86.85	1.20	0.93	0.96	0.93
Sp. Writing	3	16A	16A	248	0.99	1.05	-0.06	0.59	0.45	29.84	70.16	0.00	0.48	0.73	0.46
Sp. Writing	3	16B	16B	248	0.46	0.35	0.11	0.50	0.48	27.42	72.58	0.00	0.45	0.72	0.44
Sp. Writing	3	16C	16C	248	0.50	0.75	-0.25	0.50	0.44	27.42	72.58	0.00	0.51	0.71	0.45
Sp. Writing	3	16D	16D	248	0.84	0.88	-0.04	0.36	0.33	10.89	89.11	0.00	0.55	0.77	0.55
Sp. Writing	4	24	25	244	1.66	1.67	-0.01	1.15	1.03	31.97	66.39	1.64	0.84	0.92	0.84



**Table 16. Tested Population Demographic Distribution - Mathematics**

Subgroup	Grade							
	3	4	5	6	7	8	9	10
	N	N	N	N	N	N	N	N
No Disability	53364	52229	51239	51283	51402	51611	54371	51270
Disability	5864	5987	5857	5692	5478	5107	4925	4298
No IEP	53364	52230	51240	51284	51393	51602	54366	51253
IEP	5840	5972	5844	5676	5469	5099	4911	4294
No Accommodation	48814	48418	48044	49668	51180	51603	55574	52486
Accommodation	10414	9798	9052	7307	5700	5115	3722	3082
Am. Indian/AK Nat.	677	671	666	700	650	737	748	639
Asian/Pac. Isl.	2143	2136	2086	2025	2037	1885	1817	1824
Black	3581	3537	3262	3420	3393	3471	3641	3386
Hispanic	17847	17118	16320	15778	15358	15138	15788	13269
White	34976	34754	34762	35050	35437	35484	37300	36449
Free Lunch Elig.	19058	18342	17224	16632	15745	15354	14450	11149
Reduced Lunch Elig.	4554	4474	4341	4270	4152	3994	3697	3102
Not FRL Elig.	35583	35372	35508	36053	36955	37346	41126	41288
Female	28979	28634	27988	27872	27627	27722	28822	27457
Male	30241	29574	29105	29101	29247	28990	30468	28106
Lang. Prof. NA	48311	47623	47156	47572	48152	48303	51081	48872
Lang. Prof. NEP	3300	2340	1517	1203	1101	882	1105	853
Lang. Prof. LEP	5273	4951	4623	3913	3326	2856	2597	2120
Lang. Prof. FEP	2330	3298	3796	4283	4295	4672	4510	3715
Not Mig. or Immig.	57818	57044	55958	55923	55816	55752	58176	54664
Mig. or Immig.	1385	1157	1125	1036	1041	945	1094	878



**Table 17. Tested Population Demographic Distribution - Reading**

Subgroup	Grade							
	3	4	5	6	7	8	9	10
	N	N	N	N	N	N	N	N
No Disability	51962	52048	51195	51216	51339	51509	54144	50997
Disability	5718	5955	5814	5634	5441	5086	4853	4286
No IEP	51951	52049	51195	51210	51332	51505	54136	50986
IEP	5679	5939	5801	5626	5433	5074	4845	4272
No Accommodation	47462	47185	47889	49077	51125	51939	55703	52579
Accommodation	10218	10818	9120	7773	5655	4656	3294	2704
Am. Indian/AK Nat.	673	672	665	698	648	734	731	630
Asian/Pac. Isl.	2142	2122	2085	2021	2038	1878	1809	1823
Black	3576	3536	3254	3423	3386	3456	3613	3369
Hispanic	16290	16949	16274	15726	15327	15076	15672	13142
White	34975	34724	34728	34979	35377	35445	37171	36310
Free Lunch Elig.	17759	18184	17184	16564	15709	15279	14331	11044
Reduced Lunch Elig.	4461	4470	4333	4265	4149	3984	3677	3092
Not FRL Elig.	35406	35323	35466	36001	36897	37308	40969	41114
Female	28274	28549	27958	27826	27599	27682	28718	27337
Male	29378	29450	29044	29020	29175	28904	30273	27930
Lang. Prof. NA	48247	47622	47094	47480	48064	48212	50859	48640
Lang. Prof. NEP	2343	2153	1487	1172	1087	852	1074	840
Lang. Prof. LEP	4781	4930	4627	3910	3324	2845	2568	2114
Lang. Prof. FEP	2275	3294	3795	4284	4301	4679	4491	3680
Not Mig. or Immig.	56485	56934	55883	55811	55728	55641	57898	54386
Mig. or Immig.	1142	1052	1106	1024	1033	934	1076	868



**Table 18. Tested Population Demographic Distribution - Writing**

Subgroup	Grade							
	3	4	5	6	7	8	9	10
	N	N	N	N	N	N	N	N
No Disability	52048	52003	51190	51230	51351	51547	54196	51028
Disability	5715	5954	5829	5671	5462	5111	4880	4278
No IEP	52045	52004	51190	51224	51344	51543	54188	51017
IEP	5694	5938	5816	5663	5454	5099	4872	4264
No Accommodation	48115	46925	47399	49167	50959	51893	55520	52504
Accommodation	9648	11032	9620	7734	5854	4765	3556	2802
Am. Indian/AK Nat.	678	672	664	698	649	738	736	635
Asian/Pac. Isl.	2148	2125	2082	2021	2039	1881	1810	1821
Black	3581	3532	3256	3423	3385	3462	3621	3363
Hispanic	16358	16943	16275	15733	15338	15113	15700	13154
White	34996	34685	34739	35023	35398	35458	37208	36324
Free Lunch Elig.	17784	18179	17190	16585	15713	15324	14365	11063
Reduced Lunch Elig.	4463	4463	4331	4266	4152	3987	3681	3096
Not FRL Elig.	35484	35289	35472	36030	36923	37323	41010	41113
Female	28286	28519	27959	27847	27604	27716	28742	27359
Male	29472	29434	29053	29050	29203	28933	30328	27931
Lang. Prof. NA	48325	47567	47114	47530	48099	48246	50924	48662
Lang. Prof. NEP	2364	2159	1481	1178	1091	862	1080	836
Lang. Prof. LEP	4774	4931	4628	3909	3322	2854	2574	2117
Lang. Prof. FEP	2290	3296	3790	4280	4297	4689	4493	3682
Not Mig. or Immig.	56592	56886	55896	55861	55763	55699	57974	54413
Mig. or Immig.	1146	1054	1103	1025	1031	939	1079	864



**Table 19. Tested Population Demographic Distribution – Science**

Subgroup	Grade		
	5	8	10
	N	N	N
No Disability	51205	51583	51261
Disability	5848	5122	4324
No IEP	51211	51586	51258
IEP	5829	5105	4314
No Accommodation	49061	52118	52687
Accommodation	7992	4587	2898
Am. Indian/AK Nat.	664	740	633
Asian/Pac. Isl.	2090	1885	1828
Black	3257	3460	3398
Hispanic	16296	15130	13290
White	34743	35488	36434
Free Lunch Elig.	17227	15338	11163
Reduced Lunch Elig.	4342	3997	3117
Not FRL Elig.	35462	37344	41276
Female	27964	27743	27470
Male	29086	28961	28107
Lang. Prof. NA	47114	48304	48903
Lang. Prof. NEP	1503	873	854
Lang. Prof. LEP	4635	2847	2119
Lang. Prof. FEP	3795	4676	3705
Not Mig. or Immig.	55928	55750	54698
Mig. or Immig.	1111	937	872



**Table 20. Tested Population Demographic Distribution –  
Spanish Reading and Writing**

<b>Subgroup</b>	<b>Spanish Reading</b>		<b>Spanish Writing</b>	
	<b>Grade</b>		<b>Grade</b>	
	<b>3</b>	<b>4</b>	<b>3</b>	<b>4</b>
	<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>
No Disability	1380	170	1370	169
Disability	110	6	111	5
No IEP	1380	170	1370	169
IEP	110	6	111	5
No Accommodation	1153	137	1170	130
Accommodation	337	39	311	44
Am. Indian/AK Nat.	.	.	.	.
Asian/Pac. Isl.	.	.	.	.
Black	2	.	2	.
Hispanic	1482	173	1473	171
White	6	3	6	3
Free Lunch Elig.	1278	145	1275	142
Reduced Lunch Elig.	92	8	91	8
Not FRL Elig.	120	23	115	24
Female	713	90	712	89
Male	777	86	769	85
Lang. Prof. NA	8	1	9	2
Lang. Prof. NEP	928	159	922	158
Lang. Prof. LEP	515	14	511	13
Lang. Prof. FEP	39	2	39	1
Not Mig. or Immig.	1254	85	1245	84
Mig. or Immig.	236	91	236	90



**Table 21. Multiple-Choice Item Analyses, English Grade 3 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
002	1	1	1	0.47	0.83	0.74	021	2	1	1	0.43	0.41	0.51
003	1	1	1	0.25	0.05	0.80	022	2	1	1	0.55	0.31	0.77
004	1	1	3	0.47	0.05	0.80	023	2	1	3	0.49	0.61	0.81
005	1	1	3	0.37	0.19	0.88	025	2	1	2	0.35	2.06	0.27
008	1	1	2	0.54	0.32	0.73	027	2	1	3	0.24	0.38	0.49
009	1	1	2	0.43	0.46	0.59	028	2	1	3	0.41	0.42	0.63
010	1	1	3	0.54	0.29	0.75	030	2	1	1	0.52	0.25	0.69
011	1	1	3	0.30	0.55	0.76	031	2	1	1	0.51	0.48	0.74
012	1	1	1	0.50	0.83	0.76	032	2	1	1	0.43	1.59	0.57
014	1	1	1	0.39	1.11	0.56	033	2	1	1	0.50	0.45	0.86
015	1	1	1	0.51	1.43	0.77	034	2	1	3	0.42	0.72	0.79
016	1	1	3	0.43	1.54	0.59	036	2	1	2	0.46	0.90	0.82
017	1	1	3	0.49	1.72	0.75	037	2	1	2	0.59	0.66	0.75
018	2	1	1	0.48	0.05	0.65	038	2	1	2	0.53	0.89	0.78
019	2	1	1	0.48	0.08	0.74	039	2	1	2	0.24	0.86	0.55
020	2	1	1	0.47	0.17	0.87	040	2	1	2	0.25	0.93	0.49

Mean Item-Total Corr.: 0.44 Mean p-Value: 0.70

**Table 22. Constructed-Response Item Analyses, English Grade 3 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
					0	1	2	3	4		
001	1	1	1	0.58	32.46	15.96	32.98	17.73		0.87	0.45
006	1	1	1	0.51	14.65	39.83	44.79			0.73	0.65
007	1	1	2	0.67	28.54	23.74	45.96			1.75	0.58
013	1	1	1	0.59	44.56	18.54	34.29			2.61	0.44
024	2	1	2	0.57	31.92	36.69	20.66	10.03		0.70	0.36
026	2	1	2	0.62	40.43	4.52	18.77	35.18		1.11	0.49
029	2	1	1	0.52	39.92	28.24	30.92			0.92	0.45
035	2	1	2	0.70	18.44	15.54	23.85	40.92		1.25	0.62

Mean Item-Total Corr.: 0.60 Mean p-Value: 0.51



**Table 23. Multiple-Choice Item Analyses, Spanish Grade 3 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
003	1	1	2	0.33	0.27	0.26	021	2	1	1	0.40	0.54	0.94
004	1	1	2	0.29	0.07	0.63	022	2	1	1	0.45	0.00	0.67
005	1	1	3	0.21	0.20	0.34	023	2	1	1	0.46	0.20	0.86
006	1	1	3	0.27	0.27	0.25	024	2	1	3	0.43	0.07	0.84
007	1	1	1	0.27	0.00	0.27	027	2	1	2	0.28	0.54	0.89
009	1	1	3	0.36	0.20	0.48	028	2	1	3	0.48	0.13	0.74
010	1	1	3	0.32	0.34	0.60	029	2	1	3	0.34	0.13	0.74
011	1	1	1	0.43	0.20	0.66	030	2	1	2	0.41	0.13	0.51
012	1	1	1	0.30	0.60	0.56	031	2	1	2	0.42	0.54	0.60
013	1	1	1	0.28	0.87	0.31	033	2	1	2	0.37	0.13	0.54
014	1	1	1	0.09	0.87	0.38	034	2	1	2	0.31	0.40	0.48
015	1	1	3	0.47	1.14	0.76	035	2	1	3	0.18	0.54	0.37
016	1	1	1	0.41	1.28	0.84	037	2	1	1	0.59	0.74	0.71
018	1	1	1	0.42	8.72	0.73	038	2	1	3	0.44	1.07	0.63
019	1	1	1	0.50	2.21	0.75	039	2	1	1	0.41	1.01	0.58
020	1	1	3	0.53	2.42	0.66	040	2	1	3	0.43	0.87	0.56

Mean Item-Total Corr.: 0.37 Mean p-Value: 0.60

**Table 24. Constructed-Response Item Analyses, Spanish Grade 3 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
					0	1	2	3	4		
001	1	1	2	0.58	29.73	10.94	21.61	37.25		0.47	0.55
002	1	1	2	0.66	23.22	8.52	12.89	54.63		0.74	0.66
008	1	1	1	0.62	25.10	26.98	47.18			0.74	0.61
017	1	1	1	0.58	15.77	20.87	28.52	31.54		3.29	0.58
025	2	1	1	0.53	16.44	28.39	54.56			0.60	0.69
026	2	1	1	0.50	44.09	19.73	35.30			0.87	0.45
032	2	1	2	0.55	28.79	30.47	31.41	8.66		0.67	0.40
036	2	1	1	0.62	25.77	37.92	35.17			1.14	0.54

Mean Item-Total Corr.: 0.58 Mean p-Value: 0.56



**Table 25. Multiple-Choice Item Analyses, English Grade 3 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
002	1	3	8	0.45	0.02	0.75	021	2	3	7	0.48	0.02	0.62
003	1	3	8	0.42	0.07	0.83	022	2	3	8	0.29	0.05	0.86
004	1	3	8	0.41	0.15	0.66	023	2	3	7	0.42	0.20	0.90
005	1	3	8	0.49	0.29	0.88	024	2	3	7	0.42	0.29	0.84
006	1	3	8	0.42	0.42	0.91	025	2	3	7	0.42	0.66	0.69
007	1	3	7	0.34	0.23	0.82	026	2	3	7	0.42	0.08	0.71
008	1	3	7	0.32	0.43	0.79	027	2	2	5	0.44	0.15	0.87
009	1	3	7	0.42	0.47	0.84	028	2	2	5	0.44	0.17	0.60
010	1	3	7	0.36	0.37	0.75	029	2	3	8	0.48	0.31	0.90
011	1	3	7	0.42	0.36	0.89	031	2	3	8	0.48	0.07	0.91
012	1	2		0.33	0.45	0.96	032	2	2		0.31	0.06	0.97
014	1	2		0.33	0.16	0.71	033	2	2	5	0.41	0.07	0.92
015	1	2		0.44	0.22	0.91	034	2	3	8	0.53	0.13	0.75
016	1	2		0.47	0.44	0.62	035	2	3	8	0.34	0.14	0.93
017	1	2		0.43	0.85	0.89	036	2	3	8	0.44	0.49	0.81
018	1	2		0.49	1.03	0.70	037	2	3	8	0.47	0.26	0.81
019	1	2	5	0.43	0.28	0.79	038	2	3	8	0.35	0.30	0.89
020	1	2	5	0.47	0.34	0.90							

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.82

**Table 26. Constructed-Response Item Analyses, English Grade 3 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001	A	1	3	7	0.54	24.65	75.22				0.13	0.75
001	B	1	3	8	0.14	72.70	27.15				0.15	0.27
001	C	1	3	8	0.49	40.78	59.00				0.22	0.59
001	D	1	3	8	0.29	2.47	97.45				0.08	0.97
001	E	1	3	7	0.17	12.83	86.99				0.18	0.87
001	F	1	3	7	0.23	86.98	12.85				0.17	0.13
013	A	1	2	5	0.30	1.01	91.29	7.28			0.42	0.53
013	B	1	2	5	0.32	1.46	98.12				0.41	0.98
013	C	1	2	5	0.53	19.91	79.67				0.41	0.80
013	D	1	3	5	0.50	12.55	87.03				0.41	0.87
030	A	2	2	5	0.40	2.37	85.47	11.84			0.32	0.55
030	B	2	2	5	0.36	2.87	96.84				0.29	0.97
030	C	2	2	5	0.54	18.63	81.08				0.29	0.81
030	D	2	3	5	0.53	17.77	81.94				0.29	0.82
039	A	2	2	5	0.37	3.13	89.21	7.10			0.56	0.52
039	B	2	2	5	0.33	3.42	96.02				0.56	0.96
039	C	2	2	5	0.55	21.31	78.13				0.55	0.78
039D	D	2	3	5	0.48	11.06	88.38				0.55	0.88

Mean Item-Total Corr.: 0.39 Mean p-Value: 0.73



**Table 27. Multiple-Choice Item Analyses, Spanish Grade 3 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	3	7	0.40	0.00	0.86	021	2	3	8	0.36	0.07	0.73
002	1	3	7	0.39	0.07	0.86	022	2	3	8	0.45	0.20	0.57
003	1	3	7	0.40	0.20	0.89	023	2	3	8	0.42	0.41	0.74
005	1	3	7	0.36	0.00	0.63	024	2	3	8	0.41	0.00	0.71
006	1	3	7	0.42	0.07	0.80	025	2	3	8	0.43	0.00	0.78
007	1	3	7	0.38	0.27	0.72	026	2	3	8	0.34	0.20	0.40
008	1	3	7	0.40	1.08	0.54	028	2	3	7	0.42	0.07	0.69
009	1	3	7	0.43	1.62	0.53	029	2	3	7	0.50	0.07	0.87
010	1	3	7	0.35	0.00	0.94	030	2	3	7	0.47	0.20	0.86
011	1	3	7	0.40	0.07	0.85	031	2	3	7	0.49	0.20	0.76
012	1	3	7	0.42	0.34	0.93	032	2	3	7	0.41	0.34	0.61
013	1	2		0.38	0.34	0.76	033	2	2		0.47	0.74	0.65
014	1	2		0.43	0.41	0.79	034	2	2		0.44	0.14	0.92
015	1	2	7	0.46	0.54	0.77	035	2	2		0.44	0.07	0.91
017	1	2		0.49	0.20	0.77	036	2	2		0.49	0.47	0.69
018	1	2		0.15	0.41	0.23	037	2	2		0.38	0.47	0.54
019	1	2		0.24	0.27	0.28	038	2	2		0.38	0.61	0.76
020	2	3	8	0.44	0.00	0.66							

Mean Item-Total Corr.: 0.41 Mean p-Value: 0.71

**Table 28. Constructed-Response Item Analyses, Spanish Grade 3 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004	A	1	3	8	0.42	19.31	80.01				0.68	0.80
004	B	1	3	7	0.40	75.02	24.44				0.54	0.24
004	C	1	3	8	0.46	33.90	65.50				0.61	0.65
004	D	1	3	8	0.47	35.45	64.01				0.54	0.64
004	E	1	3	7	0.49	47.06	52.33				0.61	0.52
004	F	1	3	7	0.37	20.19	79.27				0.54	0.79
016	A	1	2	5	0.49	8.37	65.77	25.05			0.81	0.58
016	B	1	2	5	0.48	35.38	63.81				0.81	0.64
016	C	1	2	5	0.57	22.01	77.25				0.74	0.77
016	D	1	3	5	0.46	9.79	89.47				0.74	0.89
027	A	2	2	5	0.60	22.01	57.12	19.92			0.95	0.48
027	B	2	2	5	0.54	50.64	48.41				0.95	0.48
027	C	2	2	5	0.62	33.36	65.70				0.95	0.66
027	D	2	3	5	0.56	21.54	77.52				0.95	0.78
039	A	2	2	5	0.52	16.00	62.05	21.27			0.68	0.52
039	B	2	2	5	0.44	57.80	41.53				0.68	0.42
039	C	2	2	5	0.57	34.91	64.42				0.68	0.64
039	D	2	3	5	0.43	16.00	83.32				0.68	0.83

Mean Item-Total Corr.: 0.49 Mean p-Value: 0.63



**Table 29. Multiple-Choice Item Analyses, English Grade 3 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	2		0.55	0.09	0.80	021	2	1		0.50	0.08	0.69
002	1	6		0.41	0.19	0.93	022	2	2		0.31	0.16	0.60
003	1	4		0.37	0.14	0.48	023	2	6		0.48	0.34	0.70
005	1	1		0.27	0.32	0.94	025	2	2		0.53	0.20	0.63
006	1	1		0.43	0.62	0.87	027	2	4		0.52	0.20	0.58
007	1	4		0.36	0.22	0.90	028	2	4		0.44	0.29	0.82
008	1	2		0.45	0.12	0.71	029	2	2		0.53	0.35	0.75
010	1	4		0.25	0.05	0.97	030	2	2		0.55	0.27	0.61
011	1	2		0.56	0.17	0.60	031	2	6		0.49	1.50	0.71
012	1	6		0.46	0.10	0.81	032	2	4		0.40	0.78	0.86
013	1	4		0.38	0.21	0.64	034	2	4		0.22	0.12	0.90
014	1	4		0.48	0.12	0.74	035	2	6		0.47	1.42	0.60
015	1	4		0.28	0.19	0.96	036	2	1		0.44	0.66	0.76
017	1	2		0.52	0.13	0.53	037	2	2		0.56	0.10	0.82
018	1	1		0.44	0.83	0.67	038	2	4		0.48	0.22	0.78
019	1	4		0.40	0.24	0.79	039	2	1		0.47	0.32	0.85

Mean Item-Total Corr.: 0.44 Mean p-Value: 0.75

**Table 30. Constructed-Response Item Analyses, English Grade 3 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		1	2		0.62	38.23	19.60	41.87			0.31	0.52
009		1	6		0.61	9.29	33.10	57.47			0.14	0.74
016		1	1		0.61	41.91	18.18	39.01			0.90	0.48
020		1	4		0.69	15.06	38.84	22.02	24.01		0.08	0.52
024*		2	1		0.50	21.36	51.12	27.32			0.19	0.53
026		2	4		0.56	10.43	33.25	56.12			0.19	0.73
033		2	2		0.50	7.43	26.97	65.54			0.07	0.79
040		2	6		0.62	2.99	38.13	26.22	32.47		0.19	0.63

Mean Item-Total Corr.: 0.59 Mean p-Value: 0.62

\*Item removed from calibration.



**Table 31. Multiple-Choice Item Analyses, English Grade 4 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
004	3	4	1	0.54	0.04	0.86	042	4	6	1	0.51	0.45	0.79
005	3	5		0.50	0.14	0.61	043	4	6	1	0.35	0.37	0.54
006	3	4	1	0.41	0.23	0.80	044	4	6	1	0.48	0.44	0.88
007	3	1	1	0.53	0.10	0.80	046	4	4	1	0.33	0.63	0.86
008	3	1	1	0.47	0.17	0.68	047	4	4	1	0.49	0.85	0.57
009	3	1	3	0.43	0.22	0.88	048	4	4	1	0.41	0.97	0.79
012	3	1	2	0.29	0.16	0.62	049	4	1	3	0.49	1.09	0.59
013	3	1	2	0.16	0.33	0.34	050	4	1	3	0.36	1.04	0.52
015	3	5		0.33	2.84	0.81	051	4	1	3	0.45	1.09	0.80
016	3	5		0.46	0.42	0.55	052	4	5		0.23	1.24	0.36
017	3	5		0.36	0.78	0.46	053	4	5		0.41	1.49	0.46
019	3	5		0.21	0.73	0.42	096	6	4	2	0.49	0.06	0.66
020	3	6	1	0.38	1.33	0.58	097	6	4	2	0.41	0.16	0.81
022	3	1	3	0.43	1.27	0.77	098	6	4	2	0.47	0.21	0.87
023	3	1	3	0.50	1.44	0.70	099	6	5		0.46	0.20	0.83
026	4	1	1	0.45	0.35	0.81	100	6	5		0.43	0.45	0.54
027	4	1	1	0.24	0.14	0.80	101	6	1	3	0.51	0.14	0.86
028	4	1	3	0.43	0.14	0.87	102	6	5		0.50	0.26	0.72
029	4	1	3	0.39	0.25	0.88	105	6	1	2	0.42	0.27	0.89
031	4	1	2	0.37	0.11	0.77	106	6	1	2	0.51	0.45	0.87
032	4	4	2	0.37	0.23	0.48	107	6	1	2	0.50	1.04	0.84
034	4	4	2	0.56	0.23	0.80	108	6	1	2	0.31	0.25	0.61
035	4	4	2	0.51	0.37	0.70	109	6	1	2	0.29	0.30	0.58
036	4	1	2	0.51	0.34	0.70	110	6	1	1	0.52	0.14	0.78
037	4	5		0.45	1.06	0.46	111	6	1	1	0.48	0.48	0.61
038	4	1	3	0.54	0.22	0.81	112	6	4	1	0.53	0.49	0.63
039	4	5		0.49	0.24	0.59	113	6	1	1	0.58	0.75	0.71
041	4	4	1	0.35	0.28	0.52	114	6	1	1	0.43	0.38	0.58

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.69



**Table 32. Constructed-Response Item Analyses, English Grade 4 Reading**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
010		3	6	1	0.48	36.57	23.09	39.65			0.69	0.51
011		3	6	1	0.43	32.25	39.49	22.66	4.36		1.24	0.33
014		3	6	2	0.54	19.67	23.30	27.68	18.30	9.35	1.69	0.43
018		3	4	1	0.41	40.76	38.41	19.20			1.63	0.38
021		3	5		0.54	49.38	8.91	40.01			1.71	0.44
025		4	1	1	0.53	29.38	24.07	25.86	19.95		0.74	0.45
030		4	1	1	0.47	9.89	36.98	52.54			0.58	0.71
033		4	1	2	0.44	38.25	54.67	5.87			1.21	0.33
040		4	4	1	0.38	29.63	48.60	12.48	8.03		1.26	0.33
045		4	5		0.48	28.62	21.44	49.02			0.92	0.60
103		6	5		0.48	7.27	12.55	79.77			0.41	0.86
104		6	1	2	0.58	5.56	7.91	19.89	65.98		0.66	0.82
115		6	6	1	0.59	12.60	44.07	18.65	24.13		0.56	0.51
116		6	6	1	0.52	19.25	53.60	25.63			1.53	0.52

Mean Item-Total Corr.: 0.49    Mean p-Value: 0.52



**Table 33. Multiple-Choice Item Analyses, Spanish Grade 4 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
004	3	1	2	0.46	0.57	0.46	039	4	5		0.31	1.70	0.61
005	3	5		0.32	0.00	0.41	040	4	1	1	0.53	1.70	0.71
006	3	6	2	0.11	0.00	0.68	041	4	1	1	0.42	1.70	0.46
007	3	5		0.23	0.57	0.35	043	4	1	1	0.42	1.70	0.37
008	3	6	2	0.10	0.57	0.29	046	4	1	3	0.53	3.98	0.69
009	3	4	2	0.41	0.57	0.57	047	4	6	3	0.02	3.98	0.37
010	3	4	2	0.40	0.57	0.55	048	4	5		0.17	4.55	0.31
011	3	1	3	0.32	0.57	0.60	091	6	1	2	0.39	0.00	0.85
012	3	6	2	0.12	0.00	0.28	092	6	1	3	0.35	0.00	0.68
015	3	4	1	0.25	0.57	0.70	093	6	1	3	0.43	0.00	0.44
016	3	1	1	0.44	1.14	0.74	094	6	1	2	0.11	0.00	0.74
017	3	4	1	0.21	1.14	0.83	095	6	1	2	0.61	0.00	0.79
018	3	1	1	0.52	0.57	0.66	096	6	1	2	0.24	0.00	0.60
019	3	6	1	0.22	1.14	0.93	099	6	6	1	0.26	1.70	0.53
020	3	1	1	0.09	1.14	0.49	101	6	4	1	0.44	1.14	0.42
021	3	1	1	0.43	0.57	0.56	102	6	4	1	0.35	1.14	0.34
022	3	1	1	0.50	0.57	0.49	103	6	1	3	0.58	1.14	0.73
023	3	6	1	0.31	0.00	0.52	104	6	1	3	0.37	3.98	0.60
024	3	6	1	0.23	0.00	0.71	105	6	5		0.34	4.55	0.57
026	4	1	2	0.19	0.00	0.49	106	6	5		0.34	1.70	0.34
027	4	1	3	0.42	0.00	0.74	107	6	5		0.31	1.14	0.48
028	4	4	2	0.34	0.00	0.63	109	6	1	2	0.39	0.00	0.66
030	4	4	2	0.19	0.57	0.39	110	6	1	2	0.46	0.00	0.47
032	4	4	2	0.35	0.00	0.49	111	6	4	2	0.62	0.00	0.60
035	4	4	1	0.53	0.57	0.76	112	6	1	3	0.40	0.00	0.56
036	4	1	1	0.42	0.00	0.53	113	6	1	3	0.37	2.27	0.65
037	4	1	3	0.46	0.00	0.74	114	6	5		0.42	2.84	0.63
038	4	5		0.41	0.57	0.44	115	6	5		0.43	1.70	0.56

Mean Item-Total Corr.: 0.35 Mean p-Value: 0.57



**Table 34. Constructed-Response Item Analyses, Spanish Grade 4 Reading**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
013		3	1	2	0.68	32.95	26.14	28.98	11.36		0.57	0.39
014		3	5		0.29	48.86	43.75	3.41			3.98	0.25
029		4	5		0.73	17.61	9.09	15.34	55.68		2.27	0.69
031		4	4	2	0.54	61.36	23.30	14.20			1.14	0.26
033		4	6	1	0.45	42.61	26.70	19.89	10.80		0.00	0.33
034		4	1	1	0.65	30.68	27.27	18.75	21.02		2.27	0.43
042		4	1	1	0.59	59.09	22.16	13.64			5.11	0.25
044		4	6	1	0.48	28.41	30.68	35.23			5.68	0.51
045		4	4	1	0.50	25.00	42.05	19.32	5.11		8.52	0.32
097		6	4	1	0.42	27.27	49.43	21.59			1.70	0.46
098		6	6	1	0.55	35.80	31.82	21.59	8.52		2.27	0.34
100		6	6	1	0.58	52.84	34.09	9.66			3.41	0.27
108		6	1	2	0.51	23.86	22.73	53.41			0.00	0.65
116		6	5		0.51	23.86	9.09	50.00	14.20		2.84	0.51

Mean Item-Total Corr.: 0.53    Mean p-Value: 0.40



**Table 35. Multiple-Choice Item Analyses, English Grade 4 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
054	5	2		0.47	0.03	0.89	074	5	2	5	0.32	0.24	0.89
055	5	3	7	0.32	0.28	0.89	076	5	2	5	0.31	0.25	0.50
056	5	3	7	0.37	0.19	0.58	077	5	3	8	0.48	0.47	0.56
057	5	3	7	0.32	0.64	0.83	078	5	3	8	0.44	0.80	0.61
058	5	3	7	0.37	0.38	0.90	079	5	2		0.39	0.64	0.78
059	5	3	7	0.29	0.26	0.94	080	5	2		0.45	0.70	0.79
060	5	2		0.32	0.28	0.87	081	5	3	7	0.51	0.79	0.81
061	5	3	7	0.41	0.45	0.90	082	5	3	8	0.41	0.97	0.51
062	5	3	7	0.37	0.68	0.90	083	5	3	8	0.52	1.25	0.60
063	5	3	7	0.36	1.34	0.90	084	5	3	8	0.42	1.87	0.85
064	5	2		0.35	0.51	0.81	085	5	2		0.50	0.37	0.68
065	5	3	7	0.39	0.76	0.91	086	5	2		0.41	0.50	0.92
066	5	3	8	0.30	0.08	0.65	087	5	2		0.52	0.68	0.81
067	5	3	8	0.43	0.18	0.75	088	5	2		0.57	0.52	0.80
068	5	3	7	0.48	0.72	0.86	089	5	3	7	0.44	0.77	0.79
069	5	3	7	0.42	0.94	0.85	090	5	3	7	0.51	1.06	0.80
070	5	3	7	0.43	1.25	0.71	091	5	2	5	0.25	0.39	0.35
071	5	3	8	0.49	2.05	0.82	092	5	2	5	0.47	0.44	0.74
072	5	3	7	0.48	0.21	0.83	093	5	2	5	0.29	0.46	0.57
073	5	3	7	0.55	0.32	0.70	094	5	2	5	0.48	0.68	0.76

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.77

**Table 36. Constructed-Response Item Analyses, English Grade 4 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.10	2.08	97.92				0.00	0.98
002	A	2	3	8	0.48	42.17	57.35				0.48	0.57
002	B	2	3	8	0.42	70.06	29.53				0.41	0.30
002	C	2	3	7	0.33	64.66	34.87				0.47	0.35
002	D	2	3	8	0.47	24.55	75.07				0.38	0.75
002	E	2	3	7	0.49	29.33	70.23				0.44	0.70
002	F	2	3	7	0.51	18.95	80.65				0.40	0.81
003	A	2	2	6	0.65	2.07	2.24	21.91	52.43	21.19	0.15	0.72
003	B	2	2	6	0.68	0.05	3.01	25.19	50.89	20.71	0.15	0.72
003	C	2	3	6	0.48	0.07	10.98	88.80			0.15	0.94
024		5	2	5	0.54	1.54	10.05	47.90	33.90	4.01	2.59	0.56
075		5	2	5	0.55	0.92	7.84	52.56	34.38	3.46	0.84	0.57
095		5	2	5	0.59	1.10	9.86	44.50	38.37	4.85	1.32	0.58

Mean Item-Total Corr.: 0.48 Mean p-Value: 0.66



**Table 37. Multiple-Choice Item Analyses, Spanish Grade 4 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
049	5	3	7	0.30	0.00	0.79	070	5	3	7	0.32	0.00	0.37
050	5	3	7	0.35	0.00	0.74	071	5	3	7	0.44	1.72	0.46
051	5	2		0.28	0.57	0.84	072	5	3	8	0.19	0.00	0.45
052	5	2		0.33	0.00	0.37	073	5	3	8	0.20	0.57	0.39
053	5	2		0.14	0.00	0.95	074	5	3	8	0.37	1.72	0.66
054	5	3	7	0.43	0.00	0.60	075	5	3	8	0.23	1.72	0.40
055	5	2		0.24	0.00	0.80	076	5	3	7	0.32	0.57	0.40
056	5	3	7	0.29	1.72	0.84	077	5	3	7	0.18	0.00	0.37
057	5	2	5	0.30	0.00	0.40	078	5	3	7	0.24	2.30	0.26
058	5	2	5	0.21	0.00	0.43	079	5	3	8	0.23	0.00	0.55
059	5	2	5	0.40	0.00	0.36	080	5	3	8	0.17	0.00	0.36
060	5	2	5	0.31	0.00	0.47	081	5	3	8	0.42	1.15	0.47
061	5	2	5	0.31	0.57	0.43	082	5	3	8	0.26	0.57	0.45
062	5	2	5	0.09	0.57	0.32	083	5	3	8	0.40	0.57	0.51
064	5	3	7	0.49	0.00	0.39	084	5	3	8	0.28	1.15	0.37
065	5	3	7	0.47	0.00	0.72	085	5	3	8	0.24	0.57	0.37
066	5	3	7	0.29	1.15	0.44	086	5	3	8	0.20	0.57	0.30
067	5	3	7	0.38	1.72	0.57	087	5	2		0.44	0.57	0.34
068	5	3	7	0.47	5.17	0.56	088	5	2		0.47	0.57	0.71
069	5	3	7	0.54	6.32	0.44	089	5	2		0.38	0.57	0.45

Mean Item-Total Corr.: 0.32 Mean p-Value: 0.50

**Table 38. Constructed-Response Item Analyses, Spanish Grade 4 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.03	8.05	91.95				0.00	0.92
002	A	2	3	7	0.36	10.92	86.78				2.30	0.87
002	B	2	3	7	0.45	47.70	50.00				2.30	0.50
002	C	2	3	7	0.41	43.68	54.02				2.30	0.54
002	D	2	3	8	0.16	26.44	71.26				2.30	0.71
002	E	2	3	7	0.39	56.90	40.80				2.30	0.41
002	F	2	3	8	0.34	85.06	12.64				2.30	0.13
003	A	2	2	6	0.48	27.01	14.37	37.93	18.39	2.30	0.00	0.39
003	B	2	2	6	0.59	2.30	29.89	45.98	20.69	1.15	0.00	0.47
003	C	2	3	6	0.54	5.17	71.26	23.56			0.00	0.59
025		5	2	5	0.54	12.64	35.63	30.46	10.92	3.45	6.90	0.36
063		5	2	5	0.49	2.87	21.84	51.15	17.82	3.45	2.87	0.48
090		5	2	5	0.41	4.02	16.67	53.45	16.67	6.90	2.30	0.50

Mean Item-Total Corr.: 0.40 Mean p-Value: 0.53



**Table 39. Multiple-Choice Item Analyses, English Grade 4 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	3		0.52	0.12	0.71	036	2	3		0.40	0.58	0.50
002	1	2	2	0.56	0.06	0.75	037	2	3		0.55	0.07	0.69
003	1	1		0.34	0.22	0.52	038	2	1	1	0.35	0.31	0.62
004	1	6		0.43	0.90	0.75	039	2	6		0.48	0.98	0.86
006	1	2	2	0.49	0.06	0.88	041	2	1		0.47	0.36	0.87
007	1	1	1	0.36	0.14	0.92	042	2	3		0.51	0.35	0.83
008	1	6		0.47	0.72	0.78	043	2	4		0.24	0.30	0.90
009	1	6	1	0.38	0.18	0.90	044	2	4		0.39	0.32	0.88
010	1	1	1	0.46	0.22	0.75	045	2	4		0.32	0.33	0.92
012	1	1	1	0.30	0.20	0.95	047	3	4	3	0.31	0.50	0.94
013	1	4		0.37	0.29	0.89	048	3	3		0.59	0.13	0.83
014	1	6		0.38	1.17	0.50	050	3	4		0.25	0.30	0.96
016	1	2	2	0.38	0.20	0.93	051	3	4		0.39	0.54	0.70
017	1	4		0.48	0.14	0.66	052	3	4		0.47	0.29	0.77
019	1	4		0.27	0.22	0.89	053	3	3		0.30	0.35	0.82
020	1	1	1	0.45	0.28	0.56	054	3	6		0.35	0.78	0.88
021	1	2	2	0.48	0.47	0.47	056	3	1	1	0.50	0.29	0.84
022	1	3		0.39	0.68	0.87	057	3	2	2	0.41	0.44	0.69
024	2	3		0.49	0.05	0.59	058	3	4		0.54	0.27	0.71
025	2	4		0.50	0.08	0.68	059	3	4		0.49	1.28	0.74
026	2	6	1	0.50	0.28	0.72	061	3	1		0.51	0.44	0.64
028	2	4	3	0.20	0.30	0.97	062	3	1	1	0.54	0.09	0.79
029	2	4		0.33	0.33	0.92	063	3	6	1	0.59	1.00	0.66
030	2	4	3	0.32	0.21	0.88	064	3	6		0.46	0.86	0.79
032	2	6		0.35	0.66	0.83	066	3	3		0.39	0.33	0.58
033	2	2		0.47	0.14	0.81	067	3	4	3	0.38	0.26	0.90
034	2	6		0.49	0.66	0.71	068	3	6		0.46	1.35	0.55

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.77



**Table 40. Constructed-Response Item Analyses, English Grade 4 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
005		1	4		0.55	15.82	22.51	61.40			0.27	0.73
011		1	3		0.57	38.86	37.31	22.94			0.88	0.42
015		1	4		0.42	2.67	13.47	40.51	43.21		0.14	0.75
018		1	4	3	0.57	6.83	35.86	23.61	33.61		0.08	0.61
023		1	6		0.76	8.34	10.82	15.43	34.16	30.96	0.29	0.67
027*		2	1	1	0.50	15.10	50.51	34.09			0.30	0.59
031		2	1	1	0.63	12.76	14.71	71.02			1.51	0.78
035		2	1		0.65	34.19	27.26	14.21	24.09		0.25	0.43
040		2	1	1	0.61	51.52	12.18	22.57	13.43		0.29	0.33
046		2	2	2	0.68	7.31	8.48	20.40	28.60	35.07	0.13	0.69
049		3	2	2	0.51	3.97	35.65	60.19			0.19	0.78
055		3	6	1	0.59	1.52	26.65	24.15	47.61		0.07	0.73
060		3	2	2	0.41	4.64	20.87	74.40			0.10	0.85
065		3	3		0.63	20.76	23.47	19.43	36.07		0.28	0.57
069		3	4	3	0.69	9.80	13.12	21.63	27.97	27.33	0.14	0.62

Mean Item-Total Corr.: 0.58 Mean p-Value: 0.64

\*Item removed from calibration.



**Table 41. Multiple-Choice Item Analyses, English Grade 5 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
005	3	1	1	0.45	0.04	0.87	040	4	5		0.34	0.19	0.58
006	3	1	3	0.36	0.30	0.70	041	4	5		0.40	0.11	0.55
007	3	6	1	0.53	0.15	0.83	042	4	4	1	0.33	0.22	0.59
008	3	1	3	0.49	0.19	0.83	043	4	4	2	0.48	0.09	0.80
013	3	6	2	0.43	0.14	0.54	044	4	5		0.46	0.32	0.81
014	3	4	2	0.43	0.61	0.92	045	4	4	2	0.47	0.42	0.56
015	3	4	2	0.46	0.19	0.63	046	4	5		0.46	0.77	0.90
016	3	1	3	0.41	0.23	0.83	048	4	4	1	0.36	0.19	0.62
017	3	5		0.14	0.24	0.34	049	4	6	1	0.49	0.32	0.84
018	3	5		0.26	0.17	0.66	050	4	6	1	0.42	0.23	0.63
019	3	1	3	0.21	1.12	0.61	051	4	6	1	0.46	0.23	0.91
020	3	1	2	0.29	0.24	0.67	097	6	1	2	0.46	0.20	0.91
021	3	1	2	0.15	0.37	0.36	098	6	5		0.17	0.17	0.49
023	3	5		0.35	1.97	0.86	099	6	1	3	0.38	0.23	0.83
024	3	5		0.53	0.52	0.63	100	6	1	3	0.41	0.15	0.73
025	3	5		0.42	0.69	0.56	101	6	1	3	0.44	1.25	0.71
026	4	1	1	0.31	0.05	0.66	102	6	5		0.44	0.13	0.83
027	4	6	1	0.30	0.05	0.56	103	6	5		0.52	0.42	0.75
029	4	1	1	0.36	0.12	0.74	104	6	5		0.57	0.20	0.83
030	4	4	1	0.49	0.16	0.84	107	6	6	1	0.49	0.19	0.84
031	4	4	1	0.48	0.25	0.75	108	6	4	1	0.48	0.35	0.69
032	4	6	1	0.32	0.38	0.58	109	6	4	1	0.47	0.23	0.59
033	4	5		0.46	0.12	0.78	110	6	1	1	0.49	0.34	0.83
034	4	1	3	0.47	0.25	0.80	111	6	1	1	0.51	0.38	0.79
036	4	4	1	0.22	0.07	0.42	112	6	1	1	0.51	0.57	0.79
037	4	4	1	0.40	0.18	0.74	113	6	1	3	0.34	0.11	0.56
038	4	6	1	0.47	0.16	0.75	114	6	5		0.43	0.29	0.48
039	4	1	3	0.53	0.15	0.85	115	6	1	1	0.57	0.22	0.75

Mean Item-Total Corr.: 0.41 Mean p-Value: 0.71



**Table 42. Constructed-Response Item Analyses, English Grade 5 Reading**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		3	1	1	0.46	6.49	18.68	74.53			0.30	0.84
009		3	4	1	0.36	59.42	26.62	13.43			0.53	0.27
010		3	1	2	0.44	34.52	28.87	19.30	16.84		0.48	0.39
011		3	4	2	0.66	28.34	22.66	24.08	23.98		0.94	0.48
012		3	5		0.51	32.73	40.23	16.68	9.44		0.92	0.34
022		3	6	2	0.55	17.51	21.48	27.82	20.84	11.26	1.10	0.46
028		4	6	1	0.24	85.41	3.34	10.55			0.70	0.12
035		4	6	1	0.21	36.82	38.64	10.38	11.72		2.45	0.32
047		4	4	1	0.41	21.39	49.74	15.67	12.30		0.91	0.39
052		4	5		0.42	20.99	25.50	52.94			0.56	0.66
095		6	1	2	0.65	26.72	7.67	64.67			0.94	0.69
096		6	1	2	0.57	17.21	29.66	52.58			0.55	0.67
105		6	1	1	0.63	18.32	23.35	57.52			0.81	0.69
106		6	6	1	0.62	10.68	39.32	49.16			0.85	0.69

Mean Item-Total Corr.: 0.48    Mean p-Value: 0.50



**Table 43. Multiple-Choice Item Analyses, English Grade 5 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
053	5	2		0.36	0.13	0.49	074	5	3	7	0.42	0.30	0.84
054	5	3	7	0.36	0.10	0.54	075	5	3	7	0.52	0.49	0.79
055	5	3	7	0.33	1.10	0.92	076	5	3	7	0.50	0.37	0.84
056	5	2		0.41	1.35	0.91	077	5	2	7	0.54	0.29	0.84
057	5	3	7	0.49	0.07	0.83	078	5	2	7	0.56	0.43	0.74
058	5	3	7	0.38	0.29	0.90	079	5	2	7	0.52	0.71	0.73
059	5	3	7	0.24	0.33	0.85	080	5	2	7	0.52	0.56	0.80
060	5	3	7	0.42	0.72	0.88	081	5	3	7	0.21	0.54	0.24
061	5	3	7	0.34	0.09	0.70	082	5	3	7	0.47	0.62	0.85
062	5	3	7	0.31	0.15	0.64	083	5	3	7	0.52	0.45	0.76
063	5	3	8	0.46	0.46	0.67	084	5	2	5	0.46	0.36	0.83
064	5	3	8	0.37	0.44	0.70	085	5	2	5	0.29	0.45	0.49
065	5	3	8	0.44	0.75	0.78	086	5	2	5	0.30	0.45	0.52
066	5	3	8	0.42	1.26	0.55	087	5	2	5	0.33	0.48	0.49
068	5	3	7	0.40	0.23	0.70	088	5	2	8	0.45	0.62	0.69
069	5	3	7	0.48	0.38	0.86	089	5	2	8	0.40	0.88	0.64
070	5	3	7	0.46	0.42	0.89	090	5	3	7	0.27	0.59	0.43
071	5	2		0.41	0.33	0.86	091	5	3	7	0.43	0.89	0.81
072	5	2		0.40	0.45	0.85	092	5	3	7	0.52	0.91	0.83
073	5	2		0.46	0.71	0.83	093	5	3	7	0.53	1.02	0.73

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.73

**Table 44. Constructed-Response Item Analyses, English Grade 5 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.12	1.39	98.61				0.00	0.99
002	A	2	3	7	0.50	27.36	72.47				0.16	0.72
002	B	2	3	7	0.46	52.59	47.26				0.15	0.47
002	C	2	3	8	0.42	68.70	31.12				0.18	0.31
002	D	2	3	8	0.37	21.57	78.27				0.16	0.78
002	E	2	3	8	0.45	41.62	58.20				0.18	0.58
002	F	2	3	8	0.40	46.86	52.98				0.16	0.53
003	A	2	2	6	0.59	2.20	2.76	28.83	49.37	16.68	0.15	0.69
003	B	2	2	6	0.60	0.01	3.31	30.43	49.56	16.53	0.15	0.70
003	C	2	3	6	0.44	0.04	7.12	92.68			0.15	0.96
067		5	2	5	0.54	0.38	3.38	35.45	52.54	7.59	0.66	0.66
094		5	2	5	0.54	0.69	9.83	49.19	35.23	3.21	1.86	0.57
116		5	2	5	0.53	0.99	4.20	42.99	43.40	7.88	0.53	0.63

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.66



**Table 45. Multiple-Choice Item Analyses, English Grade 5 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	4	1	0.38	0.02	0.75	036	2	1		0.40	0.66	0.62
002	1	1		0.29	0.08	0.92	037	2	1	1	0.57	0.24	0.44
003	1	1	1	0.60	0.07	0.60	038	2	3		0.48	0.18	0.65
004	1	4		0.38	0.12	0.71	040	2	6		0.42	0.16	0.91
005	1	1		0.45	0.23	0.67	041	2	6		0.58	0.75	0.52
007	1	3		0.50	0.12	0.59	042	2	4		0.38	0.18	0.67
008	1	6		0.43	0.75	0.70	043	2	2	2	0.44	0.27	0.28
009	1	1	1	0.51	0.14	0.67	044	2	3	3	0.35	0.24	0.73
010	1	4		0.36	0.11	0.89	045	2	6		0.29	0.35	0.87
011	1	1	1	0.55	0.45	0.53	047	3	2		0.36	0.05	0.86
012	1	1	1	0.55	0.29	0.72	048	3	4		0.36	0.16	0.73
013	1	1	1	0.33	0.09	0.88	050	3	4		0.45	0.10	0.73
015	1	6		0.44	1.76	0.80	051	3	6		0.42	0.08	0.85
017	1	1		0.24	0.40	0.93	052	3	2	2	0.48	0.11	0.64
018	1	2		0.50	0.06	0.71	054	3	3	3	0.25	0.36	0.94
019	1	3		0.36	0.13	0.61	055	3	1	1	0.37	0.21	0.58
021	1	4		0.40	0.13	0.55	056	3	4		0.52	0.19	0.75
022	1	6	1	0.47	0.18	0.83	058	3	6		0.42	0.89	0.79
024	2	1	1	0.42	0.02	0.92	059	3	2	2	0.33	0.22	0.89
025	2	6		0.43	0.11	0.81	060	3	1	1	0.51	0.19	0.82
026	2	3		0.39	0.20	0.63	061	3	4		0.40	0.12	0.45
028	2	4		0.30	0.22	0.33	062	3	6		0.49	0.35	0.62
029	2	4		0.40	0.08	0.70	063	3	3		0.40	0.20	0.71
030	2	6		0.43	0.61	0.35	064	3	6		0.46	0.11	0.89
031	2	2	3	0.38	0.25	0.86	065	3	6		0.28	0.75	0.90
033	2	1	1	0.50	0.53	0.81	067	3	2	2	0.48	0.36	0.73
035	2	6		0.41	0.85	0.71	068	3	2	2	0.38	0.34	0.76

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.71



**Table 46. Constructed-Response Item Analyses, English Grade 5 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
006		1	4		0.61	9.72	43.28	46.79			0.21	0.68
014		1	3	3	0.53	2.61	16.70	38.30	41.80		0.59	0.73
016		1	2		0.55	49.29	6.71	43.83			0.17	0.47
020		1	6		0.64	37.58	26.60	19.33	16.10		0.38	0.38
023		1	2	2	0.65	3.52	4.16	14.08	27.99	50.10	0.14	0.79
027		2	2	2	0.61	24.41	16.68	58.67			0.24	0.67
032		2	2	2	0.46	23.62	25.65	32.39	18.14		0.21	0.48
034		2	1	1	0.56	4.77	7.34	83.07			4.82	0.87
039		2	4		0.72	13.72	23.66	32.06	30.42		0.14	0.60
046		2	3	3	0.71	5.32	12.21	34.91	31.25	16.04	0.27	0.60
049		3	6		0.65	34.50	10.05	55.30			0.15	0.60
053		3	1		0.62	10.01	23.59	18.34	47.82		0.25	0.68
057		3	3	3	0.54	15.38	30.69	53.44			0.49	0.69
066		3	3	3	0.60	12.58	20.07	17.86	49.37		0.11	0.68
069		3	4		0.66	2.86	17.11	19.48	19.10	41.35	0.10	0.70

Mean Item-Total Corr.: 0.61    Mean p-Value: 0.64



**Table 47. Multiple-Choice Item Analyses, English Grade 5 Science**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	1	1	0.23	0.08	0.98	039	2	4		0.19	0.17	0.76
002	1	3		0.36	0.02	0.44	040	2	1	2	0.46	0.08	0.85
003	1	1	1	0.17	0.04	0.83	041	2	1	2	0.42	0.24	0.61
004	1	4		0.35	0.14	0.67	043	2	1		0.48	0.19	0.63
005	1	3		0.24	0.04	0.65	044	2	1	2	0.47	0.08	0.66
007	1	2		0.22	0.05	0.91	045	2	1	1	0.41	0.30	0.73
008	1	1	2	0.26	0.16	0.76	047	2	1	1	0.54	0.17	0.77
009	1	3		0.48	0.09	0.59	049	2	1		0.44	0.15	0.65
010	1	2		0.34	0.06	0.69	050	2	4		0.37	0.23	0.50
011	1	2		0.46	0.13	0.80	051	3	1	1	0.28	0.40	0.74
012	1	3		0.33	0.05	0.82	052	3	1	1	0.48	0.02	0.85
013*	1	3		0.02	0.02	0.88	054	3	4		0.38	0.22	0.80
014	1	1	2	0.52	0.04	0.74	056	3	2		0.18	0.05	0.96
015	1	4		0.27	0.23	0.96	057	3	1	2	0.43	0.07	0.81
016	1	2		0.52	0.12	0.63	059	3	2		0.45	0.09	0.75
017	1	4		0.32	0.04	0.52	060	3	1	2	0.44	0.08	0.60
018	1	4		0.36	0.05	0.92	061	3	4		0.31	0.19	0.41
019	1	4		0.28	0.13	0.53	062	3	1	1	0.34	0.13	0.60
020	1	2		0.42	0.29	0.34	063	3	4		0.39	0.19	0.85
026	2	4		0.33	0.04	0.87	064	3	1	1	0.59	0.15	0.73
027	2	2		0.19	0.03	0.98	066	3	3		0.38	0.23	0.70
029	2	3		0.33	0.10	0.65	067	3	3		0.45	0.36	0.89
030	2	2		0.51	0.09	0.52	068	3	1	1	0.31	0.17	0.69
031	2	2		0.32	0.03	0.63	069	3	4		0.42	0.35	0.75
032	2	1	2	0.22	0.12	0.97	070	3	3		0.36	0.93	0.65
034*	2	3		0.31	0.26	0.63	072	3	1	2	0.41	0.06	0.59
035	2	3		0.19	0.11	0.87	073	3	2		0.36	0.33	0.43
036	2	2		0.36	0.29	0.82	074	3	1	1	0.43	0.21	0.74
037	2	3		0.39	0.09	0.82							

Mean Item-Total Corr.: 0.36 Mean p-Value: 0.72

\* Item removed from calibration.



**Table 48. Constructed-Response Item Analyses, English Grade 5 Science**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
006		1	2		0.44	44.10	39.93	15.47			0.49	0.35
021		1	1	1	0.18	20.52	79.41				0.08	0.79
022		1	1	1	0.41	42.34	57.23				0.43	0.57
023		1	1	1	0.55	20.75	40.37	38.43			0.44	0.59
024		1	1	2	0.58	14.37	37.64	47.75			0.25	0.67
025		1	1	2	0.47	43.28	56.26				0.45	0.56
028		2	2		0.47	37.59	31.10	31.04			0.27	0.47
033		2	1	1	0.50	44.17	55.46				0.37	0.55
038		2	4		0.51	50.88	48.40				0.72	0.48
042		2	1	2	0.52	7.55	11.47	80.56			0.42	0.86
046		2	1	1	0.59	15.08	23.67	60.27			0.97	0.72
048		2	3		0.53	4.12	36.40	59.41			0.07	0.78
053		3	3		0.39	10.01	6.42	83.43			0.13	0.87
055		3	4		0.52	54.77	28.74	16.18			0.31	0.31
058		3	2		0.32	88.48	10.40	0.99			0.13	0.06
065		3	4		0.60	10.54	57.67	30.05			1.74	0.59
071		3	3		0.48	29.26	57.82	12.77			0.15	0.42
075		3	1		0.48	7.70	25.31	66.70			0.29	0.79

Mean Item-Total Corr.: 0.47    Mean p-Value: 0.58



**Table 49. Multiple-Choice Item Analyses, English Grade 6 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
005	3	1	1	0.41	0.05	0.91	042	4	5		0.36	0.22	0.50
006	3	1	3	0.36	0.23	0.77	043	4	5		0.20	3.18	0.50
007	3	6	1	0.48	1.63	0.86	044	4	5		0.46	0.12	0.81
008	3	1	3	0.44	2.23	0.87	045	4	5		0.48	0.20	0.64
009	3	6	1	0.19	0.09	0.72	046	4	5		0.53	0.20	0.72
013	3	1	2	0.41	0.39	0.54	047	4	5		0.44	0.35	0.72
014	3	1	2	0.46	1.27	0.66	048	4	5		0.43	0.09	0.87
015	3	1	2	0.06	0.20	0.33	049	4	5		0.52	0.14	0.90
016	3	1	3	0.39	0.30	0.80	050	4	5		0.42	0.14	0.93
017	3	1	3	0.38	0.43	0.90	095	6	6	1	0.30	0.13	0.66
020	3	1	1	0.25	0.46	0.56	096	6	4	1	0.36	0.18	0.55
021	3	4	1	0.21	0.62	0.60	097	6	1	3	0.34	0.16	0.51
022	3	1	1	0.42	0.89	0.83	098	6	1	3	0.36	0.26	0.78
023	3	6	1	0.40	0.54	0.57	099	6	1	3	0.59	0.53	0.84
024	3	5		0.45	0.69	0.85	100	6	4	1	0.32	0.15	0.45
025	3	5		0.57	0.65	0.69	101	6	1	1	0.51	0.34	0.86
026	3	1	3	0.45	0.73	0.92	102	6	1	1	0.34	0.23	0.45
028	4	6	1	0.29	0.07	0.61	103	6	4	1	0.37	0.11	0.84
030	4	1	1	0.25	0.15	0.71	104	6	4	1	0.38	0.15	0.94
031	4	1	1	0.37	0.19	0.78	105	6	6	1	0.43	0.15	0.69
032	4	6	1	0.40	0.17	0.67	107	6	6	1	0.36	0.36	0.45
033	4	5		0.42	0.23	0.81	108	6	1	3	0.22	0.32	0.47
034	4	1	3	0.45	0.61	0.85	109	6	5		0.40	0.34	0.66
037	4	4	2	0.43	2.51	0.82	112	6	1	2	0.47	0.29	0.78
038	4	4	2	0.40	0.56	0.68	113	6	4	2	0.42	0.45	0.54
039	4	4	2	0.42	0.25	0.70	114	6	1	2	0.57	0.52	0.72
040	4	5		0.38	0.39	0.58	115	6	1	3	0.38	1.15	0.60
041	4	1	3	0.53	0.39	0.74	116	6	1	3	0.46	1.25	0.88

Mean Item-Total Corr.: 0.39 Mean p-Value: 0.71



**Table 50. Constructed-Response Item Analyses, English Grade 6 Reading**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		3	1	1	0.43	4.61	16.49	78.60			0.30	0.87
010		3	4	1	0.34	55.01	28.06	16.34			0.60	0.30
011		3	4	2	0.55	27.04	40.03	27.94	4.24		0.74	0.36
012		3	4	2	0.45	65.53	21.32	12.02			1.12	0.23
018		3	6	1	0.56	16.23	53.29	29.24			1.25	0.56
019		3	6	1	0.50	48.19	26.09	17.29	5.77		2.66	0.26
029		4	6	1	0.38	65.03	10.87	23.50			0.60	0.29
035		4	5		0.59	7.59	2.35	19.70	69.76		0.60	0.84
036		4	5		0.59	4.45	5.69	9.77	78.12		1.96	0.87
093		6	6	1	0.52	46.53	24.57	18.01	9.99		0.90	0.30
094		6	6	1	0.61	30.08	26.82	41.99			1.11	0.55
106		6	1	1	0.52	22.33	33.63	27.36	9.87	5.44	1.38	0.35
110		6	4	2	0.56	50.68	36.26	10.93			2.13	0.29
111		6	4	2	0.46	17.77	69.31	11.31			1.61	0.46

Mean Item-Total Corr.: 0.50 Mean p-Value: 0.47



**Table 51. Multiple-Choice Item Analyses, English Grade 6 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
051	5	3	7	0.44	0.06	0.86	071	5	3	7	0.35	0.49	0.56
052	5	3	8	0.25	0.08	0.87	072	5	3	7	0.51	0.63	0.79
053	5	2		0.46	0.76	0.80	073	5	3	8	0.48	0.33	0.66
054	5	2		0.41	1.04	0.86	074	5	3	7	0.36	0.30	0.66
055	5	2	7	0.46	0.09	0.91	075	5	3	7	0.42	0.66	0.76
056	5	2	7	0.49	0.22	0.84	076	5	3	7	0.41	0.38	0.66
057	5	2	5	0.37	0.27	0.55	078	5	3	7	0.26	0.21	0.63
058	5	2	5	0.38	0.30	0.80	079	5	3	7	0.33	0.29	0.55
059	5	2	5	0.55	0.26	0.76	080	5	3	7	0.29	0.73	0.69
060	5	2	5	0.47	0.35	0.79	081	5	3	8	0.44	0.56	0.60
061	5	3	8	0.51	0.47	0.69	082	5	3	7	0.40	1.07	0.74
062	5	2	5	0.46	0.12	0.90	083	5	2	8	0.42	0.33	0.72
063	5	3	8	0.32	0.34	0.48	084	5	2	8	0.43	0.44	0.68
064	5	3	7	0.44	0.41	0.86	085	5	2	8	0.30	0.53	0.38
065	5	3	7	0.52	0.15	0.80	086	5	2	8	0.37	0.44	0.55
066	5	3	7	0.58	0.23	0.66	087	5	2	8	0.35	0.62	0.58
067	5	3	7	0.52	0.50	0.68	088	5	2	7	0.52	0.90	0.80
068	5	3	7	0.50	0.54	0.83	089	5	3	8	0.34	0.48	0.55
069	5	3	8	0.35	0.82	0.73	090	5	3	8	0.49	0.76	0.74
070	5	3	7	0.47	0.28	0.71	091	5	3	8	0.49	0.57	0.71

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.71

**Table 52. Constructed-Response Item Analyses, English Grade 6 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.12	0.96	99.04				0.00	0.99
002	A	2	3	8	0.38	30.37	69.35				0.28	0.69
002	B	2	3	7	0.47	40.82	58.93				0.26	0.59
002	C	2	3	7	0.35	24.11	75.66				0.23	0.76
002	D	2	3	8	0.45	27.70	72.00				0.30	0.72
002	E	2	3	7	0.27	75.91	23.74				0.36	0.24
002	F	2	3	8	0.42	14.98	84.78				0.23	0.85
003	A	2	2	6	0.60	0.60	2.10	22.06	57.03	18.06	0.15	0.72
003	B	2	2	6	0.63	0.01	2.59	23.86	55.27	18.13	0.14	0.72
003	C	2	3	6	0.44	0.04	6.19	93.63			0.14	0.97
027		5	2	5	0.53	0.32	4.62	32.12	49.43	11.14	2.38	0.65
077		5	2	5	0.55	0.22	4.23	26.15	58.08	10.46	0.86	0.68
092		5	2	5	0.55	0.64	3.88	42.45	45.16	6.31	1.56	0.62

Mean Item-Total Corr.: 0.44 Mean p-Value: 0.71



**Table 53. Multiple-Choice Item Analyses, English Grade 6 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	2		0.37	0.15	0.89	031	2	3		0.53	0.18	0.64
002	1	6		0.47	0.44	0.83	032	2	4		0.51	0.45	0.59
003	1	1		0.36	0.11	0.51	034	2	6		0.37	1.17	0.75
005	1	1		0.44	0.19	0.58	035	2	4		0.36	0.11	0.78
006	1	6	1	0.53	0.15	0.62	036	2	2	2	0.44	0.30	0.61
008	1	6	1	0.43	0.49	0.77	038	2	4	3	0.27	0.09	0.91
009	1	1		0.32	0.31	0.78	039	2	2	2	0.28	0.17	0.56
010	1	4		0.40	0.04	0.81	041	3	4		0.47	0.11	0.58
012	1	4		0.46	0.21	0.83	042	3	1	1	0.40	0.08	0.65
013	1	3		0.43	0.17	0.64	044	3	4		0.40	0.08	0.63
014	1	3	2	0.47	0.14	0.49	045	3	3		0.47	0.23	0.48
015	1	3		0.40	0.11	0.60	047	3	4		0.48	0.16	0.56
017	1	1	1	0.62	0.18	0.70	049	3	2		0.52	0.30	0.74
018	1	6	1	0.46	0.48	0.78	050	3	6		0.47	0.70	0.82
019	1	4	3	0.38	0.19	0.62	051	3	6		0.24	0.64	0.92
021	2	1		0.41	0.11	0.69	052	3	4	3	0.32	0.44	0.60
022	2	1		0.48	0.40	0.36	053	3	1	1	0.53	0.70	0.63
023	2	6		0.44	0.62	0.86	054	3	4		0.32	0.55	0.45
024	2	2	2	0.17	0.07	0.97	055	3	1		0.42	0.58	0.47
025	2	3		0.48	0.10	0.71	056	3	6		0.43	0.98	0.77
027	2	1	1	0.33	0.17	0.76	058	3	2	2	0.48	0.21	0.68
028	2	2	2	0.44	0.24	0.84	059	3	3		0.46	0.36	0.50
030	2	4	3	0.40	0.13	0.90							

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.69

**Table 54. Constructed-Response Item Analyses, English Grade 6 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		1	4		0.40	2.69	20.90	76.11			0.30	0.87
007		1	3		0.54	0.83	9.64	33.92	55.26		0.35	0.81
011		1	4	3	0.63	51.12	27.42	20.86			0.60	0.35
016		1	1		0.65	31.81	25.22	6.86	34.39		1.71	0.47
020		1	2	2	0.64	6.96	31.58	30.03	23.02	8.16	0.25	0.48
026		2	2	2	0.60	38.03	5.60	56.11			0.26	0.59
029		2	2	2	0.50	18.20	22.57	33.78	25.30		0.15	0.55
033		2	6	1	0.59	25.21	18.42	56.01			0.36	0.65
037		2	2		0.63	34.18	44.84	4.51	16.21		0.26	0.34
040		2	3		0.62	0.72	7.63	7.76	21.32	62.31	0.26	0.84
043		3	3		0.61	12.59	22.86	64.40			0.16	0.76
046		3	6		0.61	31.72	22.55	45.30			0.43	0.57
048		3	4	3	0.71	7.61	19.12	32.87	40.24		0.15	0.69
057		3	4	3	0.56	30.08	40.96	22.92	5.46		0.58	0.34
060		3	1	1	0.76	5.42	15.82	21.58	32.17	24.78	0.23	0.64

Mean Item-Total Corr.: 0.60 Mean p-Value: 0.60



**Table 55. Multiple-Choice Item Analyses, English Grade 7 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
007	3	6	1	0.27	0.15	0.76	041	4	6	4	0.31	0.33	0.54
008	3	1	1	0.42	0.14	0.84	042	4	6	4	0.34	0.63	0.57
009	3	1	3	0.46	0.13	0.91	043	4	5		0.44	0.20	0.80
010	3	5		0.43	0.11	0.90	044	4	5		0.44	3.47	0.84
014	3	1	1	0.38	0.22	0.72	045	4	5		0.48	0.70	0.74
015	3	4	1	0.47	0.29	0.91	046	4	5		0.45	0.26	0.84
016	3	4	1	0.35	0.50	0.67	091	6	4	2	0.28	0.17	0.34
017	3	5		0.25	0.45	0.47	092	6	6	2	0.35	0.22	0.70
018	3	1	3	0.52	0.33	0.65	093	6	1	3	0.46	0.12	0.71
019	3	5		0.37	0.33	0.70	094	6	5		0.36	0.45	0.50
020	3	5		0.45	0.62	0.70	095	6	6	2	0.40	0.22	0.79
022	3	6	4	0.10	0.58	0.28	096	6	4	4	0.37	0.10	0.88
023	3	4	4	0.37	0.57	0.70	097	6	4	4	0.36	0.15	0.95
024*	3	6	4	-0.01	0.60	0.31	098	6	1	3	0.28	0.20	0.55
025	3	4	4	0.35	0.61	0.60	100	6	6	4	0.46	0.79	0.71
026	3	6	4	0.35	0.64	0.68	101	6	6	4	0.44	0.31	0.52
027	4	1	3	0.35	0.08	0.55	102	6	5		0.43	0.27	0.71
028	4	4	4	0.41	0.12	0.77	104	6	1	2	0.36	0.15	0.77
029	4	4	4	0.18	0.31	0.49	105	6	4	2	0.44	0.37	0.73
030	4	6	4	0.33	0.43	0.85	106	6	1	3	0.37	0.18	0.81
031	4	6	4	0.20	0.14	0.46	107	6	1	3	0.38	0.32	0.83
032	4	6	4	0.40	0.35	0.55	108	6	5		0.38	0.63	0.64
033	4	5		0.44	0.29	0.65	109	6	4	2	0.40	0.26	0.78
034	4	4	2	0.36	2.80	0.38	110	6	5		0.45	0.32	0.70
035	4	5		0.46	2.04	0.88	113	6	1	2	0.45	0.47	0.81
038	4	1	3	0.43	0.30	0.47	114	6	4	2	0.42	0.74	0.55
039	4	5		0.49	0.32	0.78	115	6	1	3	0.44	0.74	0.67
040	4	4	2	0.16	0.33	0.32	116	6	1	3	0.45	0.75	0.89

Mean Item-Total Corr.: 0.37 Mean p-Value: 0.68

\*Item removed from calibration.



**Table 56. Constructed-Response Item Analyses, English Grade 7 Reading**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		3	1	1	0.62	10.87	13.23	23.53	51.35		1.02	0.71
005		3	1	1	0.45	3.59	12.45	34.27	49.02		0.66	0.76
006		3	5	1	0.51	18.30	49.23	26.74	4.67		1.06	0.39
011		3	5		0.38	70.47	9.13	17.93			2.47	0.22
012		3	6	1	0.54	17.82	49.91	30.50			1.77	0.55
013		3	6	1	0.60	20.51	15.13	62.73			1.63	0.70
021		3	6	4	0.51	27.87	34.53	29.28	6.17		2.15	0.37
036		4	1	2	0.48	15.31	51.13	26.67	5.13		1.78	0.40
037		4	4	2	0.47	20.94	50.42	27.83			0.81	0.53
090		6	1	2	0.55	37.94	33.03	27.01			2.01	0.44
099		6	1	4	0.53	17.96	32.85	28.60	11.84	6.50	2.25	0.38
103		6	1	2	0.46	7.44	29.89	61.36			1.30	0.76
111		6	4	2	0.55	44.76	43.46	8.67			3.12	0.30
112		6	4	2	0.43	14.66	71.45	11.58			2.31	0.47

Mean Item-Total Corr.: 0.51 Mean p-Value: 0.50



**Table 57. Multiple-Choice Item Analyses, English Grade 7 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
048	5	3	8	0.37	0.04	0.78	069	5	2	5	0.52	0.22	0.70
049	5	3	8	0.45	0.13	0.50	070	5	2	5	0.31	0.38	0.64
050	5	3	7	0.39	0.51	0.88	071	5	3	7	0.38	0.40	0.59
051	5	3	7	0.48	2.28	0.83	072	5	3	7	0.51	0.57	0.73
052	5	3	7	0.51	2.67	0.74	073	5	3	7	0.36	0.70	0.76
053	5	3	7	0.39	0.13	0.64	074	5	3	7	0.32	0.78	0.44
054	5	3	7	0.29	0.33	0.59	075	5	3	7	0.07	0.44	0.13
055	5	2	7	0.48	0.18	0.84	076	5	3	7	0.32	0.43	0.52
056	5	3	7	0.44	0.22	0.87	077	5	3	7	0.37	0.25	0.60
057	5	3	8	0.47	0.27	0.80	078	5	2	5	0.31	0.48	0.55
058	5	2	5	0.47	0.24	0.81	079	5	2	5	0.42	0.31	0.52
059	5	2	8	0.44	0.33	0.51	080	5	3	7	0.34	0.36	0.67
060	5	2	8	0.48	0.25	0.79	081	5	3	8	0.43	0.33	0.55
061	5	2	8	0.46	0.39	0.62	082	5	3	8	0.48	0.48	0.65
062	5	3	8	0.43	0.55	0.90	083	5	3	8	0.52	0.73	0.75
063	5	3	8	0.41	0.25	0.83	084	5	3	8	0.50	1.60	0.72
064	5	2	7	0.25	0.33	0.78	085	5	3	8	0.57	0.39	0.70
065	5	2	7	0.42	0.36	0.52	086	5	3	8	0.52	2.09	0.72
066	5	2	5	0.37	0.19	0.67	087	5	2		0.48	0.51	0.88
067	5	2	7	0.41	0.41	0.49	088	5	2		0.53	0.64	0.74

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.67

**Table 58. Constructed-Response Item Analyses, English Grade 7 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.12	1.28	98.72				0.00	0.99
002	A	2	3	8	0.32	64.43	35.31				0.26	0.35
002	B	2	3	8	0.35	53.45	46.29				0.26	0.46
002	C	2	3	8	0.34	61.01	38.71				0.27	0.39
002	D	2	3	7	0.44	53.48	46.28				0.24	0.46
002	E	2	3	8	0.47	25.38	74.35				0.27	0.74
002	F	2	3	7	0.17	63.56	36.17				0.26	0.36
003	A	2	2	6	0.63	0.39	2.12	24.38	57.46	15.42	0.24	0.71
003	B	2	2	6	0.64	0.03	2.37	25.17	57.20	14.99	0.24	0.71
003	C	2	3	6	0.41	0.03	6.23	93.50			0.24	0.97
047		5	2	5	0.58	0.28	3.62	35.92	49.55	9.60	1.03	0.66
068		5	2	5	0.53	0.29	5.88	51.57	38.67	2.49	1.11	0.59
089		5	2	5	0.54	0.20	7.05	49.52	33.94	7.46	1.83	0.59

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.61



**Table 59. Multiple-Choice Item Analyses, English Grade 7 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	1	2	0.43	0.04	0.62	031	2	3		0.47	0.32	0.40
002	1	1	1	0.47	0.11	0.57	032	2	4	2	0.45	0.45	0.34
004	1	1		0.49	0.37	0.73	034	2	1	1	0.34	0.36	0.90
005	1	1		0.43	0.56	0.80	036	2	2		0.17	0.24	0.97
006	1	4		0.39	0.20	0.65	037	2	3		0.28	0.32	0.40
007	1	3		0.43	0.08	0.68	038	2	4		0.28	0.19	0.62
009	1	3		0.28	0.20	0.51	039	2	2		0.52	0.35	0.38
010	1	4		0.50	0.16	0.55	041	3	4		0.19	0.11	0.55
011	1	1		0.38	0.25	0.58	042	3	2		0.31	0.13	0.62
013	1	2		0.35	0.23	0.57	043	3	2		0.41	0.31	0.58
015	1	3		0.24	0.43	0.20	045	3	1	1	0.54	0.22	0.56
016	1	2		0.43	0.82	0.54	046	3	3		0.49	0.13	0.78
017	1	4		0.42	0.34	0.55	047	3	1		0.34	0.44	0.75
018	1	4	2	0.11	0.64	0.57	049	3	4	2	0.33	0.22	0.57
019	1	1	1	0.40	0.49	0.65	050	3	1		0.40	0.32	0.83
021	2	4	2	0.16	0.16	0.58	052	3	1		0.37	0.39	0.79
022	2	1	1	0.42	0.08	0.80	053	3	3		0.49	0.41	0.60
023	2	3		0.43	0.07	0.45	054	3	4		0.35	0.28	0.73
024	2	3		0.44	0.24	0.63	056	3	2		0.26	0.55	0.35
026	2	1		0.40	0.86	0.84	057	3	4	2	0.47	0.27	0.55
027	2	4		0.33	0.07	0.82	058	3	2		0.39	0.18	0.36
028	2	2		0.47	0.36	0.61	059	3	1		0.48	0.59	0.63
030	2	1		0.19	0.43	0.59							

Mean Item-Total Corr.: 0.38 Mean p-Value: 0.61

**Table 60. Constructed-Response Item Analyses, English Grade 7 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
003		1	4	2	0.69	44.21	26.36	28.74			0.69	0.42
008		1	4	2	0.54	28.95	43.35	22.38	4.67		0.65	0.34
012		1	2		0.64	32.77	22.27	41.85			3.11	0.53
014		1	2		0.75	19.99	32.21	23.30	23.63		0.87	0.50
020		1	1	1	0.68	30.72	38.38	10.68	9.68	7.97	2.56	0.30
025		2	1		0.51	22.52	25.43	51.70			0.35	0.64
029		2	3	1	0.64	29.34	51.81	13.79	4.21		0.84	0.31
033		2	3		0.37	12.00	49.87	37.48			0.65	0.62
035		2	2		0.67	8.93	17.82	43.40	29.48		0.36	0.64
040		2	4	1	0.58	20.25	62.56	3.65	7.14	5.38	1.02	0.28
044		3	4		0.52	25.89	35.15	38.46			0.49	0.56
048		3	1		0.71	48.29	31.10	13.09	6.95		0.57	0.26
051		3	1	1	0.58	70.88	7.80	20.11			1.22	0.24
055		3	4		0.60	64.58	24.91	5.00	3.58		1.93	0.15
060		3	3		0.60	20.53	8.35	31.92	12.42	25.71	1.08	0.53

Mean Item-Total Corr.: 0.61 Mean p-Value: 0.42



**Table 61. Multiple-Choice Item Analyses, English Grade 8 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
004	3	6	1	0.35	0.12	0.61	042	4	4	2	0.51	0.24	0.85
005	3	6	1	0.44	0.08	0.86	043	4	5		0.51	0.27	0.79
006	3	6	1	0.43	0.14	0.78	044	4	1	2	0.33	0.30	0.73
007	3	1	3	0.44	0.05	0.83	045	4	1	2	0.55	0.33	0.84
008	3	6	1	0.43	0.15	0.88	046	4	4	2	0.48	0.30	0.88
010	3	5		0.42	0.12	0.76	090	6	4	2	0.34	0.24	0.43
011	3	5		0.26	0.20	0.47	091	6	6	2	0.34	0.20	0.74
012	3	5		0.34	0.19	0.44	092	6	1	3	0.48	0.14	0.78
015	3	1	2	0.22	0.07	0.83	093	6	1	3	0.25	0.23	0.24
016	3	4	2	0.36	0.13	0.39	094	6	1	3	0.56	0.32	0.77
017	3	4	2	0.29	0.16	0.64	095	6	5		0.50	0.12	0.69
018	3	1	3	0.19	0.14	0.22	096	6	5		0.37	0.16	0.61
019	3	4	2	0.41	0.21	0.83	097	6	5		0.37	0.27	0.54
020	3	1	2	0.42	0.29	0.88	098	6	6	2	0.52	0.34	0.84
024	4	4	4	0.06	0.15	0.58	099	6	6	2	0.39	0.33	0.80
025	4	4	4	0.40	0.07	0.69	100	6	4	2	0.39	1.01	0.61
026	4	6	4	0.27	0.11	0.65	103	6	4	4	0.18	0.74	0.70
027	4	4	4	0.46	0.18	0.85	104	6	6	4	0.36	0.16	0.55
028	4	1	3	0.35	0.28	0.47	105	6	1	4	0.14	0.24	0.27
031	4	1	3	0.36	0.07	0.63	106	6	1	4	0.42	0.91	0.63
032	4	4	2	0.38	0.22	0.85	107	6	6	4	0.42	0.39	0.62
033	4	4	2	0.46	0.17	0.83	109	6	4	2	0.28	0.32	0.30
034	4	4	2	0.43	0.29	0.69	110	6	4	2	0.44	0.39	0.69
035	4	5		0.38	0.48	0.53	111	6	4	2	0.39	0.19	0.73
036	4	5		0.46	0.54	0.86	112	6	1	3	0.42	0.23	0.87
037	4	4	2	0.35	3.05	0.43	113	6	1	3	0.50	0.28	0.81
038	4	5		0.48	2.12	0.88	114	6	5		0.40	0.31	0.65
041	4	1	3	0.44	0.32	0.51	115	6	5		0.44	0.40	0.68

Mean Item-Total Corr.: 0.39 Mean p-Value: 0.67



**Table 62. Constructed-Response Item Analyses, English Grade 8 Reading**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
009		3	6	1	0.65	23.41	38.56	35.70			2.33	0.55
013		3	1	2	0.55	8.57	40.63	32.27	17.43		1.10	0.52
014		3	1	2	0.47	4.56	14.18	80.14			1.12	0.87
022		4	6	4	0.56	56.72	11.83	26.88	4.01		0.56	0.26
023		4	1	4	0.52	8.88	50.48	38.08			2.56	0.63
029		4	5		0.51	15.17	21.63	30.91	29.87		2.41	0.58
030		4	1	2	0.65	29.06	20.57	7.69	38.42		4.26	0.50
039		4	1	2	0.53	13.82	47.46	28.92	7.56		2.24	0.43
040		4	4	2	0.48	21.34	48.89	28.49			1.27	0.53
089		6	1	2	0.57	30.32	33.48	33.83			2.37	0.51
101		6	6	4	0.56	31.84	51.13	12.50			4.53	0.38
102		6	6	4	0.47	14.48	68.82	4.03	7.78		4.89	0.33
108		6	5		0.68	12.91	13.01	21.15	48.84		4.09	0.67
116		6	5		0.60	23.71	12.76	57.62			5.90	0.64

Mean Item-Total Corr.: 0.56    Mean p-Value: 0.53



**Table 63. Multiple-Choice Item Analyses, English Grade 8 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
047	5	3	8	0.33	0.02	0.83	067	5	3	8	0.44	0.20	0.32
048	5	3	8	0.37	0.08	0.45	068	5	3	8	0.49	0.30	0.52
049	5	3	8	0.51	0.22	0.72	069	5	3	8	0.29	0.17	0.47
050	5	3	8	0.51	0.17	0.80	070	5	2	7	0.49	0.16	0.86
051	5	3	8	0.45	0.23	0.62	071	5	2		0.46	0.25	0.88
052	5	3	8	0.42	0.21	0.59	072	5	2		0.33	0.24	0.96
053	5	3	8	0.43	5.65	0.68	074	5	3	7	0.45	0.11	0.83
054	5	3	7	0.45	0.22	0.80	075	5	2	7	0.43	0.35	0.51
055	5	3	7	0.42	0.31	0.71	076	5	3	7	0.52	0.39	0.83
056	5	3	7	0.25	1.62	0.31	077	5	2	5	0.49	0.14	0.78
057	5	3	7	0.54	0.40	0.82	078	5	2	5	0.54	0.18	0.72
058	5	3	7	0.51	1.04	0.82	079	5	2	5	0.27	0.29	0.37
059	5	2	8	0.49	0.15	0.59	080	5	2	5	0.27	0.46	0.46
060	5	2	8	0.49	0.22	0.80	081	5	2	5	0.38	0.21	0.71
061	5	3	7	0.43	0.29	0.51	082	5	3	8	0.41	0.29	0.45
062	5	3	7	0.41	0.25	0.81	083	5	2	5	0.45	0.22	0.80
063	5	3	7	0.52	0.38	0.76	084	5	3	8	0.35	0.47	0.47
064	5	3	7	0.41	0.48	0.67	085	5	2	5	0.42	0.23	0.72
065	5	3	7	0.39	0.29	0.74	086	5	2		0.42	0.25	0.71
066	5	3	7	0.43	0.15	0.88	087	5	2	5	0.49	0.38	0.85

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.68

**Table 64. Constructed-Response Item Analyses, English Grade 8 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.12	1.13	98.87				0.00	0.99
002	A	2	3	8	0.55	34.11	65.66				0.23	0.66
002	B	2	3	8	0.13	42.37	57.36				0.27	0.57
002	C	2	3	8	0.39	75.77	23.87				0.36	0.24
002	D	2	3	8	0.26	32.80	66.92				0.27	0.67
002	E	2	3	7	0.35	74.11	25.59				0.30	0.26
002	F	2	3	7	0.53	39.50	60.21				0.29	0.60
003	A	2	2	6	0.58	0.28	2.22	30.05	58.01	9.24	0.19	0.68
003	B	2	2	6	0.59	0.02	2.63	31.29	56.97	8.90	0.19	0.68
003	C	2	3	6	0.40	0.02	6.17	93.62			0.19	0.97
021		5	2	5	0.55	0.17	3.30	47.61	40.69	7.38	0.85	0.63
073		5	2	5	0.56	0.20	4.17	40.79	48.11	5.87	0.87	0.63
088		5	2	5	0.53	0.18	4.38	38.10	50.45	5.53	1.36	0.64

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.63



**Table 65. Multiple-Choice Item Analyses, English Grade 8 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	2		0.45	0.06	0.75	032	2	4	2	0.36	0.19	0.58
002	1	4	2	0.42	0.18	0.54	033	2	1		0.35	0.25	0.35
004	1	4	3	0.49	0.49	0.39	035	2	3		0.35	0.27	0.44
006	1	3		0.53	0.32	0.61	036	2	3		0.34	0.14	0.56
008	1	1		0.44	0.38	0.80	037	2	3		0.44	0.32	0.60
009	1	4		0.42	0.13	0.59	038	2	1		0.50	0.19	0.42
010	1	4	2	0.42	0.21	0.29	039	2	2	1	0.48	0.25	0.51
011	1	4	3	0.33	0.24	0.13	041	3	4	3	0.32	0.16	0.20
012	1	3		0.40	0.44	0.42	042	3	2		0.58	0.16	0.40
014	1	2	1	0.38	0.25	0.50	043	3	1		0.12	0.23	0.29
015	1	3		0.40	0.19	0.73	045	3	2		0.34	0.60	0.41
016	1	2	1	0.38	0.26	0.33	047	3	3		0.46	0.28	0.74
017	1	2		0.39	0.56	0.53	048	3	4		0.38	0.54	0.46
018	1	1	2	0.48	0.57	0.70	050	3	2	1	0.62	0.38	0.53
019	1	3		0.36	0.48	0.31	051	3	4	2	0.21	0.48	0.82
021	2	4	3	0.40	0.08	0.54	052	3	4	2	0.22	0.11	0.53
022	2	2	1	0.59	0.13	0.57	053	3	1		0.47	0.20	0.78
023	2	2		0.26	0.15	0.79	054	3	4		0.45	0.27	0.68
025	2	4	2	0.34	0.09	0.45	056	3	1		0.56	0.44	0.48
027	2	4		0.29	0.13	0.68	057	3	3	2	0.30	0.45	0.43
028	2	1		0.22	0.35	0.65	058	3	2	1	0.41	0.37	0.39
029	2	1		0.45	0.42	0.72	059	3	1	2	0.44	0.75	0.65
031	2	1		0.34	0.38	0.41							

Mean Item-Total Corr.: 0.40 Mean p-Value: 0.53

**Table 66. Constructed-Response Item Analyses, English Grade 8 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
003		1	2	1	0.47	2.32	19.71	33.66	44.13		0.18	0.73
005		1	2	1	0.63	25.20	21.30	50.24			3.25	0.61
007		1	1		0.59	69.14	7.13	19.93			3.79	0.23
013		1	4	3	0.56	33.29	33.22	21.89	9.93		1.67	0.36
020		1	1	2	0.73	26.16	38.38	9.22	11.16	11.84	3.23	0.34
024		2	2	1	0.66	26.39	50.86	21.78			0.97	0.47
026		2	4		0.65	32.80	40.32	23.13	2.14		1.62	0.31
030		2	3		0.38	8.05	39.56	51.93			0.46	0.72
034		2	3		0.70	22.92	29.92	16.47	29.49		1.20	0.50
040		2	2	1	0.62	2.51	8.79	45.35	28.52	14.38	0.46	0.61
044		3	4	3	0.65	47.30	20.11	29.98			2.61	0.40
046		3	3		0.62	12.85	19.09	44.81	22.27		0.99	0.59
049		3	1		0.67	40.05	35.01	23.69			1.24	0.41
055		3	1	2	0.67	28.34	37.17	26.28	6.90		1.31	0.37
060		3	4	3	0.70	32.03	9.34	18.80	8.33	29.88	1.61	0.48

Mean Item-Total Corr.: 0.62 Mean p-Value: 0.48



**Table 67. Multiple-Choice Item Analyses, English Grade 8 Science**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	2	3	0.34	0.05	0.45	043	2	3	5	0.31	0.15	0.48
002	1	1	1	0.27	0.05	0.50	044	2	4		0.09	0.18	0.31
003	1	3		0.28	0.17	0.51	045	2	3	5	0.17	0.12	0.81
004	1	1	1	0.40	0.02	0.77	046	2	4	6	0.17	0.44	0.30
005	1	3		0.26	0.02	0.26	048	2	1	2	0.25	0.08	0.61
006	1	1	1	0.35	0.04	0.39	049	2	2	3	0.45	0.52	0.65
007	1	1	2	0.36	0.05	0.60	051	2	1	1	0.32	0.18	0.53
008	1	4		0.05	0.12	0.18	052	2	4	6	0.31	0.24	0.57
010	1	1		0.50	0.09	0.63	053	2	3	5	0.15	0.17	0.56
011	1	1	2	0.28	2.00	0.62	055	2	3	5	0.37	0.16	0.60
012	1	4	6	0.46	0.12	0.66	058	3	3		0.26	0.05	0.48
014	1	1	2	0.47	0.11	0.52	059	3	4	6	0.38	0.42	0.50
016	1	2	3	0.07	0.11	0.46	060	3	2	3	0.35	0.69	0.75
017	1	2	3	0.29	0.13	0.71	062	3	2		0.45	0.08	0.63
018	1	3	5	0.37	0.06	0.61	065	3	4	6	0.30	0.19	0.70
019	1	4	6	0.40	0.17	0.46	067	3	4	6	0.33	0.06	0.34
026	2	1	1	0.29	0.07	0.63	068	3	3		0.47	0.40	0.77
027	2	2	3	0.44	0.05	0.77	069	3	1	2	0.47	0.14	0.52
028	2	2	3	0.30	0.21	0.61	070	3	1	1	0.40	0.18	0.66
029	2	1	2	0.34	0.12	0.65	072	3	3	5	0.25	0.17	0.73
030	2	1	1	0.30	0.05	0.71	073	3	1	2	0.17	0.22	0.44
031	2	1	1	0.49	0.14	0.56	074	3	1	1	0.44	0.27	0.45
032	2	4	6	0.42	0.24	0.42	075	3	1	1	0.48	0.31	0.55
033	2	2		0.39	0.49	0.54	077	3	1	2	0.35	0.27	0.30
035	2	4		0.31	0.26	0.49	078	3	4	6	0.22	0.09	0.43
037	2	2		0.11	0.16	0.37	079	3	1	1	0.44	0.10	0.74
038	2	1	2	0.44	0.16	0.73	080	3	1	2	0.34	0.61	0.75
039	2	3	5	0.38	0.15	0.69	081	3	1		0.43	0.33	0.52
040	2	3	5	0.20	0.17	0.24	082	3	2		0.43	0.39	0.39
041	2	4		0.36	0.20	0.26	083	3	3	5	0.27	0.35	0.44

Mean Item-Total Corr.: 0.33 Mean p-Value: 0.54



**Table 68. Constructed-Response Item Analyses, English Grade 8 Science**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
009		1	3	5	0.60	31.99	32.39	31.48			4.14	0.48
013		1	2	3	0.50	43.81	55.46				0.72	0.55
015		1	4	6	0.25	88.56	10.83				0.60	0.11
020		1	1	1	0.48	50.47	48.59				0.94	0.49
021		1	1	1	0.34	21.76	77.59				0.64	0.78
022		1	1	1	0.56	24.04	29.19	45.42			1.34	0.60
023		1	1	1	0.40	28.32	70.39				1.29	0.70
024		1	1	2	0.59	18.24	18.02	14.85	22.04	26.02	0.83	0.54
025		1	1	2	0.65	26.37	29.20	41.97			2.45	0.57
034		2	4	6	0.51	49.97	46.06	1.92			2.05	0.25
036		2	2	3	0.27	74.58	21.01	3.48			0.94	0.14
042		2	1	1	0.60	46.41	46.66	5.80			1.13	0.29
047		2	4	6	0.33	44.42	47.60	4.27			3.71	0.28
050		2	2		0.49	64.00	13.62	16.26			6.12	0.23
054		2	4		0.54	30.19	46.92	20.32			2.56	0.44
056		3	2	3	0.33	61.05	23.06	14.10			1.78	0.26
057		3	2	3	0.33	58.87	33.57				7.57	0.34
061		3	3		0.65	40.72	34.96	23.60			0.72	0.41
063		3	3	5	0.61	49.54	39.25	8.20			3.02	0.28
064		3	1	1	0.68	33.74	25.09	22.54	17.47		1.16	0.41
066		3	3	5	0.51	54.76	40.59				4.65	0.41
071		3	2		0.41	78.89	16.65				4.46	0.17
076		3	1	2	0.37	15.34	83.44				1.23	0.83

Mean Item-Total Corr.: 0.48 Mean p-Value: 0.42



**Table 69. Multiple-Choice Item Analyses, English Grade 9 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
006	3	4	2	0.41	0.12	0.47	039	4	5		0.28	0.14	0.43
007	3	4	2	0.26	0.14	0.66	040	4	5		0.42	0.09	0.85
008	3	1	3	0.22	0.19	0.23	043	4	1	3	0.49	0.16	0.55
009	3	4	2	0.40	0.22	0.87	044	4	1	3	0.45	0.19	0.75
010	3	1	2	0.40	0.26	0.90	045	4	1	2	0.41	0.37	0.73
013	3	6	1	0.37	0.19	0.71	046	4	1	2	0.51	0.77	0.82
014	3	1	1	0.63	0.21	0.75	047	4	4	2	0.57	0.69	0.84
015	3	6	1	0.29	0.21	0.54	048	4	6	2	0.51	0.78	0.63
016	3	4	1	0.47	0.35	0.71	093	6	4	4	0.18	0.51	0.70
017	3	6	1	0.41	0.37	0.79	094	6	6	4	0.35	0.10	0.56
018	3	5		0.55	0.53	0.71	095	6	1	4	0.16	0.17	0.31
020	3	6	4	0.55	0.30	0.80	096	6	1	4	0.42	0.43	0.65
021	3	4	2	0.18	0.39	0.29	097	6	6	4	0.43	0.32	0.62
022	3	4	2	0.49	0.36	0.75	099	6	4	1	0.46	0.15	0.71
023	3	1	3	0.55	0.33	0.85	100	6	4	1	0.29	0.16	0.87
024	3	5		0.39	0.44	0.58	101	6	1	1	0.44	0.20	0.85
025	3	5		0.51	0.47	0.79	103	6	1	1	0.44	0.17	0.64
028	4	1	3	0.51	0.07	0.77	104	6	5		0.55	0.22	0.89
029	4	1	3	0.57	0.14	0.77	106	6	1	2	0.48	0.28	0.71
030	4	1	3	0.28	0.09	0.51	107	6	1	2	0.47	0.28	0.84
031	4	4	2	0.32	0.13	0.78	108	6	4	2	0.50	0.22	0.85
032*	4	5		-0.20	0.25	0.17	109	6	4	2	0.56	0.30	0.83
033	4	5		0.30	0.26	0.49	110	6	5		0.41	0.34	0.66
034	4	1	2	0.41	0.11	0.61	111	6	5		0.42	0.36	0.60
035	4	1	3	0.40	0.18	0.66	112	6	1	3	0.46	0.23	0.66
036	4	1	3	0.17	0.11	0.28	113	6	5		0.49	0.30	0.61
037	4	5		0.38	0.14	0.43	115	6	5		0.51	0.21	0.62
038	4	5		0.42	0.09	0.66	116	6	5		0.53	0.21	0.86

Mean Item-Total Corr.: 0.41 Mean p-Value: 0.66

\*Item removed from calibration.



**Table 70. Constructed-Response Item Analyses, English Grade 9 Reading**

Item #	Part	Session	CS	SA	Item- Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		3	1	2	0.52	6.06	40.22	34.01	18.69		1.01	0.55
005		3	1	2	0.42	2.97	9.66	86.29			1.08	0.91
011		3	6	1	0.46	7.35	37.02	40.97	13.10		1.55	0.53
012		3	6	1	0.57	39.10	17.98	30.17	6.59		6.16	0.33
019		3	1	4	0.54	28.76	22.85	24.52	20.55		3.33	0.45
027		4	1	2	0.62	10.94	31.74	40.31	14.17		2.84	0.52
041		4	4	2	0.65	20.73	14.10	29.67	30.82		4.69	0.55
042		4	4	2	0.60	5.06	26.02	52.29	12.62		4.01	0.56
091		6	6	4	0.58	28.74	51.96	15.03			4.28	0.41
092		6	6	4	0.47	10.92	69.93	4.20	10.11		4.84	0.36
098		6	6	1	0.60	9.36	30.93	25.69	29.43		4.59	0.57
102		6	4	1	0.35	32.37	47.60	17.09			2.94	0.41
105		6	5		0.65	8.40	15.27	26.25	45.11		4.96	0.68
114		6	5		0.54	6.84	12.32	49.23	29.09		2.52	0.66

Mean Item-Total Corr.: 0.54 Mean p-Value: 0.54



**Table 71. Multiple-Choice Item Analyses, English Grade 9 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
049	5	2		0.42	0.05	0.54	070	5	2	8	0.40	0.30	0.44
050	5	2		0.29	0.09	0.65	071	5	3	7	0.50	0.36	0.69
051	5	2		0.51	0.09	0.78	072	5	3	7	0.45	0.46	0.81
052	5	2		0.43	5.41	0.49	073	5	3	7	0.50	0.38	0.82
053	5	2		0.34	0.04	0.71	074	5	2	7	0.53	0.54	0.80
054	5	3	8	0.43	0.10	0.77	075	5	3	7	0.43	0.79	0.43
055	5	3	8	0.36	0.30	0.53	076	5	3	7	0.54	0.88	0.82
056	5	3	8	0.49	0.21	0.75	077	5	2	5	0.44	0.27	0.88
057	5	3	8	0.30	0.58	0.41	078	5	3	8	0.32	0.28	0.52
058	5	3	8	0.40	1.34	0.61	079	5	3	7	0.32	0.33	0.59
059	5	3	8	0.42	0.20	0.79	080	5	2	5	0.45	0.31	0.74
060	5	3	8	0.50	0.29	0.85	081	5	2	8	0.23	0.40	0.76
061	5	3	7	0.43	0.34	0.70	082	5	3	8	0.44	0.43	0.37
062	5	3	7	0.39	0.31	0.66	083	5	3	7	0.33	0.40	0.81
063	5	3	7	0.39	0.28	0.54	084	5	3	8	0.45	0.52	0.76
064	5	3	7	0.51	0.36	0.81	085	5	3	8	0.39	0.69	0.48
065	5	2	5	0.50	0.38	0.65	086	5	3	8	0.08	0.40	0.11
066	5	2	5	0.56	0.21	0.76	087	5	3	7	0.52	0.58	0.73
067	5	2	5	0.53	0.29	0.69	088	5	3	8	0.49	0.79	0.67
068	5	2	5	0.50	0.40	0.86	089	5	2	8	0.57	0.58	0.66

Mean Item-Total Corr.: 0.43 Mean p-Value: 0.66

**Table 72. Constructed-Response Item Analyses, English Grade 9 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.19	1.90	98.10				0.00	0.98
002	A	2	3	7	0.46	21.66	78.11				0.24	0.78
002	B	2	3	7	0.41	8.08	91.68				0.24	0.92
002	C	2	3	7	0.52	62.67	36.99				0.33	0.37
002	D	2	3	8	0.13	17.81	81.92				0.27	0.82
002	E	2	3	8	0.39	52.36	47.25				0.39	0.47
002	F	2	3	8	0.25	5.61	93.95				0.44	0.94
003	A	2	2	6	0.63	0.70	3.72	51.29	39.48	4.54	0.27	0.61
003	B	2	2	6	0.64	0.12	4.49	51.37	39.17	4.58	0.27	0.61
003	C	2	3	6	0.47	0.15	7.70	91.88			0.27	0.96
026		5	2	5	0.59	0.27	4.81	46.13	41.02	5.48	2.30	0.61
069		5	2	5	0.59	0.17	6.66	48.63	37.89	5.09	1.56	0.59
090		5	2	5	0.60	0.33	8.27	43.09	38.22	7.69	2.40	0.60

Mean Item-Total Corr.: 0.45 Mean p-Value: 0.71



**Table 73. Multiple-Choice Item Analyses, English Grade 9 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	2		0.28	0.05	0.91	031	2	1		0.41	0.96	0.48
002	1	4		0.40	0.20	0.50	033	2	3		0.30	0.14	0.60
004	1	4	2	0.34	0.09	0.51	034	2	1		0.46	0.24	0.79
005	1	2		0.43	0.20	0.62	036	2	4		0.38	0.29	0.27
006	1	2	1	0.42	0.11	0.72	037	2	2		0.40	0.20	0.83
008	1	3		0.53	0.28	0.59	038	2	2		0.22	0.49	0.69
009	1	4	2	0.48	0.18	0.35	039	2	4		0.52	0.41	0.37
010	1	1		0.47	0.37	0.43	041	3	3		0.43	0.18	0.58
011	1	3		0.18	0.15	0.36	042	3	4	2	0.25	0.29	0.57
013	1	3		0.39	0.16	0.81	044	3	3	2	0.39	0.24	0.66
014	1	2		0.32	0.14	0.80	045	3	4		0.34	0.50	0.55
016	1	4		0.22	0.27	0.57	047	3	1		0.53	0.41	0.60
017	1	2		0.27	0.37	0.38	048	3	1		0.25	0.45	0.53
018	1	3		0.37	0.33	0.43	049	3	2		0.22	0.38	0.47
019	1	4	2	0.47	0.55	0.32	051	3	3		0.37	0.35	0.40
021	2	3		0.40	0.23	0.43	052	3	3		0.43	0.30	0.70
022	2	2	1	0.55	0.11	0.60	053	3	2		0.34	0.40	0.39
024	2	1	2	0.39	0.18	0.72	055	3	1		0.28	0.46	0.37
025	2	4		0.41	0.14	0.19	056	3	1		0.43	0.31	0.69
027	2	4		0.35	0.30	0.32	057	3	2		0.35	0.35	0.10
028	2	1	2	0.42	0.35	0.64	058	3	3		0.35	0.33	0.84
029*	2	2		0.06	0.53	0.43	059	3	4		0.19	0.42	0.49
030	2	1	2	0.41	0.38	0.69							

Mean Item-Total Corr.: 0.36 Mean p-Value: 0.54

\*Item removed from calibration.

**Table 74. Constructed-Response Item Analyses, English Grade 9 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
003		1	1	2	0.66	67.52	16.69	14.00			1.79	0.22
007		1	2		0.73	48.28	15.17	8.54	24.80		3.21	0.36
012		1	1	2	0.67	37.60	35.15	26.13			1.12	0.44
015		1	4		0.59	69.59	20.10	6.10	2.51		1.70	0.13
020		1	2	1	0.72	7.68	18.90	36.49	25.70	9.81	1.42	0.52
023		2	2	1	0.66	26.65	49.12	23.06			1.18	0.48
026		2	4		0.67	38.38	32.29	23.84	3.20		2.29	0.30
032		2	3		0.62	41.48	34.67	22.61			1.24	0.40
035		2	2	1	0.68	11.72	45.26	21.54	19.96		1.51	0.49
040		2	4	2	0.69	70.54	10.37	5.96	4.54	6.22	2.36	0.15
043		3	2	1	0.56	67.99	22.41	4.07			5.53	0.15
046		3	1	2	0.70	51.16	27.94	6.97	11.87		2.07	0.26
050		3	3		0.58	28.31	45.36	24.22			2.10	0.47
054		3	3		0.57	19.50	57.57	13.45	7.09		2.39	0.35
060		3	3	1	0.64	15.09	51.34	17.15	9.48	4.38	2.55	0.33

Mean Item-Total Corr.: 0.65 Mean p-Value: 0.34



**Table 75. Multiple-Choice Item Analyses, English Grade 10 Reading**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
006	3	6	1	0.29	0.19	0.55	038	4	6	4	0.17	0.39	0.24
007	3	1	1	0.39	0.12	0.80	040	4	1	3	0.49	0.11	0.80
008	3	4	1	0.17	0.21	0.47	041	4	1	3	0.58	0.22	0.78
009	3	1	1	0.37	0.28	0.74	042	4	1	3	0.32	0.10	0.57
010	3	4	1	0.21	0.20	0.66	043	4	1	2	0.39	0.27	0.71
011	3	1	3	0.17	0.15	0.58	044	4	4	2	0.39	0.24	0.79
012	3	1	3	0.46	0.18	0.87	045*	4	5		-0.15	0.52	0.17
014	3	4	4	0.30	0.12	0.46	048	4	1	2	0.26	0.40	0.47
015	3	4	4	0.31	0.24	0.65	049	4	5		0.40	0.29	0.68
016	3	1	3	0.25	0.12	0.60	050	4	1	2	0.49	0.26	0.91
017	3	5		0.33	0.20	0.49	051	4	5		0.45	0.24	0.77
018	3	5		0.38	0.18	0.81	052	4	5		0.54	0.30	0.87
019	3	5		0.24	0.29	0.43	053	4	5		0.44	1.53	0.83
020	3	5		0.18	0.27	0.34	098	6	1	1	0.46	0.12	0.86
021	3	5		0.35	0.42	0.47	099	6	4	1	0.41	0.35	0.72
022	3	4	4	0.33	1.61	0.49	100	6	5		0.47	0.13	0.81
023	3	6	4	0.43	2.01	0.55	101	6	4	1	0.30	0.21	0.88
025	3	1	3	0.24	0.32	0.45	102	6	1	1	0.43	0.22	0.88
026	3	5		0.42	0.72	0.79	104	6	1	1	0.41	0.16	0.68
027	3	1	3	0.40	0.23	0.51	105	6	5		0.46	0.16	0.79
028	3	5		0.41	0.25	0.81	106	6	5		0.53	0.20	0.90
029	3	5		0.38	0.36	0.57	108	6	4	1	0.42	0.20	0.66
030	3	5		0.43	0.33	0.62	109	6	4	1	0.16	0.29	0.40
032	4	6	4	0.46	0.05	0.82	111	6	5		0.52	0.18	0.80
033	4	6	4	0.32	0.12	0.66	112*	6	1	3	0.03	0.28	0.37
034	4	1	3	0.35	0.11	0.81	113	6	5		0.45	0.47	0.72
035	4	6	4	0.50	0.48	0.76	114*	6	1	3	0.28	0.18	0.51
036	4	6	4	0.33	0.90	0.60	115	6	1	3	0.30	0.21	0.44

Mean Item-Total Corr.: 0.35 Mean p-Value: 0.65

\* Item removed from calibration.



**Table 76. Constructed-Response Item Analyses, English Grade 10 Reading**

Item #	Part	Session	CS	SA	Item- Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		3	6	1	0.50	53.45	21.37	16.15			9.03	0.27
005		3	1	1	0.67	3.88	10.28	38.75	16.12	27.38	3.59	0.61
013		3	4	4	0.59	6.10	28.34	46.13	16.24		3.18	0.56
024		3	6	4	0.54	16.93	31.19	31.15	16.90		3.84	0.48
031		4	6	4	0.57	31.45	41.07	24.21			3.27	0.45
037		4	6	4	0.56	25.17	16.18	25.24	14.25	7.26	11.9	0.35
039		4	1	2	0.66	11.70	27.07	39.44	17.75		4.03	0.53
046		4	4	2	0.63	7.00	5.62	23.25	59.96		4.17	0.77
047		4	4	2	0.62	6.38	36.23	29.44	22.52		5.42	0.54
054		4	5		0.61	29.54	22.72	40.94			6.80	0.52
097		6	6	1	0.64	8.08	29.47	24.01	33.33		5.10	0.59
103		6	4	1	0.35	28.46	48.28	19.78			3.48	0.44
107		6	1	1	0.63	10.00	35.47	31.96	18.14		4.42	0.51
110		6	1	1	0.58	38.61	22.86	32.70			5.83	0.44

Mean Item-Total Corr.: 0.58    Mean p-Value: 0.50



**Table 77. Multiple-Choice Item Analyses, English Grade 10 Writing**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
055	5	3	8	0.36	0.06	0.60	076	5	3	8	0.36	0.36	0.57
056	5	2		0.36	0.18	0.88	077	5	3	8	0.25	0.46	0.50
057	5	3	8	0.50	0.07	0.78	078	5	2	8	0.44	0.14	0.68
058	5	3	8	0.38	6.84	0.56	079	5	2	8	0.36	0.18	0.46
059	5	3	7	0.36	0.07	0.52	080	5	2	8	0.53	0.42	0.85
060	5	3	7	0.52	0.14	0.87	081	5	3	8	0.49	0.17	0.87
061	5	3	7	0.52	0.26	0.81	082	5	3	7	0.47	0.40	0.66
062	5	3	7	0.56	0.40	0.87	083	5	3	7	0.43	0.48	0.64
063	5	3	8	0.52	0.25	0.85	084	5	3	7	0.53	0.37	0.71
064	5	3	7	0.41	0.48	0.48	085	5	3	7	0.42	0.25	0.80
065	5	3	7	0.21	0.49	0.28	086	5	2	7	0.55	0.36	0.82
066	5	3	7	0.26	0.39	0.26	087	5	3	7	0.47	0.29	0.50
067	5	2	5	0.26	0.26	0.53	088	5	2	5	0.34	0.28	0.43
068	5	2	5	0.54	0.30	0.84	089	5	2		0.44	0.41	0.84
069	5	2	5	0.41	0.45	0.65	090	5	2		0.36	0.48	0.67
070	5	3	7	0.36	0.07	0.75	091	5	2		0.38	0.21	0.50
071	5	2	5	0.44	0.09	0.73	092	5	3	7	0.34	0.18	0.45
072	5	2	5	0.56	0.08	0.79	093	5	3	7	0.56	0.24	0.79
073	5	2	5	0.51	0.10	0.86	094	5	3	7	0.48	0.44	0.78
075	5	3	7	0.21	0.20	0.43	095	5	3	8	0.53	0.37	0.83

Mean Item-Total Corr.: 0.42 Mean p-Value: 0.67

**Table 78. Constructed-Response Item Analyses, English Grade 10 Writing**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
001		1	2	6	0.17	1.89	98.11				0.00	0.98
002	A	2	3	7	0.42	44.78	54.91				0.31	0.55
002	B	2	3	8	0.55	41.91	57.77				0.32	0.58
002	C	2	3	8	0.34	63.15	36.51				0.34	0.37
002	D	2	3	8	0.46	50.74	48.90				0.37	0.49
002	E	2	3	8	0.31	38.75	60.89				0.36	0.61
002	F	2	3	7	0.51	19.91	79.76				0.33	0.80
003	A	2	2	6	0.63	0.30	3.36	36.06	50.33	9.65	0.30	0.66
003	B	2	2	6	0.66	0.09	3.82	36.83	49.71	9.25	0.30	0.66
003	C	2	3	6	0.48	0.13	9.21	90.36			0.30	0.95
074		5	2	5	0.57	0.49	5.46	42.71	45.12	3.68	2.54	0.60
096		5	2	5	0.59	0.71	3.89	27.73	58.16	6.06	3.45	0.65
116		5	2	5	0.60	0.41	8.41	40.13	38.51	10.17	2.38	0.61

Mean Item-Total Corr.: 0.48 Mean p-Value: 0.65



**Table 79. Multiple-Choice Item Analyses, English Grade 10 Mathematics**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	1		0.20	0.04	0.61	031	2	3		0.25	0.20	0.30
002	1	1		0.17	0.23	0.51	033	2	4		0.17	0.20	0.52
003	1	3	2	0.21	0.17	0.33	035	2	2		0.27	0.26	0.42
005	1	4		0.40	0.08	0.70	036	2	2	1	0.53	0.37	0.72
006	1	3		0.38	0.13	0.45	037	2	1		0.31	0.27	0.36
008	1	3		0.29	0.23	0.43	038	2	1		0.42	0.20	0.68
009	1	1		0.24	0.23	0.32	039	2	2		0.45	0.52	0.53
010	1	1		0.49	0.20	0.49	041	3	1		0.36	0.58	0.22
011	1	4		0.25	0.24	0.87	042	3	3	2	0.39	0.19	0.69
012	1	2		0.31	0.30	0.27	043	3	4		0.25	0.71	0.46
013	1	4		0.48	0.40	0.27	044	3	3	2	0.33	0.30	0.30
015	1	1		0.25	0.40	0.37	046	3	3	2	0.29	0.18	0.88
016	1	4		0.42	0.12	0.57	047	3	4		0.60	0.46	0.35
017	1	2	1	0.45	0.22	0.74	049	3	4		0.21	0.55	0.43
019	1	2	1	0.43	0.11	0.60	050	3	4		0.22	0.45	0.51
021	2	4		0.39	0.07	0.30	051	3	1		0.50	0.33	0.64
022	2	3		0.38	0.07	0.67	052	3	3		0.42	0.31	0.46
023	2	2	1	0.38	0.11	0.26	053	3	2		0.32	0.35	0.52
024	2	4		0.42	0.37	0.23	055	3	2	1	0.60	0.30	0.66
026	2	1		0.41	0.21	0.65	056	3	2		0.25	0.50	0.35
027	2	2		0.28	0.16	0.80	058	3	1		0.33	0.50	0.32
029	2	3		0.39	0.32	0.82	059	3	2		0.37	0.33	0.63
030	2	3	2	0.42	0.19	0.66							

Mean Item-Total Corr.: 0.35 Mean p-Value: 0.51

**Table 80. Constructed-Response Item Analyses, English Grade 10 Mathematics**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
004		1	2		0.51	19.40	13.98	65.33			1.28	0.72
007		1	2	1	0.62	43.34	12.34	35.30	8.22		0.79	0.36
014		1	3	2	0.18	94.93	1.98	1.59			1.51	0.03
018		1	4		0.59	58.50	29.82	7.87	2.44		1.38	0.18
020		1	4		0.67	69.15	10.71	4.97	6.85	6.61	1.71	0.17
025		2	4		0.70	44.19	29.77	23.55			2.49	0.38
028		2	3		0.63	24.11	48.85	23.42	2.14		1.48	0.34
032		2	1		0.57	33.47	56.82	7.67			2.04	0.36
034		2	2		0.74	44.37	16.06	5.84	29.77		3.95	0.39
040		2	2		0.75	28.09	31.31	12.67	5.13	20.63	2.18	0.39
045		3	3	2	0.49	64.36	18.56	15.54			1.54	0.25
048		3	4		0.74	55.59	15.75	12.44	14.05		2.17	0.28
054		3	2	1	0.50	4.26	62.98	31.27			1.49	0.63
057		3	1		0.71	48.64	26.23	7.83	14.47		2.84	0.28
060		3	3	1	0.66	10.98	42.75	30.95	11.36	2.60	1.35	0.37

Mean Item-Total Corr.: 0.60 Mean p-Value: 0.34



**Table 81. Multiple-Choice Item Analyses, English Grade 10 Science**

Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value	Item #	Session	CS	SA	Item-Total Corr.	Omit %	p-Value
001	1	3	5	0.25	0.10	0.53	045	2	4	6	0.31	0.19	0.48
002	1	3	5	0.38	0.05	0.86	046	2	1	1	0.42	0.14	0.71
003	1	4		0.17	0.11	0.43	048	2	4	6	0.17	0.14	0.39
004	1	4	6	0.44	0.15	0.73	049	2	4		0.45	0.11	0.64
005	1	3		0.24	0.05	0.37	050	2	4	6	0.41	0.23	0.68
006	1	1	2	0.42	0.15	0.79	051	2	2	4	0.42	0.22	0.32
008	1	2	4	0.25	0.09	0.38	053	2	2	4	0.49	0.61	0.54
009	1	2	4	0.14	0.23	0.47	054	2	2	4	0.38	0.53	0.79
010	1	2	4	0.43	0.09	0.58	055	3	1		0.39	0.04	0.77
011	1	3		0.27	0.09	0.72	056	3	1	1	0.36	0.06	0.83
012	1	2	4	0.21	1.80	0.11	057	3	1	1	0.35	0.11	0.40
013	1	2		0.49	0.08	0.58	058	3	1	2	0.48	0.10	0.65
014	1	4		0.31	0.07	0.37	060	3	3		0.44	0.13	0.44
015*	1	4	6	0.34	0.10	0.67	061	3	3		0.33	0.10	0.63
016	1	4	6	0.30	0.15	0.52	063	3	1	1	0.23	0.07	0.25
017	1	4	6	0.28	0.12	0.61	064	3	2		0.21	0.08	0.35
018	1	2	4	0.38	0.13	0.42	065	3	1		0.27	0.21	0.39
019	1	3	5	0.42	0.14	0.70	067	3	4	6	0.36	0.10	0.82
020	1	1	1	0.47	0.13	0.82	068	3	3	5	0.41	0.23	0.51
028	2	2	4	0.33	0.08	0.63	070*	3	2		0.05	0.27	0.13
030	2	3	5	0.29	0.09	0.45	071	3	1	2	0.47	0.29	0.66
032	2	1	1	0.47	0.08	0.87	072	3	4		0.08	0.52	0.19
033	2	1	2	0.45	0.06	0.73	073	3	4	6	0.33	0.13	0.84
035	2	3		0.44	0.06	0.69	075	3	1	2	0.48	0.15	0.73
036	2	1	1	0.19	0.17	0.39	076	3	4	6	0.37	0.23	0.39
037	2	3	5	0.13	0.18	0.39	077	3	2	4	0.38	0.18	0.61
039	2	3	5	0.42	0.26	0.76	079	3	1	1	0.50	0.09	0.53
040	2	1	1	0.43	0.18	0.65	080	3	4	6	0.51	0.17	0.75
042	2	3		0.43	0.09	0.76	081	3	3		0.46	0.25	0.57
043	2	1	1	0.28	0.30	0.37	083	3	3	5	0.27	0.26	0.52

Mean Item-Total Corr.: 0.35 Mean p-Value: 0.56

\*Item removed from calibration.



**Table 82. Constructed-Response Item Analyses, English Grade 10 Science**

Item #	Part	Session	CS	SA	Item-Total Corr.	Percent of Students Obtaining Score Level					Omit %	p-Value
						0	1	2	3	4		
007		1	1	1	0.25	87.53	9.95				2.52	0.10
021		1	1	2	0.52	15.72	9.38	32.75	20.92	20.16	1.07	0.55
022		1	1	1	0.42	49.23	25.90	22.04			2.83	0.35
023		1	1	2	0.47	43.16	53.78				3.05	0.54
024		1	1	1	0.46	7.49	11.86	25.92	50.67		4.07	0.72
025		1	1	2	0.41	64.13	33.21				2.66	0.33
026		1	1	1	0.40	31.94	64.59				3.47	0.65
027		1	1	1	0.50	38.50	57.37				4.13	0.57
029		2	2	4	0.36	88.51	7.14				4.35	0.07
031		2	1	1	0.40	27.35	49.54	19.79			3.32	0.45
034		2	4		0.49	47.31	50.53				2.16	0.51
038		2	1		0.42	41.34	32.78	16.07	3.87		5.94	0.26
041		2	3		0.32	33.72	64.12				2.16	0.64
044		2	1	1	0.42	16.29	34.91	46.07			2.73	0.64
047		2	4	6	0.49	52.42	33.17	9.65			4.76	0.26
052		2	2	4	0.59	46.60	29.56	18.10			5.74	0.33
059		3	3	5	0.55	40.17	33.68	18.51			7.64	0.35
062		3	3	5	0.43	60.53	20.50	6.37			12.6	0.17
066		3	1	2	0.49	32.75	64.19				3.06	0.64
069		3	2	4	0.46	73.53	16.08	7.06			3.33	0.15
074		3	4	6	0.58	19.83	30.64	45.96			3.57	0.61
078		3	2		0.56	40.97	37.43	19.50			2.10	0.38
082		3	1	1	0.53	27.21	66.68				6.11	0.67

Mean Item-Total Corr.: 0.46 Mean p-Value: 0.43



**Table 83. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 English Reading**

Item	a	b	c	Fit-Z
002	0.74418	-1.0293	0.0997	13.99
003	0.35194	-2.1074	0.1877	20.14
004	0.82037	-1.1988	0.1777	19.93
005	0.70137	-1.9436	0.2000	43.11
008	1.24872	-0.5574	0.2380	9.29
009	1.15694	0.2048	0.2843	35.90
010	1.12318	-0.7542	0.1913	6.35
011	0.41002	-1.6103	0.1428	34.12
012	0.82624	-1.1101	0.0705	14.08
014	0.61591	-0.0043	0.1447	26.08
015	0.85631	-1.1945	0.0497	8.92
016	0.82183	0.0369	0.2134	6.81
017	0.81657	-0.9748	0.1219	10.69
018	1.06539	-0.1694	0.2456	12.63
019	1.02160	-0.5619	0.2709	4.69
020	1.02559	-1.5381	0.1762	14.84
021	1.08966	0.3917	0.2196	21.40
022	1.26256	-0.7622	0.2098	14.43
023	0.94502	-1.1538	0.1828	10.22
025	0.81906	1.1838	0.0724	26.52
027	0.33115	0.7965	0.1639	18.32
028	0.58181	-0.3156	0.1777	136.92
030	0.94368	-0.5548	0.1467	21.50
031	0.98259	-0.7290	0.1827	3.28
032	0.75686	0.0163	0.1643	11.38
033	1.23715	-1.2032	0.2799	4.16
034	0.90549	-0.7105	0.3586	4.87
036	0.89834	-1.1668	0.2310	20.19
037	1.51546	-0.6364	0.2046	12.05
038	1.05223	-0.9871	0.1546	11.60
039	0.70414	1.0485	0.3877	27.99
040	0.40187	0.9185	0.2115	12.04

M1=64.3442, M2=562.5168, N=57201, Critical Z=152.54

**Table 84. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		0.64252	0.4230	-0.7065	0.9158		45.65
006		0.78369	-1.4407	-0.0653			239.30
007		1.24725	-0.4540	-0.4129			32.08
013		0.94579	0.6573	-0.2898			26.02
024		0.77263	-0.4295	0.7210	1.2411		57.83
026		0.58379	1.9406	-1.4455	-0.4211		161.33
029		0.73322	0.1454	0.1127			79.44
035		0.94026	-0.5835	-0.6644	-0.2673		21.16

M1=64.3442, M2=562.5168, N=57201, Critical Z=152.54



**Table 85. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Spanish Reading**

Item	a	b	c	Fit-Z
003	1.09081	1.3369	0.1268	0.28
004	0.37992	-0.3699	0.2000	1.80
005	0.52456	2.0194	0.2125	0.19
006	0.72282	1.7969	0.1333	2.30
007	0.82130	1.6689	0.1530	-0.17
009	0.81285	0.7073	0.2307	0.02
010	0.50865	-0.0075	0.2000	0.95
011	0.71401	-0.3948	0.2000	0.25
012	0.45721	0.2730	0.2000	0.26
013	0.79932	1.5282	0.1758	-0.34
014	0.10406	6.8517	0.2000	1.91
015	0.86956	-0.8654	0.2000	-0.37
016	0.72778	-1.5010	0.2000	-0.70
018	0.67509	-0.7930	0.2000	-0.50
019	0.96609	-0.7603	0.2000	-1.38
020	1.18506	-0.2391	0.2161	1.12
021	1.36110	-1.9732	0.2000	-0.29
022	0.81185	-0.3112	0.2324	1.38
023	1.07093	-1.4131	0.2000	-0.94
024	0.82402	-1.4587	0.2000	5.25
027	0.51040	-2.5690	0.2000	-0.30
028	0.90217	-0.7365	0.2000	1.46
029	0.48736	-1.0655	0.2000	1.89
030	0.89459	0.4527	0.2131	0.53
031	0.79163	0.0604	0.2339	-1.21
033	0.55156	0.2627	0.1902	0.59
034	0.77815	0.9213	0.2794	-0.24
035	0.26791	2.9688	0.2000	-0.35
037	1.29524	-0.5857	0.1364	-0.13
038	0.74855	-0.2639	0.1831	0.14
039	1.28997	0.3292	0.3086	3.26
040	0.67318	0.0681	0.1645	-0.09

M1=36.7743, M2=521.6038, N=1488, Critical Z=3.97

**Table 86. Item Parameter and Fit Summary, Constructed-Response Items, Grade 3 Spanish Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		0.52068	0.7307	-0.7419	-0.3862		5.01
002		0.70917	0.4643	-0.6142	-1.2964		0.26
008		1.02573	-0.6367	-0.3933			-0.70
017		0.61335	-0.5042	-0.4055	0.0977		0.30
025		0.84158	-1.0811	-0.6226			3.17
026		0.60418	0.6677	-0.4256			-0.15
032		0.69577	-0.3400	0.0643	1.7341		6.09
036		1.08029	-0.8852	0.3728			5.38

M1=36.7743, M2=521.6038, N=1488, Critical Z=3.97



**Table 87. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 English Writing**

Item	a	b	c	Fit-Z
002	1.13187	-0.3445	0.3759	14.46
003	0.65693	-1.5946	0.0875	8.13
004	0.67510	-0.3963	0.1766	15.94
005	1.16358	-1.2991	0.2453	5.02
006	1.05823	-1.5845	0.3348	2.75
007	0.55579	-1.5808	0.2000	16.81
008	0.83959	-0.2443	0.4991	26.28
009	0.70042	-1.6256	0.1246	5.60
010	1.26252	0.0349	0.4995	28.56
011	1.01725	-1.3065	0.3882	10.98
012	0.77572	-2.7096	0.2373	105.35
014	0.61199	-0.1797	0.3671	19.48
015	0.99039	-1.7437	0.2000	6.43
016	0.89141	-0.1175	0.1751	5.22
017	0.88401	-1.6985	0.2000	1.99
018	0.85100	-0.5797	0.1394	4.38
019	0.73744	-1.0202	0.2120	0.51
020	1.14778	-1.4113	0.2971	5.00
021	0.86066	-0.1895	0.1527	12.90
022	0.50464	-1.7155	0.3542	21.07
023	0.89531	-1.7620	0.2000	11.26
024	0.82811	-1.0964	0.3257	8.26
025	0.76920	-0.3347	0.2482	8.54
026	0.88125	-0.2965	0.3094	19.66
027	0.86016	-1.5515	0.2000	5.91
028	0.73275	-0.1458	0.1388	4.89
029	1.14523	-1.5081	0.2211	4.67
031	1.32537	-1.4928	0.2935	8.88
032	0.90486	-2.8130	0.2000	22.96
033	0.92264	-1.9546	0.2000	4.89
034	1.17242	-0.6275	0.2227	15.71
035	0.73369	-2.3442	0.2000	12.98
036	0.75158	-1.2172	0.1702	1.77
037	0.84328	-1.1083	0.2000	19.72
038	0.64890	-1.9817	0.2000	20.63

M1=45.6187, M2=463.7155, N=56579, Critical Z=150.88



**Table 88. Item Parameter and Fit Summary,  
Constructed-Response Items, Grade 3 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001	A	1.53462	-1.5606				4.15
001	B	0.21572	0.9984				95.60
001	C	1.20344	-0.4727				11.56
001	D	1.48057	-4.7161				2.27
001	E	0.41965	-1.9591				29.55
001	F	0.73550	2.1141				28.09
013	A	1.20372	-4.9724	3.1253			100.63
013	B	2.07838	-5.9571				4.49
013	C	1.59204	-1.9300				5.43
013	D	1.74091	-2.7466				10.08
030	A	1.41690	-4.5087	2.6811			107.68
030	B	1.98939	-5.1043				6.25
030	C	1.73119	-2.1326				11.42
030	D	1.76514	-2.2063				8.18
039	A	1.34571	-4.0625	3.2761			56.27
039	B	1.55588	-4.2351				20.39
039	C	1.70912	-1.8555				13.19
039	D	1.72705	-2.9114				17.83

M1=45.6187, M2=463.7155, N=56579, Critical Z=150.88



**Table 89. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 3 Spanish Writing**

Item	a	b	c	Fit-Z
001	0.72636	-1.6356	0.2000	-0.42
002	0.69865	-1.6673	0.2000	-0.09
003	0.79960	-1.7859	0.2000	0.18
005	0.56896	-0.1673	0.2000	0.38
006	0.67890	-1.2497	0.2000	5.31
007	0.57375	-0.7923	0.2000	0.07
008	0.69572	0.3141	0.1901	-0.75
009	0.88029	0.3406	0.2014	0.18
010	0.86365	-2.3712	0.2000	1.26
011	0.71952	-1.5266	0.2000	-0.21
012	0.98466	-1.9949	0.2000	0.89
013	0.55883	-1.1144	0.2000	1.64
014	0.70850	-1.0884	0.2000	-0.06
015	0.80286	-0.9017	0.2000	-1.51
017	0.95328	-0.8250	0.2000	0.81
018	1.35829	1.9369	0.1836	0.91
019	0.98987	1.7456	0.1935	0.41
020	0.76280	-0.3028	0.2000	-0.26
021	0.56024	-0.8516	0.2000	-0.21
022	0.91660	0.1488	0.2061	1.56
023	0.72320	-0.7483	0.2000	2.07
024	0.64572	-0.6175	0.2000	1.94
025	0.74924	-1.0085	0.2000	0.38
026	0.77749	1.0288	0.1889	-0.29
028	0.60282	-0.5751	0.1929	0.18
029	1.09060	-1.4228	0.2000	-0.21
030	0.96215	-1.3955	0.2000	-0.72
031	0.91521	-0.7958	0.2000	-0.66
032	0.63928	-0.0727	0.2000	-0.45
033	0.83169	-0.2761	0.1889	-0.32
034	1.15607	-1.7872	0.2000	-0.91
035	1.03792	-1.8187	0.2000	-1.08
036	0.84772	-0.4358	0.2000	2.11
037	0.59765	0.3643	0.2000	-0.60
038	0.56619	-1.0763	0.2000	-0.13

M1=64.1898, M2=501.4712, N=1471, Critical Z=3.92



**Table 90. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 3 Spanish Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004	A	1.08595	-1.7175				-1.12
004	B	1.10075	1.3937				2.66
004	C	1.05723	-0.8095				0.68
004	D	1.07840	-0.7179				0.51
004	E	1.14458	-0.1152				0.73
004	F	0.91387	-1.5841				0.33
016	A	1.05874	-2.6250	1.2813			-0.51
016	B	1.16766	-0.7295				0.23
016	C	1.84093	-1.9080				2.70
016	D	1.68899	-3.1443				-0.99
027	A	1.41742	-1.5381	1.7595			2.24
027	B	1.58094	0.1036				0.50
027	C	2.23694	-1.1389				-0.68
027	D	1.98233	-2.0143				-0.39
039	A	1.06278	-1.8229	1.4828			-0.62
039	B	1.06040	0.4272				-0.82
039	C	1.63350	-0.8728				0.40
039	D	1.23269	-2.0762				0.39

M1=64.1898, M2=501.4712, N=1471, Critical Z=3.92



**Table 91. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 3 English Mathematics**

Item	a	b	c	Fit-Z
001	1.05414	-1.2679	0.1201	4.43
002	1.10875	-2.1679	0.2000	7.12
003	0.72369	0.5930	0.2158	5.07
005	0.67052	-2.9363	0.2000	2.12
006	0.78873	-1.9479	0.1387	8.79
007	0.73074	-2.1618	0.2000	13.30
008	0.70592	-0.8623	0.1481	0.37
010	0.80132	-3.1060	0.2000	4.09
011	0.99553	-0.3866	0.0957	5.74
012	0.76490	-1.5518	0.1153	8.46
013	0.56851	-0.3611	0.2230	2.86
014	0.88623	-0.7688	0.2612	5.47
015	0.88075	-2.8042	0.1387	5.24
017	1.15015	0.0822	0.1627	14.80
018	0.58013	-0.9300	0.0714	6.72
019	0.59077	-1.5962	0.0889	1.77
021	0.94807	-0.5650	0.2303	6.95
022	0.39218	-0.1559	0.2089	2.78
023	0.82896	-0.6625	0.1975	0.09
025	0.88764	-0.4622	0.1052	2.25
027	0.83808	-0.3064	0.0639	8.14
028	0.75030	-1.4895	0.2000	2.90
029	1.07621	-0.8323	0.2125	3.20
030	0.96448	-0.4005	0.0978	7.71
031	0.88190	-0.6667	0.2059	1.73
032	0.69006	-1.9585	0.0966	0.64
034	0.36729	-3.5146	0.2000	1.91
035	0.68243	-0.4261	0.0756	1.81
036	0.66523	-1.2478	0.1247	0.77
037	1.09206	-1.4291	0.0361	47.47
038	0.76834	-1.3650	0.0965	0.91
039	0.85526	-1.7795	0.0883	2.97

M1=77.9711, M2=473.8477, N=52139, Critical Z=139.04

**Table 92. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 3 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.92946	0.1954	-0.5612			32.17
009		1.17207	-2.5020	-0.7223			12.87
016		0.87211	0.4417	-0.5844			56.55
020		1.15126	-1.9323	0.4031	0.5018		52.51
026		1.02704	-2.0340	-0.6229			42.67
033		0.83748	-2.0935	-1.0918			11.73
040		0.90161	-3.3578	0.0183	0.0302		31.19

M1=77.9711, M2=473.8477, N=52139, Critical Z=139.04



**Table 93. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 English Reading**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
004	1.59156	-1.0255	0.3223	3.13
005	1.42571	0.0656	0.2486	15.30
006	0.72262	-1.1221	0.2528	12.43
007	1.26065	-0.8579	0.2627	1.95
008	0.91339	-0.3786	0.2268	9.33
009	0.79821	-1.9665	0.0935	5.37
012	0.56462	0.3119	0.3410	4.33
013	0.29619	3.0832	0.2000	54.26
015	0.50406	-1.6410	0.2000	8.72
016	1.13183	0.2054	0.2001	19.56
017	0.72020	0.5846	0.1666	4.44
019	1.31998	1.2657	0.3237	18.92
020	0.64482	0.0333	0.1841	0.24
022	0.72327	-1.0072	0.2000	3.68
023	1.04828	-0.4617	0.2170	6.14
026	0.70853	-1.4972	0.0820	8.40
027	0.33172	-2.1261	0.2000	15.61
028	0.82846	-1.6818	0.2004	17.46
029	0.73283	-1.9275	0.2000	20.12
031	0.58162	-1.1601	0.2000	20.29
032	0.79520	0.5256	0.1925	5.60
034	1.22712	-1.0104	0.1700	5.94
035	1.06686	-0.4522	0.2242	1.23
036	1.02089	-0.4928	0.1946	12.77
037	1.10933	0.4441	0.1529	29.17
038	1.41947	-0.8354	0.2824	5.43
039	1.15444	0.0334	0.1995	10.53
041	0.62438	0.3765	0.1932	4.36
042	0.93018	-1.1028	0.1477	3.66
043	0.71819	0.4050	0.2443	23.47
044	1.03899	-1.6534	0.1700	4.72
046	0.53749	-2.0519	0.2000	54.51
047	1.15624	0.0771	0.1818	21.95
048	0.73883	-0.9776	0.2679	11.26
049	1.21173	0.0665	0.2232	23.71
050	0.53085	0.1723	0.1169	17.94
051	0.77413	-1.2114	0.1744	6.34
052	0.89413	1.4446	0.2393	3.27
053	0.88830	0.5312	0.1638	7.13
096	1.01681	-0.3072	0.2056	2.79
097	0.72879	-1.2192	0.2520	4.22
098	0.93955	-1.6067	0.2004	80.36
099	1.07686	-0.9513	0.3531	0.66
100	0.93836	0.2418	0.1956	11.98
101	1.13485	-1.4179	0.1796	1.36
102	0.85967	-0.7401	0.1413	1.66
105	0.86638	-1.8207	0.2000	32.55
106	1.23113	-1.3912	0.2205	0.50
107	1.04714	-1.2708	0.2183	4.90
108	0.79064	0.4402	0.3718	15.75

continued



**Table 93. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 English Reading (Concluded)**

Item	a	b	c	Fit-Z
109	0.35329	-0.2914	0.1083	18.02
110	1.21852	-0.7047	0.2721	5.32
111	0.86523	-0.1956	0.1448	17.89
112	1.35551	-0.0966	0.2183	13.27
113	1.67933	-0.3710	0.2354	17.15
114	0.90344	0.1061	0.2087	50.21

M1=49.4259, M2=591.5139, N=57516, Critical Z=153.38

**Table 94. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
010		0.58830	0.2855	-0.4295			59.95
011		0.54494	-0.3272	0.6648	1.9759		117.62
014		0.49938	-0.3781	-0.2289	0.5489	0.9699	23.04
018		0.58131	-0.0180	0.8743			21.36
021		0.75852	1.5528	-1.2650			9.72
025		0.56370	-0.0335	-0.0476	0.5051		111.44
030		0.73853	-1.7979	-0.3500			283.36
033		0.83900	-0.4713	2.6573			4.78
040		0.45178	-0.5771	1.4331	0.6741		110.27
045		0.60081	0.0580	-0.7593			72.41
103		0.84722	-1.4140	-2.0437			33.69
104		0.78114	-1.3336	-1.4532	-1.2206		28.60
115		0.82779	-1.8120	0.8322	0.1467		45.76
116		0.93507	-1.4070	1.0027			21.06

M1=49.4259, M2=591.5139, N=57516, Critical Z=153.38



**Table 95. Item Parameter and Fit Summary,  
Multiple-Choice Items, Grade 4 Spanish Reading**

Item	Source Year	a	b	c	Fit-Z
4	2004	0.83	0.55	0.18	-0.1
5	2005	1.08	0.40	0.26	-0.4
6	2005	0.37	-0.98	0.20	1.1
7	2004	1.64	1.44	0.27	-0.2
8	2004	0.50	2.47	0.22	0.0
9	2004	0.86	-0.09	0.31	-0.2
10	2004	0.67	0.02	0.30	0.0
11	2004	0.17	-1.09	0.20	-0.6
12	2004	0.24	3.74	0.20	0.9
15	2004	0.26	-1.31	0.20	-1.1
16	2004	0.61	-0.87	0.20	-0.1
17	2004	0.33	-2.10	0.20	-0.2
18	2004	0.65	-0.91	0.20	0.4
19	2004	0.87	-2.42	0.20	-0.1
20	2004	0.14	0.37	0.20	1.3
21	2004	0.91	-0.01	0.18	-0.3
22	2004	0.92	0.25	0.16	-0.1
23	2004	0.57	0.30	0.20	2.9
24	2007	0.58	-0.48	0.20	-0.5
26	2004	0.36	0.36	0.20	0.0
27	2005	1.29	-0.76	0.40	0.2
28	2004	0.46	-0.70	0.20	-1.2
30	2004	0.46	1.17	0.20	-1.4
32	2007	0.74	0.91	0.20	-0.4
35	2004	0.94	-0.95	0.20	-1.5
36	2004	1.19	0.02	0.18	0.6
37	2004	0.87	-1.01	0.20	-0.3
38	2004	0.77	0.92	0.20	0.1
39	2004	0.47	-0.26	0.20	-0.6
40	2004	0.85	-1.09	0.20	-0.4
41	2004	0.75	0.07	0.20	0.1
43	2004	0.79	1.02	0.17	-0.5
46	2004	0.86	-1.13	0.20	-0.5
47	2004	1.39	2.34	0.34	-0.9
48	2004	0.99	1.82	0.27	2.4
91	2004	0.88	-1.58	0.20	-0.7
92	2004	0.58	-0.77	0.20	2.7
93	2005	0.94	-0.07	0.20	0.5
94	2004	0.55	-1.11	0.20	0.5
95	2004	0.80	-1.43	0.20	0.6
96	2005	0.98	-0.24	0.24	0.3
99	2004	0.50	0.62	0.20	0.8
101	2004	0.67	0.49	0.18	-1.1
102	2004	0.95	0.76	0.18	0.3
103	2004	0.81	-1.02	0.20	0.3
104	2004	0.87	-0.03	0.35	0.7
105	2007	0.56	0.06	0.20	-0.3

continued



**Table 95. Item Parameter and Fit Summary,  
Multiple-Choice Items, Grade 4 Spanish Reading (Concluded)**

Item	Source Year	a	b	c	Fit-Z
106	2004	1.09	1.37	0.18	-0.2
107	2004	1.08	0.59	0.24	-0.2
109	2004	0.50	-0.55	0.20	0.1
110	2004	0.51	0.50	0.20	-0.3
111	2004	0.96	-0.50	0.21	1.3
112	2004	0.48	0.09	0.20	1.1
113	2004	0.32	-1.53	0.20	1.7
114	2004	0.70	-0.31	0.21	-1.1
115	2004	0.82	0.19	0.24	-0.3

2004 pre-equated M1= 33.6050, M2= 534.8632, N=523, Critical Z=1.39

2005 pre-equated M1= 39.5116, M2= 550.2315, N=489, Critical Z=1.30

2007 pre-equated M1= 36.1958; M2= 514.4683, N=264, Critical Z=0.70

**Table 96. Item Parameter and Fit Summary,  
Constructed-Response Items, Grade 4 Spanish Reading**

Item	Source Year	f	g1	g2	g3	g4	Fit-Z
13	2004	0.57	-0.60	-0.85	0.97		0.1
14	2004	0.44	0.17	2.84			0.7
29	2004	0.92	-1.39	-0.76	-1.82		-2.0
31	2007	1.13	1.92	1.17			-1.05
33	2004	0.51	-0.10	0.50	0.59		1.2
34	2004	0.82	-0.60	-0.16	-0.21		1.3
42	2004	0.71	0.29	0.84			-0.3
44	2004	0.53	-0.16	-0.41			1.7
45	2007	0.68	0.24	0.39	1.66		-0.65
97	2004	0.51	-0.50	0.36			-0.7
98	2004	0.59	-0.40	0.16	0.37		-1.1
100	2004	0.74	-0.30	0.90			-1.7
108	2004	0.74	-0.47	-1.38			0.5
116	2004	0.45	0.79	-1.94	1.37		1.4

2004 pre-equated M1= 33.6050, M2= 534.8632, N=523, Critical Z=1.39

2007 pre-equated M1= 36.1958; M2= 514.4683, N=264, Critical Z=0.70



**Table 97. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 4 English Writing**

Item	a	b	c	Fit-Z
054	1.35511	-1.2094	0.3306	7.95
055	0.62156	-2.0604	0.2000	2.55
056	0.73749	0.2233	0.2517	7.43
057	0.76607	-0.7133	0.4961	4.55
058	0.79214	-1.9216	0.2000	0.85
059	0.67748	-2.6267	0.2000	6.82
060	0.55164	-2.0967	0.2000	59.27
061	0.89205	-1.7856	0.2000	18.65
062	0.79493	-1.9407	0.2000	1.33
063	0.75399	-1.9979	0.2000	0.27
064	0.57152	-1.4434	0.1977	1.02
065	0.89763	-1.8174	0.2000	8.09
066	0.42228	-0.3838	0.2000	1.00
067	0.66878	-1.0688	0.1012	11.89
068	1.27385	-1.0635	0.3190	9.32
069	0.90968	-1.1799	0.3204	-0.36
070	0.77942	-0.5198	0.2260	2.53
071	1.08350	-0.9976	0.2510	3.89
072	0.95990	-1.2475	0.1542	2.24
073	1.25910	-0.4339	0.1863	11.43
074	0.58352	-2.2218	0.2000	68.51
076	0.55514	0.6624	0.2143	5.21
077	1.04012	0.1266	0.1909	9.03
078	0.80515	-0.1024	0.1911	10.57
079	0.91548	-0.5144	0.4038	0.64
080	0.86921	-0.9719	0.2221	23.08
081	1.24672	-0.8316	0.2773	8.10
082	1.06518	0.4654	0.2273	12.43
083	1.06798	-0.1165	0.1425	14.43
084	0.82123	-1.4401	0.2000	0.84
085	0.89579	-0.5143	0.1194	23.42
086	1.12938	-1.6221	0.3042	11.98
087	1.04675	-1.1038	0.1102	10.15
088	1.42705	-0.9024	0.1553	12.65
089	1.16892	-0.4995	0.4113	3.65
090	1.33000	-0.7617	0.2899	7.02
091	0.48358	1.9564	0.2000	75.94
092	0.88875	-0.7315	0.1897	3.88
093	0.80555	0.7984	0.3759	4.68
094	0.96047	-0.7535	0.2115	3.41

M1=46.5132, M2=486.9834, N=56477, Critical Z=150.61



**Table 98. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 4 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		0.59592	-4.0378				3.69
002	A	1.17419	-0.4092				2.39
002	B	1.17281	1.0843				8.55
002	C	0.71832	0.6864				19.47
002	D	1.22856	-1.4385				0.12
002	E	1.24198	-1.1365				6.76
002	F	1.53994	-2.0343				14.47
003	A	1.31343	-2.2690	-3.6865	-1.3119	1.5352	702.13
003	B	1.60926	-6.2715	-4.1378	-1.2823	1.7599	54.27
003	C	1.82199	-7.3273	-3.1069			11.71
024		0.79884	-1.7462	-1.9248	0.4724	2.7683	112.86
075		0.94494	-2.7147	-2.4662	0.5500	3.1009	54.51
095		0.97568	-2.6383	-2.0779	0.2470	2.8642	135.89

M1=46.5132, M2=486.9834, N=56477, Critical Z=150.61



**Table 99. Item Parameter and Fit Summary,  
Multiple-Choice Items, Grade 4 Spanish Writing**

Item	Source Year	a	b	c	Fit-Z
49	2004	0.63	-1.77	0.20	0.0
50	2004	0.77	-1.13	0.20	-0.4
51	2004	0.61	-1.44	0.20	0.5
52	2004	0.41	1.19	0.20	-0.1
53	2004	0.73	-2.73	0.20	-1.3
54	2004	0.55	-0.15	0.20	0.9
55	2005	0.56	-1.26	0.20	1.4
56	2004	0.56	-1.38	0.20	1.0
57	2004	0.67	0.91	0.19	-0.7
58	2004	1.01	0.64	0.31	0.9
59	2004	0.65	0.81	0.20	-0.5
60	2004	0.49	0.23	0.20	-0.7
61	2004	1.10	0.64	0.30	-0.2
62	2004	0.59	2.15	0.19	-0.8
64	2004	0.87	0.97	0.24	-0.2
65	2004	1.09	-0.58	0.23	-1.5
66	2004	1.12	0.33	0.35	0.5
67	2004	1.21	0.10	0.26	-0.7
68	2004	1.28	-0.24	0.20	-0.3
69	2004	1.01	0.07	0.19	0.4
70	2004	0.91	0.74	0.20	-0.5
71	2004	0.56	0.45	0.20	2.2
72	2004	0.64	0.31	0.20	-0.1
73	2004	0.63	1.09	0.22	-1.1
74	2004	0.96	-0.16	0.30	3.7
75	2004	0.37	1.69	0.21	-0.5
76	2004	0.63	0.98	0.20	-0.3
77	2004	0.66	1.31	0.23	-1.1
78	2004	1.22	1.17	0.22	-0.8
79	2004	0.23	-0.69	0.20	1.8
80	2004	1.64	1.21	0.26	-1.0
81	2005	0.92	0.48	0.30	-0.9
82	2004	1.27	0.63	0.18	0.3
83	2005	0.52	0.21	0.19	0.8
84	2005	1.02	0.50	0.20	-0.6
85	2004	1.10	0.81	0.19	1.5
86	2004	0.32	2.81	0.20	-0.8
87	2004	0.95	1.37	0.19	-0.1
88	2004	0.77	-0.23	0.20	-0.6
89	2004	0.72	0.65	0.19	-0.5

2004 pre-equated M1= 38.1156, M2= 519.2253, N=526, Critical Z=1.40

2005 pre-equated M1= 36.9687, M2= 524.4168, N=490, Critical Z=1.31



**Table 100. Item Parameter and Fit Summary, Constructed-Response Items, Grade 4 Spanish Writing**

Item	Source Year	Part	f	g1	g2	g3	g4	Fit-Z
1	2005		0.44	-3.42				-1.7
2	2002	A	1.40	-2.79				-0.9
2	2002	B	1.11	-0.58				-0.2
2	2002	C	0.85	-1.11				-0.1
2	2002	D	0.54	-0.75				-0.1
2	2002	E	1.21	-0.81				0.2
2	2002	F	1.25	0.74				-0.5
3	2005	A	0.66	-0.06	-1.80	-0.33	2.52	1.6
3	2005	B	1.09	-3.73	-2.60	-0.00	3.15	-1.2
3	2005	C	1.14	-4.33	1.14			1.0
25	2005		0.57	0.21	-1.43	0.08	1.90	1.2
63	2007		0.72	-1.65	-1.25	0.99	2.18	-2.6
90	2005		0.46	0.35	-2.18	-0.20	1.00	-1.1

2002 pre-equated M1= 39.9142, M2= 522.7280, N=1,001, Critical Z=2.67

2005 pre-equated M1= 36.9687, M2= 524.4168, N=490, Critical Z=1.31

2007 pre-equated M1= 33.0014; M2= 508.4550, N=264, Critical Z=0.70



**Table 101. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 4 English Mathematics**

Item	a	b	c	Fit-Z
001	0.79645	-1.0538	0.0915	5.93
002	0.98163	-1.1881	0.0968	1.25
003	0.77293	0.4597	0.2833	9.81
004	0.98503	-0.5547	0.3977	7.29
006	1.05470	-1.9189	0.2000	0.57
007	0.73797	-2.6844	0.1676	14.85
008	0.90925	-1.0658	0.2984	3.46
009	0.70834	-2.3947	0.2000	3.66
010	0.64046	-1.4819	0.0734	1.83
012	0.68549	-3.3246	0.2000	5.28
013	0.67240	-2.3634	0.2000	8.08
014	0.80898	0.3454	0.2150	3.08
016	0.80442	-2.7200	0.1676	7.10
017	0.73706	-0.6624	0.1676	63.50
019	0.45032	-2.9700	0.2000	7.39
020	0.87901	-0.0914	0.1785	1.78
021	0.92382	0.1161	0.1057	2.69
022	0.67059	-2.1778	0.2000	2.18
024	0.72101	-0.5290	0.0724	5.29
025	0.86629	-0.6737	0.1849	6.77
026	0.75940	-1.0149	0.1676	48.55
028	0.62920	-3.9543	0.2000	4.26
029	0.67716	-2.6326	0.2000	19.24
030	0.55415	-2.4201	0.2000	2.13
032	0.53549	-2.0533	0.2000	4.28
033	0.77923	-1.5580	0.1676	23.50
034	0.95101	-0.6998	0.2535	3.90
036	0.61565	0.0622	0.1131	0.30
037	0.99053	-0.8140	0.1341	7.73
038	0.64803	-0.0420	0.3025	-0.98
039	1.10159	-1.5163	0.3206	2.43
041	0.89350	-1.9034	0.1348	7.48
042	0.89803	-1.6966	0.0786	5.82
043	0.40890	-3.3943	0.2000	4.29
044	0.70720	-2.0970	0.2477	10.10
045	0.66860	-2.7044	0.2000	10.06
047	0.67315	-3.1537	0.2000	5.16
048	1.32881	-1.4846	0.1203	2.32
050	0.63516	-3.5949	0.2000	9.03
051	0.55752	-0.9586	0.2000	1.47
052	0.85394	-1.0731	0.2343	0.07
053	0.44384	-2.1128	0.2000	9.85
054	0.57794	-2.4055	0.2000	1.76
056	0.97465	-1.5764	0.1852	5.11
057	0.65620	-0.6987	0.2575	2.15
058	0.91428	-0.9516	0.0989	1.51
059	0.84653	-0.9763	0.1866	4.07

continued



**Table 101. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 4 English Mathematics (Concluded)**

Item	a	b	c	Fit-Z
061	0.84214	-0.6458	0.1234	5.77
062	1.21851	-1.0523	0.2400	1.54
063	1.19068	-0.6195	0.1291	6.61
064	0.77494	-1.4065	0.1853	1.59
066	0.48799	-0.5328	0.0717	0.25
067	0.72120	-2.5484	0.1147	-0.14
068	1.01463	-0.0116	0.2044	1.97

M1=65.1155, M2=505.2377, N=53016, Critical Z=141.38

**Table 102. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 4 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
005		0.82122	-1.0811	-1.2043			55.63
011		0.96497	-0.4561	0.7607			11.74
015		0.47372	-2.2226	-1.4376	-0.1222		33.37
018		0.73468	-2.4684	0.1105	-0.2312		19.55
023		1.14222	-2.0663	-1.5491	-1.2646	0.3935	63.37
031		1.15075	-1.3488	-2.0171			138.78
035		0.85663	-0.3814	0.5765	-0.1227		56.12
040		0.82831	1.0086	-0.5169	1.0350		53.98
046		0.80100	-1.3711	-1.6608	-0.6745	-0.0739	105.22
049		0.92742	-3.3668	-0.8322			6.85
055		0.82016	-3.9179	-0.5047	-0.7054		11.60
060		0.67821	-2.2644	-1.5611			14.45
065		0.68623	-0.7268	-0.0633	-0.4937		180.69
069		0.77336	-1.3346	-1.1303	-0.4574	0.2539	27.12

M1=65.1155, M2=505.2377, N=53016, Critical Z=141.38



**Table 103. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 5 English Reading**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
005	1.06006	-1.2724	0.3518	13.21
006	0.97424	0.0175	0.4183	8.80
007	1.01683	-1.3291	0.1123	21.50
008	0.90837	-1.3950	0.1131	8.28
013	1.26568	0.2595	0.2355	25.54
014	0.96644	-2.0364	0.2000	33.48
015	0.88660	-0.2295	0.1857	16.52
016	1.13602	-0.6759	0.4892	23.56
017	0.62474	2.2474	0.2619	25.81
018	0.34744	-0.6405	0.2000	8.79
019	0.25021	-0.2015	0.2000	56.60
020	0.42967	-0.6183	0.2000	31.11
021	0.25434	3.1622	0.2000	48.62
023	0.59446	-1.9098	0.2000	3.41
024	1.26171	-0.1997	0.1843	15.06
025	0.73924	-0.0158	0.1372	7.55
026	0.42879	-0.6002	0.2000	45.52
027	0.44458	0.1747	0.1918	12.19
029	0.53324	-1.0608	0.1918	22.34
030	0.95500	-1.3746	0.1781	16.92
031	0.77479	-1.0234	0.1047	27.17
032	0.61221	0.2400	0.2637	8.60
033	0.77838	-1.1281	0.1539	1.87
034	0.86442	-1.1947	0.1743	4.11
036	0.25677	0.8892	0.0350	1.04
037	0.63756	-0.9086	0.2000	12.79
038	0.80957	-0.8931	0.1703	1.17
039	1.20068	-1.3081	0.1827	0.62
040	0.62333	0.1422	0.2294	6.17
041	0.78409	0.1614	0.1920	3.84
042	0.99789	0.4633	0.3645	10.49
043	1.06043	-0.8868	0.2882	1.76
044	0.77069	-1.4327	0.0996	1.18
045	0.96070	-0.0299	0.1417	6.50
046	0.98862	-1.8593	0.1446	6.48
048	0.53224	-0.3843	0.1499	0.05
049	0.89720	-1.5085	0.1142	4.01
050	0.80892	-0.1618	0.2191	13.19
051	1.08494	-1.9126	0.1492	6.38
097	1.05875	-2.0101	0.0912	11.87
098	0.22586	1.4161	0.2000	26.35
099	0.64719	-1.6064	0.2000	8.09
100	0.57952	-1.2006	0.0758	7.83
101	0.92557	-0.3967	0.2953	15.60
102	0.75155	-1.5864	0.1119	10.19
103	1.32593	-0.5374	0.2855	9.95
104	1.41734	-1.1000	0.1994	4.95

continued



**Table 103. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 English Reading (Concluded)**

Item	a	b	c	Fit-Z
107	1.13432	-1.0720	0.3039	13.21
108	1.19715	-0.2717	0.2905	10.17
109	0.87407	-0.1660	0.1263	6.97
110	1.06443	-1.1572	0.2475	2.36
111	0.92376	-1.1774	0.1147	1.85
112	1.07586	-0.9546	0.2080	15.82
113	0.69533	0.3006	0.2403	3.45
114	0.86477	0.3031	0.1201	17.52
115	1.15869	-0.8369	0.1190	11.87

M1=58.5969, M2=620.6273, N=55800, Critical Z=148.80

**Table 104. Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.76279	-1.7649	-1.5394			19.70
009		0.50509	0.7610	0.8566			79.09
010		0.42891	0.0455	0.4235	0.2995		21.39
011		0.96893	-0.3276	-0.0468	0.4928		43.73
012		0.68022	-0.4190	1.0112	0.9950		322.23
022		0.51110	-0.4807	-0.3539	0.3846	0.886	19.61
						1	
028		0.40421	3.2521	-1.0039			7.92
035		0.15799	-0.0105	1.3131	-0.1027		42.91
047		0.46101	-0.9823	1.1809	0.4367		81.51
052		0.52688	-0.4338	-0.7273			66.70
095		1.02950	0.5829	-2.1069			21.09
096		0.93005	-1.1696	-0.5351			45.61
105		1.12297	-1.0654	-0.8785			8.14
106		1.29992	-2.4079	-0.1651			128.00

M1=58.5969, M2=620.6273, N=55800, Critical Z=148.80



**Table 105. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 English Writing**

<b>Item</b>	<b>a</b>	<b>b</b>	<b>c</b>	<b>Fit-Z</b>
053	0.56698	0.4000	0.1368	1.63
054	0.64556	0.2900	0.1990	9.14
055	0.70534	-2.3707	0.2000	4.29
056	0.95040	-1.9818	0.1413	8.27
057	1.02266	-1.1825	0.2160	8.59
058	0.96024	-1.4847	0.4142	8.10
059	0.36497	-2.6696	0.2000	20.16
060	0.92707	-1.5745	0.2662	2.94
061	0.65721	-0.2437	0.3558	11.69
062	0.44617	-0.3970	0.2000	13.00
063	1.13468	-0.1725	0.2954	12.61
064	0.54780	-0.7576	0.2000	7.97
065	0.78265	-1.0522	0.2000	3.56
066	0.82802	0.1671	0.2053	4.50
068	0.69261	-0.5723	0.2350	3.56
069	0.94479	-1.5773	0.0882	13.67
070	1.06802	-1.5843	0.2000	24.68
071	0.87976	-1.3432	0.3085	4.15
072	0.74991	-1.5396	0.2000	3.15
073	0.85543	-1.4720	0.1059	2.04
074	0.78436	-1.4529	0.2000	2.33
075	1.07167	-1.0259	0.1469	4.54
076	1.09739	-1.3047	0.1687	9.89
077	1.30802	-1.2029	0.1612	18.39
078	1.24073	-0.7816	0.1233	40.76
079	0.98840	-0.8159	0.1125	29.33
080	1.05199	-1.1232	0.1113	20.86
081	0.64414	2.0981	0.1384	30.12
082	0.94292	-1.4694	0.1642	12.25
083	1.10017	-0.7953	0.2036	7.32
084	0.87105	-1.4130	0.1150	2.75
085	0.47570	0.7526	0.2000	9.83
086	0.38258	0.1018	0.0944	16.11
087	0.82031	0.7456	0.2733	11.76
088	0.70659	-0.6167	0.1877	94.86
089	0.66165	-0.3358	0.1841	15.48
090	0.43471	1.0771	0.1666	2.50
091	0.75875	-1.2819	0.2000	50.58
092	1.22969	-1.1106	0.2024	3.41
093	1.23205	-0.5622	0.2188	13.16

M1=52.0599, M2=512.7419, N=54947, Critical Z=146.53



**Table 106. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 5 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		0.84408	-4.7196				3.50
002	A	1.29492	-1.3813				-0.47
002	B	1.09912	0.0635				11.09
002	C	1.11290	0.9146				7.78
002	D	0.89428	-1.5799				30.59
002	E	1.00258	-0.4881				4.33
002	F	0.88319	-0.2119				133.97
003	A	0.89164	-1.5134	-3.1998	-0.7655	1.4566	147.83
003	B	1.03181	-4.8939	-3.3523	-0.7915	1.5672	66.38
003	C	1.62750	-6.8422	-3.6778			14.36
067		0.88668	-2.5863	-3.1334	-0.5300	2.4189	91.85
094		0.83228	-2.3741	-2.1057	0.4010	3.0020	133.18
116		0.82811	-2.2554	-2.9634	-0.0827	2.1821	53.70

M1=52.0599, M2=512.7419, N=54947, Critical Z=146.53



**Table 107. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 5 English Mathematics**

Item	a	b	c	Fit-Z
001	0.66505	-0.8425	0.3245	2.68
002	0.58506	-2.9336	0.2000	0.43
003	1.24828	-0.4319	0.1093	5.89
004	0.58360	-0.8779	0.2322	3.57
005	0.70933	-0.6262	0.2000	27.36
007	0.87578	-0.3291	0.1459	0.35
008	0.67121	-0.8448	0.2000	7.91
009	0.91231	-0.6434	0.1718	1.57
010	0.68028	-2.2794	0.2000	5.90
011	1.02424	-0.1995	0.0947	4.62
012	1.05954	-0.8673	0.1683	2.18
013	0.61367	-2.2881	0.2000	56.13
015	0.68677	-1.6952	0.0731	8.31
017	0.47081	-3.4798	0.2000	7.62
018	0.77743	-1.0559	0.0790	0.02
019	0.88487	0.1670	0.3441	5.01
021	0.67315	0.0243	0.1960	6.91
022	0.89005	-1.6030	0.2000	20.86
024	1.07464	-2.2215	0.2000	4.53
025	0.64513	-1.7511	0.1590	58.61
026	0.49983	-0.7774	0.0859	7.33
028	0.39270	1.1695	0.0388	9.73
029	0.56050	-1.0380	0.1590	3.52
030	1.24055	0.6774	0.1272	8.89
031	0.63696	-2.1974	0.1067	2.13
033	1.08259	-1.2448	0.2285	1.81
035	0.61831	-0.9865	0.1773	3.54
036	0.68819	-0.2527	0.2281	14.12
037	1.12041	0.0697	0.0374	9.19
038	0.83255	-0.5472	0.1664	47.72
040	1.00382	-2.1034	0.2000	3.15
041	1.27670	-0.0950	0.1080	3.42
042	0.51857	-0.8620	0.1590	7.77
043	1.28601	0.7907	0.0779	15.58
044	0.47850	-1.4835	0.1006	4.22
045	0.48045	-2.5514	0.2000	3.73
047	0.63407	-2.1343	0.2000	1.26
048	0.51648	-1.1806	0.2000	2.70
050	0.72785	-1.0250	0.2000	5.02
051	0.81158	-1.7822	0.2000	8.36
052	0.97274	-0.3164	0.2394	10.95
054	0.55340	-3.4068	0.2000	0.37
055	0.74214	0.1048	0.2775	5.80
056	0.82748	-1.2677	0.0536	2.81
058	0.63098	-1.6960	0.0872	0.68
059	0.60443	-2.5108	0.2000	4.06
060	0.93582	-1.5412	0.1016	14.88

continued



**Table 107. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 5 English Mathematics (Concluded)**

Item	a	b	c	Fit-Z
061	1.06749	0.5228	0.2133	9.01
062	1.03864	-0.2703	0.2209	1.47
063	0.51150	-1.3295	0.0947	1.63
064	1.25216	-1.5705	0.3524	3.04
065	0.52116	-2.8269	0.2000	18.12
067	0.77073	-0.9944	0.2000	13.89
068	0.58146	-1.3019	0.2112	2.34

M1=61.2298, M2=534.9059, N=52124, Critical Z=139.00

**Table 108. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 5 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
006		1.24194	-2.8265	-0.2303			26.49
014		0.71455	-2.6645	-1.3510	-0.1136		14.00
016		0.72702	1.6462	-1.8000			21.81
020		0.93709	-0.2367	0.3387	0.7614		29.22
023		0.86193	-1.6632	-2.3339	-1.3242	-0.6278	106.71
027		0.90237	-0.4524	-1.3430			142.69
032		0.45378	-0.3512	-0.3554	0.6633		313.01
034		1.20395	-1.2518	-3.1557			138.82
039		1.21586	-1.9882	-0.8483	0.3796		24.06
046		1.14605	-2.6671	-2.0713	-0.0904	1.2889	39.24
049		0.98943	0.4831	-1.7465			16.11
053		0.76738	-1.7626	-0.1604	-0.9514		39.42
057		0.84493	-1.4517	-0.6652			135.92
066		0.65081	-1.1857	-0.2310	-1.0236		227.32
069		0.77524	-2.8855	-0.8629	-0.2992	-0.6612	41.80

M1=61.2298, M2=534.9059, N=52124, Critical Z=139.00



**Table 109. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 English Science**

Item	a	b	c	Fit-Z
001	0.76013	-3.5549	0.2000	3.93
002	0.78198	0.6927	0.1992	5.02
003	0.21691	-3.8211	0.2000	27.51
004	0.68380	-0.1177	0.3654	7.14
005	0.38166	0.0723	0.3502	2.88
007	0.40503	-3.3992	0.2000	41.39
008	0.46222	-0.4707	0.4675	7.40
009	0.68160	-0.4786	0.0455	21.60
010	0.43512	-0.9019	0.2000	25.48
011	0.75961	-1.4641	0.1251	3.06
012	0.53043	-1.7357	0.2000	2.30
014	0.94883	-0.9286	0.1447	2.82
015	0.81563	-3.0572	0.2000	8.27
016	1.03716	-0.3344	0.1860	8.92
017	0.82498	0.7197	0.3294	9.71
018	0.76476	-2.4287	0.2000	21.06
019	0.73744	0.7200	0.3285	2.54
020	1.10598	0.7312	0.1072	17.49
026	0.58441	-2.2021	0.2000	23.00
027	0.56039	-4.8329	0.2000	5.66
029	0.61867	0.0212	0.3424	-0.58
030	1.03421	0.0846	0.1401	39.17
031	0.45721	-0.3565	0.2000	15.04
032	0.56812	-4.2278	0.2000	9.54
035	0.29653	-3.6715	0.2000	19.66
036	0.56789	-1.7402	0.2000	1.76
037	0.78507	-1.0664	0.4037	10.52
039	0.24162	-2.2701	0.2000	8.40
040	0.87976	-1.6537	0.1906	0.66
041	0.93797	-0.0028	0.2709	5.92
043	1.01417	-0.2077	0.2280	5.09
044	0.72309	-0.6979	0.1315	2.16
045	0.58000	-1.2442	0.1051	2.92
047	1.44241	-0.7653	0.2920	14.11
049	0.72879	-0.5058	0.1717	1.90
050	0.87681	0.5323	0.2647	3.76
051	0.32669	-1.6549	0.2000	55.90
052	1.03572	-1.4447	0.2508	1.90
054	0.63423	-1.3425	0.2652	7.78
056	0.46797	-4.4168	0.2000	5.18
057	0.73484	-1.4510	0.1825	1.87
059	0.65429	-1.3246	0.0758	2.20
060	0.77376	-0.1977	0.1887	2.00
061	1.15219	0.9603	0.2486	11.83
062	0.50014	-0.1886	0.2000	2.93
063	0.90861	-1.1166	0.4410	9.43
064	1.54683	-0.6768	0.1800	9.13
066	0.57064	-0.8140	0.2000	18.15

continued



**Table 109. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 5 English Science (Concluded)**

Item	a	b	c	Fit-Z
067	0.96727	-1.8467	0.2000	6.75
068	0.45942	-0.7944	0.2000	12.81
069	1.11172	-0.3407	0.4231	10.50
070	0.49865	-0.5167	0.2000	27.06
072	0.58940	-0.1352	0.2173	85.73
073	0.72594	0.6635	0.1644	7.92
074	0.67491	-1.0363	0.2000	19.54

M1=55.3423, M2=503.8629, N=50144, Critical Z=133.72

**Table 110 Item Parameter and Fit Summary, Constructed-Response Items, Grade 5 English Science**

Item	Part	f	g1	g2	g3	g4	Fit-Z
006		0.65344	-0.1182	1.1552			15.36
021		0.32993	-1.4752				27.66
022		0.82030	-0.4858				10.46
023		0.86585	-1.2260	0.1031			17.85
024		0.92763	-1.8181	-0.2991			44.16
025		1.02753	-0.5017				6.18
028		0.58770	-0.1031	0.0974			31.93
033		1.15112	-0.4963				21.84
038		1.27000	-0.1145				49.65
042		0.95416	-1.6724	-2.4573			15.50
046		0.97827	-1.2963	-1.0637			13.44
048		1.05117	-3.5484	-0.7289			18.29
053		0.56427	0.0476	-2.8315			182.81
055		0.92753	0.4155	1.0400			84.97
058		1.24227	2.4759	3.8268			38.19
065		1.37384	-2.8160	0.8818			40.38
071		0.87142	-1.0559	1.8249			114.43
075		0.73991	-1.9587	-1.1565			19.78

M1=55.3423, M2=503.8629, N=50144, Critical Z=133.72



**Table 111. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 6 English Reading**

Item	a	b	c	Fit-Z
005	1.07685	-1.6142	0.4222	5.22
006	0.88032	-0.4121	0.4492	2.23
007	0.89942	-1.7315	0.1094	9.79
008	0.78462	-1.9977	0.0686	2.79
009	0.23467	-1.7398	0.2000	6.20
013	1.03311	0.2676	0.2427	16.15
014	0.81300	-0.4612	0.1798	3.05
015	1.32715	2.4887	0.3202	16.63
016	0.59880	-1.5211	0.1991	60.72
017	0.72929	-2.1795	0.2000	17.60
020	0.33533	0.1875	0.2000	4.33
021	0.25297	-0.2140	0.2000	87.88
022	0.70299	-1.7134	0.1325	3.52
023	0.62866	-0.0023	0.1991	102.16
024	0.96084	-1.3486	0.2841	2.73
025	1.19260	-0.6378	0.1156	11.27
026	1.11558	-2.0956	0.1337	7.53
028	0.40298	-0.2608	0.1991	7.31
030	0.31000	-1.2988	0.2000	68.33
031	0.49948	-1.8946	0.0000	14.67
032	0.69786	-0.4557	0.2347	2.54
033	0.71022	-1.3924	0.2000	15.55
034	0.87669	-1.5615	0.2000	5.80
037	0.97623	-0.9718	0.3789	2.77
038	0.54970	-0.9311	0.0795	12.75
039	0.74410	-0.6309	0.2278	13.52
040	0.57604	-0.2002	0.1410	9.99
041	1.09490	-0.7596	0.1915	4.07
042	0.84798	0.4478	0.2296	5.60
043	0.64193	1.3325	0.3630	13.92
044	0.89629	-1.1500	0.2464	1.94
045	1.12428	-0.1894	0.2419	8.25
046	1.06152	-0.7297	0.1679	2.06
047	0.80646	-0.6758	0.2484	1.05
048	0.91586	-1.5594	0.2806	11.15
049	1.45779	-1.6214	0.2123	20.60
050	1.03777	-2.3514	0.0856	12.83
095	0.41482	-0.6524	0.2000	28.65
096	0.74244	0.2818	0.2535	5.63
097	0.86839	0.5163	0.2652	9.62
098	0.53711	-1.4514	0.1991	45.12
099	1.70199	-1.1595	0.2039	8.08
100	0.48179	0.5038	0.0968	2.84
101	1.13156	-1.4648	0.2147	4.94
102	0.68786	0.6318	0.1713	20.18
103	0.59951	-1.8413	0.2000	51.35
104	0.96404	-2.4446	0.2000	8.32

continued



**Table 111. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 6 English Reading (Concluded)**

Item	a	b	c	Fit-Z
105	0.74528	-0.6460	0.1962	1.63
107	1.01016	0.6468	0.2262	10.23
108	0.96118	1.2296	0.3580	10.52
109	0.83959	-0.2039	0.2887	2.60
112	0.78155	-1.2828	0.1100	2.71
113	1.15234	0.2848	0.2564	14.20
114	1.48116	-0.5915	0.2023	16.64
115	1.19180	0.2803	0.3527	11.24
116	0.88940	-1.9814	0.0643	7.08

M1=56.1527, M2=637.5980, N=55963, Critical Z=149.23

**Table 112. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 6 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.75043	-2.0692	-1.8112			37.19
010		0.43380	0.5957	0.6307			40.30
011		0.85436	-0.8208	0.4758	2.4630		46.55
012		0.86579	1.0575	1.0327			32.42
018		1.02665	-1.7976	0.7637			35.81
019		0.71341	0.4646	0.5974	1.6012		12.31
029		0.48103	1.7015	-0.6462			11.77
035		0.80360	0.0443	-2.7795	-1.3954		18.58
036		0.85465	-1.2555	-1.3174	-2.2706		63.29
093		0.67193	0.4280	0.4354	0.9984		45.92
094		1.01210	-0.4222	-0.2999			26.21
106		0.58820	-0.6935	0.1635	1.2283	1.0251	17.22
110		1.34989	0.1342	2.0388			29.40
111		0.95631	-1.7645	2.1033			13.46

M1=56.1527, M2=637.5980, N=55963, Critical Z=149.23



**Table 113. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 6 English Writing**

Item	a	b	c	Fit-Z
051	0.94896	-1.3473	0.2990	11.28
052	0.40848	-2.6974	0.2000	14.33
053	0.98144	-0.9183	0.2795	3.75
054	0.78727	-1.6456	0.1833	1.46
055	1.14922	-1.7638	0.1822	12.14
056	1.00213	-1.3347	0.1520	29.22
057	0.46717	-0.1892	0.0594	16.58
058	0.60491	-1.4112	0.2000	43.77
059	1.24891	-0.7657	0.1878	5.59
060	0.97973	-0.9026	0.2484	0.74
061	1.04698	-0.4726	0.2003	12.05
062	1.09385	-1.7550	0.1740	10.17
063	0.86350	0.8441	0.2756	3.98
064	0.82199	-1.7563	0.1016	3.03
065	1.08976	-1.0807	0.1609	9.76
066	1.41366	-0.3890	0.1461	22.98
067	1.29562	-0.3205	0.2443	10.81
068	1.14579	-1.1438	0.2267	1.58
069	0.50939	-0.9792	0.2000	4.36
070	0.81616	-0.7316	0.1389	2.24
071	1.05322	0.5549	0.3408	21.80
072	1.01461	-0.9853	0.1826	4.27
073	0.71506	-0.6600	0.0632	21.11
074	0.47546	-0.8147	0.0890	13.57
075	0.75623	-0.8431	0.2548	1.05
076	0.71522	-0.3277	0.2235	0.61
078	0.32588	-0.3513	0.2000	8.78
079	0.52163	0.3397	0.2268	1.49
080	0.56810	0.0915	0.4117	2.04
081	1.15225	0.1580	0.2954	13.31
082	0.56183	-1.2248	0.0843	-0.70
083	0.59954	-1.1171	0.0616	26.14
084	0.77538	-0.4224	0.2340	9.87
085	0.58750	1.1575	0.1581	8.75
086	0.59623	0.2044	0.2000	24.42
087	0.65736	0.2901	0.2712	5.93
088	1.15237	-0.9325	0.2222	7.15
089	0.45087	-0.0814	0.1027	13.00
090	0.91283	-0.7937	0.1747	8.50
091	1.06443	-0.4507	0.2555	3.75

M1=54.6400, M2=528.7059, N=55475, Critical Z=147.93



**Table 114. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 6 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		1.00855	-5.3190				5.51
002	A	0.80814	-1.0006				4.78
002	B	1.10807	-0.5333				2.86
002	C	0.76967	-1.3443				23.27
002	D	1.06155	-1.2629				1.74
002	E	0.62381	1.2257				9.38
002	F	1.15776	-2.2578				21.48
003	A	1.10505	-3.3585	-3.7554	-1.3956	1.6086	103.93
003	B	1.24763	-5.8298	-3.8975	-1.3488	1.6821	44.01
003	C	1.75573	-7.9952	-4.2172			6.53
027		0.69400	-1.4817	-2.4663	-0.5266	1.8040	231.27
077		0.87292	-2.9068	-2.6646	-1.0036	2.1266	87.10
092		0.84724	-1.8623	-3.0598	-0.1228	2.4941	126.35

M1=54.6400, M2=528.7059, N=55475, Critical Z=147.93



**Table 115. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 6 English Mathematics**

Item	a	b	c	Fit-Z
001	0.69624	-2.2024	0.2012	24.33
002	0.84759	-1.6400	0.0445	6.86
003	0.92214	0.6228	0.2930	3.00
005	0.58882	-0.4567	0.0325	21.26
006	1.31115	-0.1330	0.2226	3.19
008	1.46782	-0.2679	0.4995	9.77
009	0.42286	-1.7353	0.2000	229.17
010	0.67329	-1.5263	0.1860	1.41
012	1.08468	-1.0524	0.3478	0.09
013	1.02799	-0.0162	0.3134	3.57
014	0.98667	0.3199	0.1670	2.72
015	0.51476	-0.5772	0.0443	14.30
017	1.52789	-0.6153	0.1370	9.10
018	0.81042	-1.1904	0.1704	5.57
019	0.67814	0.0290	0.2864	14.38
021	0.86222	-0.2955	0.3236	18.35
022	0.86309	0.5975	0.0483	2.52
023	0.87079	-1.6388	0.2000	19.41
024	0.51572	-4.3421	0.2000	1.44
025	0.75161	-0.9417	0.1018	59.83
027	0.78279	-0.2374	0.4985	6.93
028	0.84433	-1.5317	0.2000	1.58
030	0.87222	-2.0064	0.2000	1.33
031	0.99811	-0.3881	0.1707	1.34
032	1.18477	-0.0299	0.2201	3.65
034	0.55660	-1.1226	0.2000	10.38
035	0.51789	-1.6990	0.0996	4.62
036	0.69865	-0.2743	0.1545	4.66
038	0.52563	-2.8088	0.2000	8.43
039	1.21961	0.9126	0.4349	15.42
041	0.70052	-0.2802	0.0932	28.47
042	0.94222	0.0496	0.3534	4.94
044	0.53279	-0.6800	0.0669	5.07
045	1.18267	0.3535	0.1788	37.28
047	1.13009	0.1308	0.2283	5.91
049	0.82175	-1.1504	0.0340	6.39
050	0.84895	-1.5554	0.0672	3.78
051	0.45807	-3.2294	0.2000	26.59
052	1.25989	0.5760	0.4243	12.94
053	1.46683	-0.0971	0.2665	7.92
054	0.70331	0.8621	0.2289	2.64
055	0.79871	0.4292	0.1647	13.12
056	0.79734	-0.9087	0.2772	5.22
058	0.97757	-0.3629	0.2605	2.81
059	0.84981	0.2150	0.1468	2.71

M1=64.7622, M2=546.4847, N=53315, Critical Z=142.17



**Table 116. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 6 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.78133	-2.8926	-1.5452			7.27
007		0.88523	-3.6140	-2.0661	-0.5541		13.70
011		1.34462	0.2868	1.0369			94.95
016		0.77202	-0.2015	1.2633	-1.2785		37.82
020		0.84297	-2.4024	-0.2716	0.4615	1.6926	22.51
026		0.80087	1.4773	-2.2385			13.81
029		0.51953	-0.5324	-0.5310	0.4108		328.35
033		0.83752	-0.2780	-1.1081			85.53
037		0.99399	-0.7466	2.5405	-0.4782		91.83
040		0.87402	-3.7814	-1.2512	-1.6357	-1.1449	34.15
043		1.17339	-1.8327	-1.2293			49.37
046		0.92295	-0.1665	-0.5832			143.72
048		1.28420	-2.6577	-1.2619	0.0513		26.94
057		0.83785	-0.6832	0.7435	2.1068		19.31
060		1.27627	-3.0476	-1.3598	-0.6175	0.8909	54.96

M1=64.7622, M2=546.4847, N=53315, Critical Z=142.17



**Table 117. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 7 English Reading**

Item	a	b	c	Fit-Z
007	0.37642	-1.5945	0.2000	-0.88
008	0.75027	-1.5771	0.1893	10.27
009	1.07772	-2.0125	0.1344	4.75
010	0.94656	-1.9442	0.1768	6.78
014	0.53092	-1.1263	0.1231	3.85
015	1.20209	-1.8389	0.1980	9.51
016	0.47853	-0.7174	0.1745	21.30
017	0.46483	1.0351	0.2329	0.78
018	1.00469	-0.4267	0.1401	11.08
019	0.72380	-0.3755	0.3299	5.47
020	0.78203	-0.6416	0.1896	2.81
022	1.21274	1.9956	0.2395	85.88
023	0.51114	-0.8866	0.1745	34.36
025	0.66404	0.1529	0.2827	19.30
026	0.46014	-1.0517	0.0953	0.82
027	0.55110	0.0634	0.1661	7.26
028	0.70906	-0.9762	0.2653	10.88
029	0.23199	1.3207	0.2000	8.61
030	0.54011	-2.0811	0.1745	8.40
031	0.80315	1.4637	0.3507	4.33
032	0.70340	0.0907	0.1701	6.12
033	0.66147	-0.6638	0.0904	4.64
034	0.87637	0.8469	0.1543	21.56
035	0.92240	-1.8861	0.0858	8.52
038	0.84234	0.3404	0.1355	24.09
039	0.93296	-1.0614	0.1724	9.76
040	0.67920	2.2701	0.2485	38.57
041	0.50961	0.3309	0.2002	14.12
042	0.60098	0.1377	0.2357	6.61
043	0.88209	-1.0297	0.2868	1.13
044	0.82130	-1.5139	0.1714	5.20
045	0.97493	-0.7030	0.2346	5.78
046	0.81434	-1.5884	0.1412	4.03
091	0.81505	1.2157	0.1772	30.85
092	0.51813	-0.7922	0.2004	30.29
093	0.80348	-0.7538	0.1819	1.07
094	0.58083	0.3080	0.1417	5.29
095	0.60211	-1.5971	0.0984	-0.01
096	0.66882	-2.1110	0.1745	22.60
097	0.94302	-2.6611	0.1016	9.63
098	1.01867	0.8073	0.3945	8.51
100	0.79040	-0.7839	0.1689	0.71
101	1.09002	0.2533	0.2127	9.50
102	0.91068	-0.4694	0.2925	2.25
104	0.52611	-1.5441	0.1150	3.10
105	0.93862	-0.5140	0.3221	7.07

continued



**Table 117. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 7 English Reading (Concluded)**

Item	a	b	c	Fit-Z
106	0.60295	-1.5380	0.2000	0.04
107	0.62699	-1.7020	0.2000	35.60
108	0.53525	-0.6009	0.1254	4.13
109	0.62310	-1.3596	0.1745	8.80
110	0.79571	-0.6508	0.1979	3.82
113	0.74451	-1.5155	0.0744	1.86
114	1.23692	0.2815	0.2728	12.89
115	1.01841	-0.2218	0.3038	7.14
116	0.92265	-2.0139	0.0863	5.74

M1=55.5558, M2=646.8762, N=53239, Critical Z=141.97

**Table 118. Item Parameter and Fit Summary, Constructed-Response Items, Grade 7 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.76011	-0.9587	-0.9445	-0.7217		27.45
005		0.53007	-1.6889	-1.2931	-0.3621		37.94
006		0.75997	-1.3755	0.6818	2.2376		161.39
011		0.56306	2.0196	-0.4556			5.84
012		0.95973	-1.5258	0.6641			36.60
013		0.95543	-0.3727	-1.4758			71.54
021		0.66248	-0.4547	0.2347	1.9495		53.35
036		0.71528	-1.5155	0.6980	2.0846		16.70
037		0.74338	-1.2329	0.7098			46.11
090		0.90313	-0.1470	0.4735			30.92
099		0.57496	-0.8427	0.0682	1.0634	1.0150	20.37
103		0.72546	-1.8727	-0.8199			41.80
111		1.22896	-0.1653	2.3943			17.13
112		0.87701	-1.8854	2.0569			12.52

M1=55.5558, M2=646.8762, N=53239, Critical Z=141.97



**Table 119. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 7 English Writing**

Item	a	b	c	Fit-Z
048	0.61919	-1.1947	0.2000	9.93
049	0.86605	0.2880	0.1427	4.07
050	0.80354	-1.8286	0.1746	6.03
051	0.99324	-1.2519	0.1672	1.85
052	1.21819	-0.5334	0.2707	12.96
053	0.64674	-0.2405	0.2088	0.61
054	0.35818	-0.2413	0.1260	5.95
055	0.97144	-1.4606	0.0837	11.14
056	1.02107	-1.4114	0.2682	9.07
057	0.96761	-0.9897	0.2278	4.81
058	1.01504	-0.9529	0.2658	1.12
059	1.02137	0.3997	0.2094	8.35
060	0.87357	-1.1608	0.1103	14.63
061	0.78398	-0.2692	0.1541	0.47
062	0.91909	-1.9080	0.0824	18.55
063	0.68957	-1.4727	0.1930	89.07
064	0.41226	-0.9442	0.3973	21.64
065	0.73258	0.2182	0.1488	3.83
066	0.58314	-0.4220	0.2310	2.39
067	0.68940	0.3249	0.1255	4.06
069	0.88571	-0.7353	0.0693	10.28
070	0.39903	-0.3709	0.2000	61.77
071	0.64510	0.0504	0.2122	-0.22
072	1.06273	-0.5689	0.2238	4.33
073	0.53837	-1.2171	0.1629	2.52
074	0.92160	0.9829	0.2525	10.39
075	1.20863	2.5298	0.0995	159.31
076	0.77296	0.7872	0.3049	1.92
077	0.81162	0.2811	0.3190	5.25
078	0.40341	-0.0218	0.1029	3.41
079	0.69591	0.3536	0.2000	97.89
080	0.47353	-0.5909	0.2000	17.27
081	1.07059	0.3480	0.2562	9.56
082	1.25666	-0.0736	0.2894	10.08
083	1.07479	-0.7416	0.1839	9.49
084	1.19611	-0.4142	0.2786	7.11
085	1.37842	-0.4633	0.1875	13.94
086	1.22894	-0.4545	0.2448	8.86
087	1.32980	-1.3145	0.2608	2.83
088	1.06436	-0.7671	0.1338	3.53

M1=63.1436, M2=553.3884, N=52880, Critical Z=141.01



**Table 120. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 7 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		0.90261	-4.8333				6.11
002	A	0.66463	0.6372				0.73
002	B	0.67155	0.1203				57.86
002	C	0.73590	0.4727				2.72
002	D	0.97131	0.1293				3.09
002	E	1.19325	-1.4243				6.13
002	F	0.23185	0.5533				198.72
003	A	1.32832	-4.0876	-4.1742	-1.3485	1.9997	59.15
003	B	1.42352	-5.4992	-4.2782	-1.3476	2.1147	33.40
003	C	1.70433	-6.8181	-3.9306			19.98
047		1.01847	-2.7820	-3.2658	-0.4791	2.2520	124.77
068		0.90085	-2.7382	-2.8133	0.3294	3.4167	90.67
089		0.81063	-2.2817	-2.5049	0.4014	2.0562	127.00

M1=63.1436, M2=553.3884, N=52880, Critical Z=141.01



**Table 121. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 7 English Mathematics**

Item	a	b	c	Fit-Z
001	0.80458	-0.1438	0.2495	37.96
002	0.82824	-0.0714	0.1673	9.92
004	0.91060	-0.9396	0.1184	9.56
005	0.74992	-1.5204	0.0787	11.27
006	0.59954	-0.4633	0.2057	4.29
007	0.68809	-0.6259	0.2052	35.18
009	0.71618	1.0472	0.3499	4.71
010	0.96259	0.0104	0.1756	3.40
011	0.50976	-0.3659	0.0967	3.38
013	0.45232	-0.2855	0.1102	2.77
015	1.35788	1.7107	0.1319	11.36
016	0.97440	0.2928	0.2621	2.39
017	0.59396	-0.1576	0.0940	-0.07
018	0.10442	0.6446	0.2000	153.07
019	0.77386	-0.1223	0.3166	2.00
021	0.18056	0.1516	0.2000	3.39
022	1.49192	-0.5011	0.4995	9.58
023	0.75023	0.4447	0.1328	2.11
024	0.93881	-0.0294	0.2981	1.23
026	0.80450	-1.5897	0.2052	22.71
027	0.52676	-1.9808	0.1195	4.83
028	1.12131	0.0306	0.2835	4.53
030	0.46938	1.3120	0.4489	4.61
031	0.81507	0.4967	0.0895	20.26
032	1.04794	0.8239	0.1185	8.20
034	0.78622	-2.2096	0.2000	8.03
036	0.54945	-4.0764	0.2000	9.12
037	0.62391	1.3755	0.2407	12.57
038	0.37231	-0.3583	0.2000	1.31
039	1.40237	0.5833	0.1232	11.76
041	0.24649	0.4884	0.2000	4.95
042	1.19950	0.6980	0.4777	20.07
043	1.22147	0.3996	0.3616	3.46
045	1.40490	0.0419	0.2185	13.71
046	0.88510	-1.3586	0.0394	6.72
047	0.95054	-0.1609	0.4993	5.59
049	0.58220	0.2699	0.2625	23.51
050	0.76468	-1.6853	0.1086	3.26
052	0.63302	-1.4162	0.2000	10.25
053	0.74307	-0.4393	0.0788	17.59
054	0.52062	-1.1009	0.2000	3.92
056	1.56992	1.3540	0.2604	27.76
057	1.40834	0.2961	0.2838	11.23
058	0.73287	0.9056	0.1268	5.10

M1=62.2830, M2=560.4256, N=54087, Critical Z=144.23



**Table 122. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 7 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
003		1.41852	-0.0744	0.5049			106.59
008		0.76873	-0.7661	0.7823	2.1552		12.74
012		1.07733	-0.1795	-0.4374			25.95
014		1.38149	-1.6767	0.1401	0.7682		88.34
020		0.92995	-0.6431	1.3482	0.6623	1.1859	194.54
025		0.72737	-0.6337	-0.7225			63.16
029		1.24496	-1.2085	1.7844	2.5470		32.39
033		0.53033	-1.7276	0.2684			108.24
035		1.21226	-2.2617	-1.5154	0.7219		150.31
040		0.84586	-1.5371	2.9384	-0.0702	1.2698	421.55
044		0.75137	-0.7280	-0.0217			82.80
048		1.51681	-0.0567	1.6068	2.3446		20.54
051		1.01451	2.1183	-0.3195			15.74
055		1.31178	0.9042	2.6169	2.1220		15.83
060		0.51012	0.5091	-1.5708	0.9482	-0.5235	47.88

M1=62.2830, M2=560.4256, N=54087, Critical Z=144.23



**Table 123. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 8 English Reading**

Item	a	b	c	Fit-Z
004	0.68178	0.1152	0.2949	11.29
005	0.84920	-1.6253	0.2041	10.06
006	0.71643	-1.1450	0.1902	2.46
007	0.82960	-1.3355	0.2228	18.24
008	0.81188	-1.9207	0.1219	4.26
010	0.72271	-0.9794	0.2255	10.19
011	1.09262	1.0487	0.3384	10.20
012	0.69120	0.6956	0.1770	5.05
015	0.31372	-2.8344	0.2000	80.78
016	1.02038	0.8045	0.1774	46.13
017	0.38667	-0.4594	0.2000	17.86
018	1.25885	1.6321	0.1475	56.62
019	0.80206	-1.2593	0.2947	8.39
020	0.86084	-1.8312	0.2000	3.97
024	0.13644	6.7529	0.4987	12.76
025	0.59166	-0.7015	0.1903	239.28
026	0.44539	-0.1528	0.2989	19.23
027	0.93870	-1.3920	0.2450	3.94
028	1.01121	0.6976	0.2501	5.95
031	0.53078	-0.3219	0.1903	26.61
032	0.64749	-1.8266	0.1903	21.80
033	0.89205	-1.3681	0.2000	-0.16
034	0.79265	-0.4522	0.2596	1.17
035	0.59270	0.0947	0.1245	8.98
036	0.90334	-1.6507	0.1515	2.24
037	0.82068	0.7562	0.1894	13.70
038	0.95672	-1.8385	0.0614	18.39
041	0.84109	0.1810	0.1426	12.95
042	0.97598	-1.6013	0.0649	19.76
043	0.99282	-1.0728	0.1750	6.37
044	0.45606	-1.1083	0.2000	99.73
045	1.33847	-1.2592	0.1889	3.31
046	1.00308	-1.7343	0.1126	3.26
090	0.78084	0.7610	0.1874	11.48
091	0.50264	-1.1397	0.2000	33.67
092	0.87632	-1.0329	0.1855	11.48
093	1.37248	1.3834	0.1381	37.37
094	1.17732	-0.8922	0.1612	3.19
095	1.25827	-0.2798	0.2870	6.08
096	0.76859	0.1019	0.2828	4.84
097	0.63942	0.1942	0.1789	0.77
098	1.12101	-1.3223	0.1676	2.77
099	0.60819	-1.5182	0.1590	4.55
100	0.55724	-0.4075	0.1103	4.20
103	0.22106	-1.4898	0.2000	15.59
104	0.97081	0.4452	0.3083	6.94
105	0.57345	2.5358	0.1961	18.33
106	0.74311	-0.2422	0.2102	0.69

continued



**Table 123. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 8 English Reading (Concluded)**

Item	a	b	c	Fit-Z
107	0.93691	0.0191	0.2830	10.62
109	0.99788	1.2473	0.1560	75.64
110	0.74545	-0.5987	0.2000	11.49
111	0.73045	-0.5508	0.3231	0.98
112	0.77866	-1.7767	0.1903	44.85
113	1.07553	-1.0468	0.2374	9.99
114	0.57382	-0.6062	0.1277	30.97
115	0.78844	-0.4338	0.2285	8.01

M1=53.8369, M2=659.7925, N=56352, Critical Z=150.27

**Table 124. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
009		1.29530	-1.1987	0.3824			49.80
013		0.77700	-2.0956	0.1281	0.9473		48.45
014		0.88415	-2.0069	-2.0181			14.31
022		0.86954	1.3697	-0.5174	2.6122		27.34
023		0.92927	-2.1912	0.3520			9.42
029		0.50402	-0.5598	-0.4567	0.1449		357.55
030		0.75874	0.0224	0.9344	-1.3208		29.62
039		0.80611	-1.6118	0.5378	1.8269		13.78
040		0.74766	-1.1426	0.6693			86.31
089		0.91348	-0.4457	0.2033			21.20
101		1.20231	-0.7346	2.0110			44.53
102		0.82115	-1.6633	3.0318	-0.0330		39.82
108		0.88841	-0.6522	-0.8323	-0.6866		56.29
116		0.86068	0.3052	-1.4685			57.76

M1=53.8369, M2=659.7925, N=56352, Critical Z=150.27



**Table 125. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 English Writing**

Item	a	b	c	Fit-Z
047	0.54544	-1.6779	0.2000	2.17
048	0.82521	0.7885	0.2054	3.23
049	1.16764	-0.4094	0.2505	4.49
050	1.08630	-0.9964	0.1722	2.84
051	0.87549	-0.0508	0.2180	9.20
052	0.77669	0.1052	0.2198	7.33
053	0.73383	-0.4226	0.1970	0.27
054	1.12002	-0.6353	0.3589	1.93
055	0.69164	-0.6078	0.2000	17.37
056	1.23787	1.5426	0.2194	20.76
057	1.47162	-0.9262	0.2170	13.79
058	1.22740	-0.9720	0.2258	7.47
059	1.03041	0.0091	0.1831	6.14
060	0.91636	-1.1372	0.0956	11.54
061	0.78745	0.3219	0.1547	17.89
062	0.83852	-0.9935	0.2969	0.03
063	1.22174	-0.5753	0.2548	9.43
064	0.67531	-0.4255	0.1856	4.94
065	0.75374	-0.4933	0.3118	2.55
066	0.95343	-1.5348	0.2000	3.22
067	1.07106	0.8882	0.0849	13.01
068	0.85919	0.1096	0.0976	11.81
069	0.44399	0.9702	0.2000	43.36
070	1.06895	-1.3883	0.1081	19.82
071	1.14962	-1.4395	0.1969	11.23
072	1.12550	-2.3142	0.2000	11.36
074	0.89193	-1.2175	0.2000	46.52
075	0.77675	0.2691	0.1381	6.04
076	1.29802	-1.0393	0.2102	10.48
077	1.05537	-0.8305	0.2178	1.96
078	1.09959	-0.6506	0.1214	12.17
079	1.19170	1.2844	0.2520	57.04
080	0.42198	1.1029	0.2000	31.75
081	0.57190	-0.7790	0.1629	-0.15
082	0.93069	0.6390	0.1780	25.82
083	0.80858	-1.2028	0.1273	73.01
084	0.76218	0.7590	0.2137	6.65
085	0.81582	-0.4313	0.2832	4.79
086	0.80137	-0.4255	0.2642	10.82
087	1.14641	-1.2248	0.1890	23.65

M1=69.8177, M2=559.8882, N=56047, Critical Z=149.46



**Table 126. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		1.02558	-5.0302				3.22
002	A	1.48319	-0.9159				16.79
002	B	0.19004	-0.3004				37.73
002	C	1.12418	1.4302				4.78
002	D	0.48852	-0.7510				5.75
002	E	0.91798	1.2432				4.43
002	F	1.39873	-0.5728				1.14
003	A	1.17170	-3.8883	-3.8827	-0.8945	2.5692	62.82
003	B	1.22750	-5.1231	-3.8334	-0.8328	2.6597	45.61
003	C	1.87071	-7.5000	-4.0504			22.38
021		0.99067	-2.7999	-3.4420	0.1566	2.4074	38.70
073		1.01365	-3.0154	-3.0962	-0.1979	2.8149	74.13
088		0.88332	-2.3270	-2.8224	-0.3133	2.7754	170.02

M1=69.8177, M2=559.8882, N=56047, Critical Z=149.46



**Table 127. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 8 English Mathematics**

Item	a	b	c	Fit-Z
001	1.17764	-0.4761	0.3836	3.27
002	0.78269	0.2228	0.2151	11.56
004	0.95408	0.5364	0.0876	16.32
006	0.95885	-0.3363	0.1120	12.44
008	0.99389	-1.0363	0.2554	6.18
009	0.59249	-0.4482	0.0611	3.18
010	1.38866	1.0568	0.1326	59.68
011	1.41205	1.6698	0.0505	66.84
012	1.08011	0.8341	0.2208	6.24
014	0.75822	0.5996	0.2429	1.54
015	0.63709	-1.0193	0.1854	68.16
016	1.43814	1.0901	0.1885	40.93
017	1.27446	0.6507	0.3396	7.51
018	1.12619	-0.3813	0.2976	3.35
019	0.69698	1.1932	0.1112	7.85
021	0.57508	-0.0213	0.1126	3.32
022	1.47853	-0.0928	0.1516	12.44
023	0.37958	-1.8897	0.2000	24.08
025	0.50516	0.6153	0.1369	7.65
027	0.39852	-0.8015	0.2000	4.11
028	0.28045	-0.7171	0.2000	8.81
029	1.30876	-0.2047	0.4099	2.88
031	1.15989	1.0488	0.2661	29.18
032	0.52909	-0.1136	0.1723	31.05
033	1.06461	1.0980	0.1944	82.91
035	0.43749	0.4159	0.0458	9.57
036	0.81821	0.6199	0.3528	3.17
037	0.83156	-0.0212	0.2338	0.13
038	0.84200	0.3560	0.0579	8.47
039	1.14975	0.3239	0.2106	53.78
041	1.38302	1.5055	0.1078	43.75
042	1.30289	0.4017	0.0846	10.89
043	1.32271	2.1017	0.2569	33.56
045	1.30515	1.0558	0.2688	29.87
047	0.85827	-0.9313	0.1854	78.91
048	1.72975	0.8691	0.3114	7.95
050	1.64318	0.0161	0.1230	23.74
051	0.31678	-2.5776	0.2000	15.02
052	0.28115	0.5958	0.2000	0.60
053	0.95729	-1.0585	0.1683	2.94
054	0.75378	-0.6368	0.1689	26.02
056	1.29765	0.2318	0.1427	18.48
057	1.30138	1.1311	0.3123	8.41
058	0.69023	0.7370	0.1123	0.48
059	0.92563	-0.1407	0.2831	9.63

M1=62.0781, M2=578.3583, N=54243, Critical Z=144.65



**Table 128. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 8 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
003		0.60099	-2.8854	-0.8760	-0.2392		175.86
005		1.10163	-0.4926	-0.7582			34.30
007		1.03137	2.2576	-0.3427			38.28
013		0.69983	-0.2579	0.5161	1.2699		117.36
020		1.03774	-0.8839	1.4441	0.3710	0.9822	132.51
024		1.49983	-1.4577	1.4891			59.46
026		1.22387	-0.7421	0.9976	3.7305		6.90
030		0.62213	-2.0359	-0.3360			117.61
034		1.04796	-1.0632	0.4891	-0.0684		329.98
040		0.98219	-2.6217	-2.4611	0.4057	1.2913	333.03
044		1.11004	0.5278	0.0633			39.95
046		0.93697	-1.2707	-1.1598	1.0552		247.31
049		1.35305	-0.3584	1.0277			60.73
055		1.19266	-0.9426	0.5888	2.4208		83.64
060		0.67214	0.7971	-0.8814	0.8995	-0.9130	190.79

M1=62.0781, M2=578.3583, N=54243, Critical Z=144.65



**Table 129. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 English Science**

Item	a	b	c	Fit-Z
001	0.58350	0.5916	0.1812	-0.05
002	0.32398	0.2265	0.1078	6.28
003	0.48680	0.5996	0.2352	2.70
004	0.79718	-0.8127	0.3509	6.78
005	0.67670	1.6418	0.1316	7.64
006	0.85366	0.9182	0.1929	2.24
007	0.46735	-0.5023	0.1068	11.67
008	0.61756	3.8524	0.1602	8.41
010	1.18698	-0.1691	0.2701	9.29
011	0.62312	0.4372	0.3912	1.09
012	1.03212	-0.2166	0.3031	6.18
014	1.21170	0.2594	0.2292	7.95
016	1.44187	2.0335	0.4422	11.71
017	0.37732	-1.2876	0.2000	89.90
018	0.56260	-0.3314	0.1912	1.68
019	0.90767	0.5080	0.2010	14.24
026	0.96926	0.5968	0.4781	0.40
027	0.99051	-0.7852	0.3584	1.54
028	0.46145	-0.0255	0.2723	25.54
029	0.46547	-0.5760	0.2167	19.64
030	0.46353	-0.7257	0.3108	10.23
031	0.92789	-0.0925	0.1616	1.64
032	0.74590	0.5139	0.1225	2.91
033	0.93039	0.3906	0.2866	3.72
035	0.54452	0.5997	0.2115	3.35
037	1.71816	1.5844	0.3329	178.13
038	0.67352	-1.1793	0.0745	9.07
039	0.80321	-0.2495	0.3690	5.46
040	0.69763	2.0658	0.1522	1.23
041	0.98487	1.1871	0.1057	4.16
043	0.78205	0.8277	0.2872	3.63
044	0.50275	3.5992	0.2729	0.67
045	0.21162	-3.6148	0.2000	53.59
046	0.64447	2.1541	0.2115	13.41
048	0.30530	-0.3923	0.2000	79.25
049	0.91798	-0.3218	0.2652	9.23
051	0.55956	0.4539	0.2382	7.56
052	0.53385	0.2813	0.2744	9.45
053	0.16534	0.4797	0.2000	34.98
055	0.56857	-0.2272	0.2000	2.63
058	0.51220	0.9608	0.2643	0.11
059	0.58447	0.1875	0.1376	3.70
060	0.53151	-1.2226	0.2167	15.19
062	1.05220	-0.0830	0.3156	8.68
065	0.71139	0.1321	0.4733	6.98
067	0.53688	1.1080	0.0981	1.65
068	1.16033	-0.7203	0.3532	2.28
069	0.68383	-0.1740	0.0551	15.53
070	0.59881	-0.5574	0.2167	37.88

continued



**Table 129. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 8 English Science (Concluded)**

Item	a	b	c	Fit-Z
072	0.31453	-1.5651	0.2000	34.59
073	0.23435	1.9172	0.2000	7.04
074	0.98054	0.4575	0.1771	17.09
075	0.84520	-0.0787	0.1438	8.91
077	0.53902	1.1167	0.0430	0.59
078	0.55480	1.6336	0.2954	6.29
079	0.77172	-0.9885	0.2005	4.53
080	0.49556	-1.3285	0.2000	9.51
081	1.05678	0.3434	0.2530	5.25
082	0.86734	0.5926	0.1278	7.24
083	0.72312	1.1260	0.2752	2.06

M1=52.7848, M2=509.0346, N=49393, Critical Z=131.71

**Table 130. Item Parameter and Fit Summary, Constructed-Response Items, Grade 8 English Science**

Item	Part	f	g1	g2	g3	g4	Fit-Z
009		1.01232	-0.4621	0.2453			11.92
013		1.17045	-0.5166				52.31
015		0.82881	2.2573				-0.17
020		1.11339	-0.1435				10.30
021		0.77310	-1.6354				21.62
022		0.85592	-0.7222	-0.4126			18.23
023		0.87409	-1.2335				23.49
024		0.46723	-0.4044	-0.0306	-0.4279	-0.0553	7.55
025		1.19720	-0.9174	-0.2231			19.58
034		1.14130	-0.1099	3.9919			10.67
036		0.51550	1.2597	1.9892			14.06
042		1.45885	-0.3929	3.1233			38.41
047		0.54983	-0.1208	2.5693			7.52
050		0.78469	1.5127	0.1685			1.46
054		0.91495	-0.8297	1.1016			96.64
056		0.43620	0.9376	0.5507			203.40
057		0.67277	0.5845				3.19
061		1.28669	-0.4379	0.9098			65.27
063		1.46271	-0.0561	2.5395			15.54
064		0.99652	-0.3659	0.1196	0.8276		18.19
066		1.25161	0.2398				10.95
071		1.32847	1.8514				3.94
076		0.99266	-2.2298				17.00

M1=52.7848, M2=509.0346, N=49393, Critical Z=131.71



**Table 131. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 9 English Reading**

Item	a	b	c	Fit-Z
006	1.00427	0.4450	0.1749	45.46
007	0.33734	-0.7062	0.2000	17.80
008	1.07596	1.5681	0.1353	40.41
009	0.77269	-1.7908	0.2000	19.85
010	0.82851	-1.9651	0.2000	6.35
013	0.53523	-0.9400	0.1745	3.11
014	1.66768	-0.7703	0.1347	13.25
015	0.39462	0.3280	0.2000	82.54
016	0.93461	-0.5544	0.2388	2.66
017	0.70874	-1.2033	0.2000	22.35
018	1.38764	-0.4427	0.2365	7.71
020	1.09635	-1.1389	0.1199	1.09
021	0.65269	1.9742	0.1823	16.47
022	0.91642	-0.8803	0.1822	9.29
023	1.56572	-1.1565	0.2453	3.50
024	0.77570	0.1099	0.2367	7.58
025	1.11735	-0.8909	0.2381	12.82
028	1.00057	-0.8980	0.1879	2.04
029	1.14113	-0.9990	0.0969	2.77
030	0.59081	0.7258	0.2652	4.23
031	0.42183	-1.6011	0.2000	494.73
033	0.39118	0.2155	0.0690	6.85
034	0.55563	-0.5723	0.0522	0.78
035	0.75863	-0.2370	0.2596	16.81
036	1.08887	1.6174	0.1971	185.59
037	0.53555	0.3747	0.0338	9.72
038	0.64048	-0.6471	0.1226	5.50
039	0.84424	0.9895	0.2451	28.91
040	0.73387	-1.7801	0.1113	2.04
043	0.84408	-0.1268	0.0901	7.29
044	0.75757	-1.0219	0.1543	7.10
045	0.64810	-0.9112	0.2000	27.86
046	1.08370	-1.1293	0.2075	9.79
047	1.50533	-1.1149	0.2178	3.05
048	0.99741	-0.2935	0.1607	27.80
093	0.22607	-1.5582	0.2000	46.25
094	0.94985	0.4657	0.3122	5.46
095	0.42732	2.4775	0.1832	21.71
096	0.74531	-0.2966	0.2187	3.18
097	0.98542	-0.0133	0.2692	9.60
099	0.70591	-0.7808	0.1745	130.60
100	0.46017	-2.4542	0.2000	452.81
101	0.79219	-1.7367	0.1143	5.15
103	0.61626	-0.7091	0.0415	3.15
104	1.52330	-1.5564	0.1461	9.36
106	1.13985	-0.3814	0.2934	3.38
107	0.82307	-1.6811	0.0495	243.53

continued



**Table 131. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 9 English Reading (Concluded)**

Item	a	b	c	Fit-Z
108	1.17556	-1.2270	0.2609	6.36
109	1.53248	-1.0635	0.2418	1.41
110	1.00471	-0.0242	0.3309	5.59
111	0.70753	-0.2067	0.1659	12.90
112	0.98998	-0.2451	0.2470	7.75
113	0.82752	-0.3420	0.1005	3.73
115	0.91528	-0.3561	0.1190	9.54
116	1.36207	-1.3029	0.2227	1.68

M1=49.8391, M2=667.4534, N=57850, Critical Z=154.27

**Table 132. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 9 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.71495	-2.3449	0.0476	0.8722		56.09
005		0.89456	-2.0608	-2.5407			20.28
011		0.59155	-1.8573	-0.1794	1.3478		37.26
012		0.80476	0.6362	-0.3356	2.0879		86.47
019		0.57147	0.0548	-0.0723	0.4126		55.72
027		0.95623	-1.6561	-0.3402	1.5273		21.22
041		0.79867	-0.0027	-0.8667	0.2354		11.52
042		0.98271	-2.0861	-0.9111	1.8875		19.56
091		1.22802	-0.9092	1.8210			30.94
092		0.81198	-1.9127	2.9677	-0.2849		26.47
098		0.76223	-1.4257	0.0395	0.1248		77.27
102		0.49142	-0.4307	1.1299			31.41
105		0.87211	-1.0583	-0.8913	-0.3880		9.44
114		0.70120	-1.0026	-1.6447	0.6598		27.87

M1=49.8391, M2=667.4534, N=57850, Critical Z=154.27



**Table 133. Item Parameter and Fit Summary, Multiple-Choice Items, Grade 9 English Writing**

Item	a	b	c	Fit-Z
049	0.89240	0.3138	0.2318	14.49
050	0.38676	-0.4432	0.2000	1.03
051	0.98143	-1.0529	0.1154	3.93
052	0.80979	0.3662	0.1493	8.39
053	0.47903	-0.8667	0.1819	3.47
054	0.77338	-0.9299	0.2227	1.64
055	0.78203	0.5694	0.2745	11.07
056	1.00132	-0.6739	0.2346	3.79
057	0.49172	1.1066	0.1516	3.59
058	0.63158	-0.2269	0.1579	3.95
059	0.84323	-0.8285	0.3177	1.22
060	1.20782	-1.1970	0.2311	4.55
061	0.65007	-0.8657	0.0918	10.86
062	0.55175	-0.7048	0.1009	33.50
063	0.62701	0.1544	0.1551	11.85
064	1.33899	-0.8451	0.2891	3.07
065	1.08367	-0.2585	0.1993	14.24
066	1.23826	-0.8094	0.1198	24.79
067	1.28088	-0.3442	0.2352	6.63
068	1.47246	-1.0526	0.3103	4.39
070	0.92401	0.6636	0.1843	29.31
071	0.92052	-0.5823	0.1397	26.97
072	0.80950	-1.2610	0.1372	20.74
073	1.03984	-1.1895	0.1256	33.51
074	1.30818	-0.9155	0.2119	16.56
075	1.02899	0.6321	0.1629	36.90
076	1.31122	-1.0658	0.1743	52.37
077	1.02195	-1.4498	0.2422	10.46
078	0.44843	0.5059	0.2000	60.12
079	0.39654	-0.3386	0.1070	-0.07
080	1.02427	-0.4454	0.3393	9.07
081	0.29483	-1.7931	0.2000	10.88
082	1.07157	0.7397	0.1127	22.71
083	0.51605	-1.6024	0.2000	37.52
084	0.74157	-1.0932	0.1007	53.95
085	0.85171	0.6024	0.2133	10.69
086	0.73149	3.5462	0.0904	16.18
087	1.10046	-0.6228	0.1993	17.37
088	0.94472	-0.3761	0.1873	9.62
089	1.62059	-0.2527	0.2102	36.21

M1=71.6679, M2=563.6617, N=57704, Critical Z=153.88



**Table 134. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 9 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		1.23015	-4.7972				6.30
002	A	1.24394	-1.7100				10.48
002	B	1.63193	-3.4710				5.78
002	C	1.55216	0.6996				79.81
002	D	0.28409	-1.5587				90.97
002	E	0.81782	0.0854				5.53
002	F	0.93797	-3.1872				3.28
003	A	1.51964	-4.3732	-4.0921	0.3008	3.6055	88.35
003	B	1.59739	-5.8979	-4.0355	0.3210	3.7001	70.03
003	C	1.90876	-6.9414	-3.8166			26.51
026		1.05672	-2.2835	-3.0558	0.1195	2.8061	165.27
069		1.07711	-3.0245	-2.7823	0.2953	2.8669	84.52
090		0.99099	-2.5200	-2.3212	0.1467	2.3057	93.10

M1=71.6679, M2=563.6617, N=57704, Critical Z=153.88



**Table 135. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 9 English Mathematics**

Item	a	b	c	Fit-Z
001	0.65438	-2.2984	0.2000	17.29
002	1.04858	0.7837	0.2827	16.01
004	0.51122	0.4971	0.1689	8.01
005	1.23826	0.3787	0.3639	2.93
006	0.93359	-0.2473	0.3432	28.47
008	1.01824	-0.0919	0.1286	12.06
009	0.90243	0.8529	0.0816	7.66
010	0.88095	0.6396	0.1235	1.57
011	0.98741	2.0910	0.3103	2.84
013	0.76119	-1.2534	0.1648	4.87
014	0.52732	-1.6652	0.1101	13.19
016	0.39828	1.1187	0.3589	7.35
017	0.94996	1.5783	0.2753	4.42
018	1.32598	1.1092	0.2778	10.04
019	1.57350	1.0592	0.1454	74.50
021	0.55235	0.5655	0.0616	5.70
022	1.34363	0.0174	0.1924	17.63
024	0.77642	-0.3827	0.3202	10.23
025	1.61857	1.4615	0.0824	49.87
027	1.20907	1.4026	0.1975	3.95
028	0.97268	0.1681	0.3196	22.43
030	0.60349	-0.8358	0.0511	14.69
031	1.19633	0.8477	0.2764	5.48
033	0.41677	0.0192	0.2000	67.73
034	1.20133	-0.7480	0.2750	8.46
036	1.40112	1.3604	0.1399	76.49
037	0.86953	-1.2635	0.2061	6.09
038	0.48292	0.6980	0.4993	103.66
039	1.07784	0.7577	0.0973	10.06
041	0.83054	0.2324	0.2401	-0.13
042	1.20419	1.2232	0.4722	12.07
044	0.78184	-0.0263	0.3137	2.03
045	0.70161	0.7185	0.3091	8.50
047	1.23110	0.0398	0.1977	8.40
048	0.89340	1.3482	0.4165	4.46
049	1.61370	1.5701	0.4078	1.96
051	0.48862	0.7206	0.0382	3.49
052	0.70769	-0.7313	0.1159	4.87
053	1.58851	1.2775	0.2725	15.39
055	0.44860	1.4608	0.1279	31.48
056	0.87714	-0.1967	0.2984	31.89
057	1.76471	2.0390	0.0412	201.65
058	0.70826	-1.4969	0.2000	19.61
059	0.26863	1.2704	0.2000	42.28

M1=60.0842, M2=578.5944, N=56887, Critical Z=151.70



**Table 136. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 9 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
003		1.56656	1.6599	1.7203			64.58
007		1.11160	0.9214	0.9636	-0.1229		18.78
012		1.37611	-0.3064	1.0819			60.93
015		1.21607	1.4700	2.3355	2.7149		27.71
020		1.28772	-2.2514	-1.1728	0.7682	2.2285	225.49
023		1.49082	-1.1980	1.5768			112.58
026		1.21214	-0.0957	0.9295	3.4414		10.54
032		1.13345	-0.0354	1.1015			35.02
035		1.21810	-2.1897	0.8306	1.0140		106.70
040		1.27574	2.0655	1.4956	1.7478	1.6195	21.64
043		1.39935	1.5567	3.3383			43.52
046		1.30870	0.4914	2.1986	0.9862		170.35
050		1.06155	-0.7800	1.1388			98.15
054		0.95936	-1.3915	1.8144	1.6117		53.77
060		0.99686	-1.6565	1.3014	1.3955	2.0744	71.36

M1=60.0842, M2=578.5944, N=56887, Critical Z=151.70



**Table 137. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 English Reading**

Item	a	b	c	Fit-Z
006	0.50040	0.3609	0.2396	2.07
007	0.68678	-1.1193	0.3012	5.10
008	0.23039	1.6102	0.2000	1.40
009	0.54235	-1.1336	0.2000	59.31
010	0.24124	-0.9068	0.2000	147.13
011	0.18815	0.0751	0.2000	172.55
012	0.87157	-1.7808	0.1622	4.85
014	0.72819	0.8191	0.2441	5.90
015	0.39090	-0.6253	0.2000	167.61
016	0.32283	-0.1846	0.2000	7.38
017	0.56532	0.4612	0.1671	7.74
018	0.62224	-1.5194	0.2000	3.79
019	0.49057	1.2140	0.2111	0.68
020	0.51608	2.0337	0.2180	0.31
021	0.59598	0.4870	0.1504	2.91
022	0.70024	0.6150	0.2336	5.63
023	1.05832	0.1899	0.2366	9.92
025	0.34794	0.9122	0.1482	0.90
026	0.79418	-1.0209	0.2955	5.43
027	0.75307	0.2568	0.1668	6.23
028	0.64012	-1.4996	0.1875	37.28
029	1.23662	0.3642	0.3287	13.76
030	0.89561	-0.0742	0.2548	7.74
032	0.75661	-1.5742	0.0984	1.55
033	0.87109	0.2843	0.4299	26.63
034	0.48036	-2.1717	0.0000	5.27
035	1.02229	-0.7679	0.2478	6.22
036	0.46571	-0.2865	0.1497	3.78
038	0.41893	2.7032	0.1174	1.62
040	0.93790	-1.1813	0.1842	1.28
041	1.15467	-1.0949	0.0900	5.33
042	0.58483	0.2192	0.2470	4.85
043	0.54076	-1.1043	0.1054	10.09
044	0.56884	-1.4757	0.2000	363.56
048	0.64236	0.9740	0.2669	19.40
049	0.66101	-0.5651	0.2154	8.37
050	1.32551	-1.8057	0.2068	12.98
051	0.78895	-1.0336	0.2118	1.82
052	1.24480	-1.5399	0.1303	3.94
053	0.80305	-1.4370	0.2083	3.64
098	0.90622	-1.6379	0.2000	23.79
099	0.60340	-0.9460	0.1875	83.36
100	0.77091	-1.3531	0.1875	381.99
101	0.49663	-2.5637	0.2000	434.44
102	0.86946	-1.8487	0.2000	9.67
104	0.56702	-0.9065	0.0826	-0.51

continued



**Table 137. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 English Reading (Concluded)**

Item	a	b	c	Fit-Z
105	0.75273	-1.2849	0.1875	279.04
106	1.45549	-1.7354	0.1428	10.18
108	0.85192	-0.2336	0.2730	35.47
109	0.24963	2.5691	0.2000	33.13
111	0.97063	-1.2015	0.1407	4.78
113	0.77029	-0.8095	0.1837	2.34
115	0.95741	0.9302	0.2716	11.45

M1=51.6390, M2=690.8945, N=55269, Critical Z=147.38

**Table 138. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 English Reading**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.97049	0.9510	0.7893			90.42
005		0.84977	-1.4905	-1.8851	0.8153	-0.1764	60.49
013		0.91876	-2.0857	-0.7093	1.4026		52.62
024		0.65777	-0.8438	-0.0491	0.8707		99.28
031		1.03758	-0.6051	0.8616			19.53
037		0.56968	0.5356	-0.4695	0.7663	1.0607	82.84
039		1.07525	-1.5554	-0.5446	1.2951		23.44
046		0.83021	-0.4182	-1.9525	-0.9682		21.98
047		0.97383	-2.0510	0.0387	0.6757		41.67
054		1.00855	-0.0315	-0.3881			23.81
097		0.91907	-1.7053	-0.0337	-0.0478		57.60
103		0.49285	-0.5779	0.9648			48.85
107		1.01748	-1.8106	-0.0134	1.0556		33.87
110		0.99483	0.2982	-0.0585			21.50

M1=51.6390, M2=690.8945, N=55269, Critical Z=147.38



**Table 139. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 English Writing**

Item	a	b	c	Fit-Z
055	0.58061	0.0182	0.2196	19.66
056	0.69350	-1.8661	0.2000	26.07
057	1.07546	-0.7842	0.2534	7.79
058	0.77423	0.3079	0.2545	10.63
059	0.77017	0.5086	0.2413	8.44
060	1.49007	-1.1714	0.2747	5.18
061	1.19074	-0.9976	0.2155	5.12
062	1.66458	-1.2542	0.1693	26.69
063	1.18940	-1.3494	0.1303	13.80
064	1.20250	0.5701	0.2352	16.45
065	0.59476	2.0827	0.1605	50.14
066	1.04564	1.5252	0.1482	37.68
067	0.33165	0.5700	0.2000	103.13
068	1.35002	-1.1865	0.1798	14.44
069	0.61495	-0.4021	0.1954	65.66
070	0.55425	-1.0709	0.2000	13.12
071	0.96834	-0.4254	0.3331	1.78
072	1.23823	-0.9751	0.1288	7.05
073	1.18885	-1.3613	0.1616	14.18
075	0.61929	1.6650	0.3014	9.32
076	0.57668	0.1192	0.2000	12.91
077	0.68147	1.1845	0.3462	16.41
078	0.62085	-0.8240	0.0623	28.30
079	0.95640	0.7195	0.2344	29.75
080	1.35893	-1.2079	0.1978	26.42
081	1.32511	-1.1784	0.3028	18.51
082	0.73680	-0.5846	0.0909	6.24
083	0.66064	-0.4506	0.1260	24.39
084	1.03728	-0.6368	0.1418	31.13
085	0.74942	-1.1576	0.2000	3.16
086	1.44320	-0.9654	0.2285	15.91
087	1.16486	0.3325	0.1822	28.88
088	0.63071	0.8084	0.1577	70.87
089	0.86978	-1.3722	0.2000	7.87
090	0.53839	-0.5109	0.2000	14.82
091	0.97123	0.5875	0.2506	14.73
092	0.95194	0.8792	0.2497	10.80
093	1.38838	-0.8484	0.2185	8.40
094	0.83862	-1.1157	0.1250	23.58
095	1.21790	-1.1926	0.1472	49.06

M1=80.3378, M2=576.0204, N=55128, Critical Z=147.01



**Table 140. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 English Writing**

Item	Part	f	g1	g2	g3	g4	Fit-Z
001		1.12259	-4.6728				13.07
002	A	0.91510	-0.2873				3.52
002	B	1.46660	-0.5188				22.26
002	C	0.75130	0.5784				21.39
002	D	1.09216	-0.0055				19.66
002	E	0.58837	-0.5166				13.79
002	F	1.51901	-2.0254				29.90
003	A	1.38677	-4.5689	-3.9312	-0.5935	2.5899	61.92
003	B	1.54373	-5.6133	-4.0597	-0.5745	2.8006	67.62
003	C	1.92900	-7.0209	-3.6337			16.61
074		0.96730	-1.9937	-2.7618	-0.0525	3.1943	142.41
096		0.93161	-1.2970	-2.7214	-0.8595	2.7885	206.34
116		0.92251	-2.4126	-2.2054	0.0201	1.9006	62.74

M1=80.3378, M2=576.0204, N=55128, Critical Z=147.01



**Table 141. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 English Mathematics**

Item	a	b	c	Fit-Z
001	1.33550	1.1368	0.4999	103.37
002	1.17485	1.7287	0.4534	6.98
003	0.32157	2.3274	0.1276	18.10
005	0.63729	-0.7724	0.1419	9.16
006	1.06389	0.9194	0.2621	23.87
008	1.25399	1.3154	0.3178	24.35
009	1.76471	1.6033	0.2514	76.59
010	0.86571	0.2715	0.1178	0.09
011	0.45047	-2.4552	0.2000	46.55
012	1.82069	1.3950	0.1726	366.64
013	1.29326	1.3202	0.2000	667.96
015	1.76471	1.5490	0.3015	59.09
016	0.83490	0.2872	0.2596	6.35
017	1.01886	-0.5348	0.2972	9.91
019	0.71076	0.0011	0.2270	90.05
021	1.06706	1.2954	0.1444	2.69
022	0.59299	-0.4787	0.2000	7.43
023	1.23761	1.3818	0.1273	19.33
024	0.91484	1.3841	0.0581	32.18
026	0.96599	0.1346	0.3493	11.08
027	0.46036	-1.6629	0.2000	21.32
029	0.88547	-0.9772	0.3441	6.03
030	1.04705	0.1156	0.3659	10.52
031	0.95439	1.7602	0.2109	46.96
033	1.76471	1.6194	0.4798	48.96
035	0.43825	1.4239	0.2000	113.52
036	1.32026	-0.5926	0.1817	3.26
037	1.76471	1.4389	0.2613	104.17
038	0.63003	-0.8870	0.0427	9.19
039	1.38205	0.5810	0.3036	7.24
041	1.37344	1.5067	0.1152	7.18
042	0.55230	-0.9750	0.0636	10.29
043	0.95931	1.4153	0.3569	1.97
044	0.74063	1.5085	0.1356	8.21
046	0.59104	-2.1569	0.2000	37.48
047	1.31095	0.6205	0.0490	22.02
049	1.15549	1.6553	0.3642	3.40
050	0.71259	1.5788	0.4029	64.79
051	0.99417	-0.2468	0.1757	4.53
052	0.57391	0.2758	0.0486	4.40
053	1.55968	1.0403	0.3968	9.07
055	1.58723	-0.4055	0.1150	10.16
056	1.76471	1.5251	0.2819	15.93
058	0.63674	1.4243	0.1296	9.58
059	0.72980	0.1122	0.3055	25.64

M1=60.7365, M2=592.0696, N=53296, Critical Z=142.12



**Table 142. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 English Mathematics**

Item	Part	f	g1	g2	g3	g4	Fit-Z
004		0.82031	-0.2351	-1.5395			130.94
007		0.80159	0.9670	-0.8539	2.0823		340.95
014		0.58136	4.0237	0.6949			14.42
018		1.11157	0.6754	2.1671	2.6486		30.80
020		0.96867	1.8461	1.3161	0.6264	1.3128	31.81
025		1.52545	0.0880	1.1938			28.01
028		1.27522	-1.3224	1.2550	3.8519		59.76
032		1.37450	-0.8433	3.0155			115.53
034		1.10390	0.6737	1.2880	-0.8252		23.92
040		0.98869	-0.6243	0.9487	1.4129	-0.4756	42.31
045		0.72573	1.2478	0.6149			41.67
048		1.39610	1.0623	0.9718	1.3317		52.05
054		1.16756	-3.4593	0.9468			132.24
057		1.23471	0.4035	1.8316	0.6410		103.62
060		1.13684	-2.2479	0.3436	1.8035	2.9320	105.90

M1=60.7365, M2=592.0696, N=53296, Critical Z=142.12



**Table 143. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 English Science**

Item	a	b	c	Fit-Z
001	0.66667	1.0246	0.3629	5.16
002	0.72939	-1.7265	0.2000	29.38
003	0.25513	2.1070	0.2000	2.30
004	0.82617	-0.6602	0.2400	10.55
005	0.52527	1.5873	0.1931	3.36
006	0.69962	-1.2030	0.2132	13.16
008	1.27362	1.3223	0.2777	10.44
009	1.71878	1.6648	0.4334	29.76
010	0.74033	-0.0699	0.1740	1.11
011	0.37443	-1.2131	0.2000	63.94
012	1.30947	1.9755	0.0570	4.56
013	1.00737	-0.0289	0.1786	5.10
014	0.58115	1.1342	0.1336	6.14
016	0.37537	0.0489	0.0891	14.82
017	0.53913	0.3913	0.3488	0.51
018	0.83067	0.7487	0.1763	20.40
019	0.77266	-0.4662	0.2484	13.82
020	0.98645	-1.2104	0.2111	6.10
028	0.85646	0.4096	0.3958	3.70
030	0.42201	0.7476	0.1262	3.97
032	1.13358	-1.5368	0.1647	19.63
033	1.07859	-0.3308	0.3589	9.25
035	0.91294	-0.3278	0.2770	4.68
036	0.86634	1.7507	0.3076	3.65
037	0.40844	3.0552	0.3080	5.44
039	0.73988	-0.9643	0.2000	3.88
040	0.77232	-0.3441	0.2038	1.66
042	1.02827	-0.5127	0.3645	4.27
043	1.60718	1.1587	0.2567	48.79
045	0.46826	0.5390	0.1427	2.60
046	0.66893	-0.7852	0.1681	8.81
048	0.26204	2.5130	0.2000	14.98
049	0.76590	-0.3673	0.1635	21.86
050	0.81945	-0.2493	0.2916	2.98
051	1.17422	0.9350	0.1165	15.86
053	0.90431	0.0552	0.1260	16.44
054	0.64538	-1.2780	0.2000	13.38
055	0.81479	-0.6046	0.3729	5.79
056	0.60890	-1.7894	0.1440	12.24
057	1.34381	0.9270	0.2298	28.83
058	1.02040	-0.2424	0.2250	0.81
060	1.20959	0.5824	0.1851	29.32
061	0.44118	-0.5243	0.1425	1.81
063	1.37072	1.5222	0.1603	114.02
064	0.59873	1.8926	0.2230	2.75
065	0.65256	1.3426	0.2156	7.50
067	0.59130	-1.6478	0.2000	8.55

continued



**Table 143. Item Parameter and Fit Summary, Multiple-Choice Items,  
Grade 10 English Science (Concluded)**

Item	a	b	c	Fit-Z
068	0.92681	0.4139	0.2196	3.61
071	1.16778	-0.0899	0.2987	6.58
072	1.20952	2.4278	0.1684	20.75
073	0.54983	-1.9374	0.2000	7.95
075	0.80152	-0.9570	0.1020	13.09
076	1.16315	0.9136	0.1990	14.54
077	1.18836	0.4248	0.3873	15.58
079	0.88917	0.0251	0.0975	14.05
080	1.15323	-0.6780	0.2468	3.72
081	1.01227	0.1204	0.2234	20.52
083	0.34884	0.2322	0.1235	8.68

M1=53.1244, M2=504.4015, N=51072, Critical Z=136.19

**Table 144. Item Parameter and Fit Summary, Constructed-Response Items,  
Grade 10 English Science**

Item	Part	f	g1	g2	g3	g4	Fit-Z
007		0.95900	2.4376				-0.86
021		0.42659	0.2633	-1.4212	0.4750	0.1952	36.00
022		0.54851	0.5969	0.3385			19.67
023		1.06844	-0.2928				0.67
024		0.46410	-0.4605	-0.9519	-0.6281		57.60
025		0.98186	0.7602				45.55
026		0.84364	-0.8006				72.19
027		1.21687	-0.5201				40.31
029		2.27826	3.9845				13.04
031		0.59275	-0.6801	1.0705			66.82
034		1.18958	-0.1061				17.26
038		0.53520	0.2380	0.8529	1.7788		9.68
041		0.66107	-0.7056				10.15
044		0.56004	-0.9390	-0.2636			7.96
047		0.93846	0.4552	1.8015			6.53
052		1.17229	0.3838	1.1504			8.97
059		1.01114	0.1313	1.0923			6.82
062		0.89847	1.3155	1.8111			33.34
066		1.18072	-0.8649				46.76
069		1.10281	1.7069	1.7299			67.39
074		0.95702	-0.8847	-0.2746			26.22
078		1.00429	-0.1241	1.1323			14.38
082		1.40873	-1.0883				72.51

M1=53.1244, M2=504.4015, N=51072, Critical Z=136.19



**Table 145. Correlations Between the Reference and New Form Item Parameters for the 2008 CSAP Administration**

<b>Content Area</b>	<b>Grade</b>	<b>Discrimination (a)</b>	<b>Difficulty (b)</b>	<b>Guessing (c)</b>	<b>p-Value (p)</b>
Reading	3	0.98	0.99	0.97	0.99
Reading	4	0.96	0.99	0.82	0.99
Reading	5	0.98	0.94	0.84	0.98
Reading	6	0.93	0.98	0.78	0.99
Reading	7	0.97	0.96	0.55	0.99
Reading	8	0.96	0.99	0.90	0.99
Reading	9	0.98	0.98	0.85	1.00
Reading	10	0.97	0.99	0.76	0.99
Writing	3	0.88	0.93	0.80	0.99
Writing	4	0.96	0.97	0.87	0.99
Writing	5	0.94	0.91	0.40	0.98
Writing	6	0.95	0.92	0.54	0.98
Writing	7	0.95	0.97	0.66	0.98
Writing	8	0.97	0.99	0.88	1.00
Writing	9	0.99	0.98	0.88	0.99
Writing	10	0.99	0.98	0.81	0.99
Mathematics	3	0.95	0.99	0.89	0.98
Mathematics	4	0.98	0.96	0.77	0.98
Mathematics	5	0.97	0.98	0.93	0.99
Mathematics	6	0.99	0.99	0.96	0.99
Mathematics	7	0.99	0.98	0.93	0.98
Mathematics	8	0.98	0.87	0.78	0.99
Mathematics	9	0.91	0.90	0.89	0.98
Mathematics	10	0.97	0.99	0.99	0.99
Reading Spanish	3	0.83	0.97	0.61	0.99
Writing Spanish	3	0.81	0.99	-0.18	1.00

Note: Grade 4 Spanish Reading and Writing were pre-equated and a new scale was established for Science in 2008.



**Table 146. Scaling Constants Across Grades and Content Areas for Two Administrations**

Content Area	Grade	2007		2008	
		Multiplicative	Additive	Multiplicative	Additive
Reading	3	62.5	565.0	64.3	562.5
Reading	4	59.4	592.0	49.4	591.5
Reading	5	58.6	620.6	58.6	620.6
Reading	6	58.3	630.3	56.2	637.6
Reading	7	58.0	642.5	55.6	646.9
Reading	8	54.8	649.8	53.8	659.8
Reading	9	46.5	665.3	49.8	667.5
Reading	10	45.7	695.0	51.6	690.9
Writing	3	43.9	469.7	45.6	463.7
Writing	4	46.3	484.4	46.5	487.0
Writing	5	49.7	508.5	52.1	512.7
Writing	6	56.7	527.8	54.6	528.7
Writing	7	64.7	558.2	63.1	553.4
Writing	8	67.0	557.3	69.8	559.9
Writing	9	70.9	564.3	71.7	563.7
Writing	10	75.8	581.5	80.3	576.0
Mathematics	3	71.9	466.2	78.0	473.8
Mathematics	4	67.0	500.7	65.1	505.2
Mathematics	5	65.6	536.9	61.2	534.9
Mathematics	6	65.3	548.0	64.8	546.5
Mathematics	7	59.6	566.0	62.3	560.4
Mathematics	8	54.5	569.5	62.1	578.4
Mathematics	9	61.8	577.3	60.1	578.6
Mathematics	10	63.3	592.8	60.7	592.1
Science	5	49.7	560.5	55.3*	503.9*
Science	8	51.8	516.1	52.8*	509.0*
Science	10	53.6	510.0	53.1*	504.4*
Reading Spanish	3	37.2	522.2	36.8	521.6
Reading Spanish	4	_*	_*	_*	_*
Writing Spanish	3	59.1	507.8	64.2	501.5
Writing Spanish	4	_*	_*	_*	_*

\*Grade 4 Spanish Reading and Writing were pre-equated using items from 2002, 2004, 2005, and 2007 and a new scale was established for Science in 2008.



**Table 147. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Reading**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Reading	3	CS 1	Total Test	40	100.0
			Anchor Set	21	100.0
		Total	Total Test	40	100.0
			Anchor Set	21	100.0
Reading	4	CS 1	Total Test	31	44.3
			Anchor Set	10	43.5
		CS 4	Total Test	15	21.4
			Anchor Set	5	21.7
		CS 5	Total Test	15	21.4
			Anchor Set	4	17.4
		CS 6	Total Test	9	12.9
			Anchor Set	4	17.4
		Total	Total Test	70	100.0
			Anchor Set	23	100.0
Reading	5	CS 1	Total Test	25	35.7
			Anchor Set	8	36.4
		CS 4	Total Test	15	21.4
			Anchor Set	4	18.2
		CS 5	Total Test	17	24.3
			Anchor Set	5	22.7
		CS 6	Total Test	13	18.6
			Anchor Set	5	22.7
		Total	Total Test	70	100.0
			Anchor Set	22	100.0
Reading	6	CS 1	Total Test	27	38.6
			Anchor Set	7	35.0
		CS 4	Total Test	14	20.0
			Anchor Set	4	20.0
		CS 5	Total Test	16	22.9
			Anchor Set	4	20.0
		CS 6	Total Test	13	18.6
			Anchor Set	5	25.0
		Total	Total Test	70	100.0
			Anchor Set	20	100.0
Reading	7	CS 1	Total Test	20	29.0
			Anchor Set	7	33.3
		CS 4	Total Test	17	24.6
			Anchor Set	4	19.0
		CS 5	Total Test	17	24.6
			Anchor Set	6	28.6
		CS 6	Total Test	15*	21.7
			Anchor Set	4	19.0
		Total	Total Test	69*	100.0
			Anchor Set	21	100.0

\* Content area in which item(s) were removed from calibration or anchor set.  
Count shown in this table does not include removed items.



**Table 147. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Reading (Concluded)**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Reading	8	CS 1	Total Test	22	31.4
			Anchor Set	6	27.3
		CS 4	Total Test	19	27.1
			Anchor Set	6	27.3
		CS 5	Total Test	15	21.4
			Anchor Set	5	22.7
		CS 6	Total Test	14	20.0
			Anchor Set	5	22.7
		Total	Total Test	70	100.0
			Anchor Set	22	100.0
Reading	9	CS 1	Total Test	25	36.2
			Anchor Set	8	36.4
		CS 4	Total Test	16	23.2
			Anchor Set	4	18.2
		CS 5	Total Test	16*	23.2
			Anchor Set	7	31.8
		CS 6	Total Test	12	17.4
			Anchor Set	3	13.6
		Total	Total Test	69*	100.0
			Anchor Set	22	100.0
Reading	10	CS 1	Total Test	22*	32.8
			Anchor Set	5*	22.7
		CS 4	Total Test	14	20.9
			Anchor Set	4	18.2
		CS 5	Total Test	19*	28.4
			Anchor Set	7	31.8
		CS 6	Total Test	12	17.9
			Anchor Set	6	27.3
		Total	Total Test	67*	100.0
			Anchor Set	22*	100.0

\* Content area in which item(s) were removed from calibration or anchor set.  
Count shown in this table does not include removed items.



**Table 148. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Mathematics**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Mathematics	3	CS 1	Total Test	7*	17.9
			Anchor Set	4	22.2
		CS 2/3	Total Test	11	28.2
			Anchor Set	3	16.7
		CS 4/5	Total Test	14	35.9
			Anchor Set	7	38.9
		CS 6	Total Test	7	17.9
			Anchor Set	4	22.2
		Total	Total Test	39*	100.0
			Anchor Set	18	100.0
Mathematics	4	CS 1	Total Test	13*	19.1
			Anchor Set	4	20.0
		CS 2	Total Test	9	13.2
			Anchor Set	2	10.0
		CS 3	Total Test	11	16.2
			Anchor Set	4	20.0
		CS 4/5	Total Test	21	30.9
			Anchor Set	6	30.0
		CS 6	Total Test	14	20.6
			Anchor Set	4	20.0
Mathematics	5	CS 1	Total Test	16	23.2
			Anchor Set	4	20.0
		CS 2	Total Test	12	17.4
			Anchor Set	4	20.0
		CS 3	Total Test	11	15.9
			Anchor Set	4	20.0
		CS 4/5	Total Test	14	20.3
			Anchor Set	4	20.0
		CS 6	Total Test	16	23.2
			Anchor Set	4	20.0
		Total	Total Test	69	100.0
			Anchor Set	20	100.0

\* Content area in which item(s) were removed from calibration or anchor set.  
Count shown in this table does not include removed items.



**Table 148. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Mathematics (Continued)**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Mathematics	6	CS 1	Total Test	12	20.0
			Anchor Set	5	26.3
		CS 2	Total Test	11	18.3
			Anchor Set	4	21.1
		CS 3	Total Test	10	16.7
			Anchor Set	2	10.5
		CS 4/5	Total Test	16	26.7
			Anchor Set	5	26.3
		CS 6	Total Test	11	18.3
			Anchor Set	3	15.8
		Total	Total Test	60	100.0
			Anchor Set	19	100.0
Mathematics	7	CS 1/6	Total Test	19	31.7
			Anchor Set	6	30.0
		CS 2	Total Test	12	20.0
			Anchor Set	4	20.0
		CS 3	Total Test	12	20.0
			Anchor Set	4	20.0
		CS 4/5	Total Test	17	28.3
			Anchor Set	6	30.0
		Total	Total Test	60	100.0
			Anchor Set	20	100.0
Mathematics	8	CS 1/6	Total Test	15	25.0
			Anchor Set	4	20.0
		CS 2	Total Test	15	25.0
			Anchor Set	6	30.0
		CS 3	Total Test	12	20.0
			Anchor Set	4	20.0
		CS 4/5	Total Test	18	30.0
			Anchor Set	6	30.0
		Total	Total Test	60	100.0
			Anchor Set	20	100.0
Mathematics	9	CS 1/6	Total Test	13	22.0
			Anchor Set	4	22.2
		CS 2	Total Test	16*	27.1
			Anchor Set	5	27.8
		CS 3	Total Test	15	25.4
			Anchor Set	5	27.8
		CS 4/5	Total Test	15	25.4
			Anchor Set	4	22.2
		Total	Total Test	59*	100.0
			Anchor Set	18	100.0

\* Content area in which item(s) were removed from calibration.  
Count shown in this table does not include removed items.



**Table 148. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Mathematics (Concluded)**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Mathematics	10	CS 1/6	Total Test	13	21.7
			Anchor Set	5	26.3
		CS 2	Total Test	17	28.3
			Anchor Set	5	26.3
		CS 3	Total Test	15	25.0
			Anchor Set	4*	21.1
		CS 4/5	Total Test	15	25.0
			Anchor Set	5	26.3
		Total	Total Test	60	100.0
			Anchor Set	19*	100.0

\* Content area in which item(s) were removed from calibration.  
Count shown in this table does not include removed items.



**Table 149. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Writing**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Writing	3	CS 2	Total Test	21	39.6
			Anchor Set	7	36.8
		CS 3	Total Test	32	60.4
			Anchor Set	12	63.2
		Total	Total Test	53	100.0
			Anchor Set	19	100.0
Writing	4	CS 2	Total Test	21	39.6
			Anchor Set	9	42.9
		CS 3	Total Test	32	60.4
			Anchor Set	12	57.1
		Total	Total Test	53	100.0
			Anchor Set	21	100.0
Writing	5	CS 2	Total Test	21	39.6
			Anchor Set	10	50.0
		CS 3	Total Test	32	60.4
			Anchor Set	10	50.0
		Total	Total Test	53	100.0
			Anchor Set	20	100.0
Writing	6	CS 2	Total Test	21	39.6
			Anchor Set	10	47.6
		CS 3	Total Test	32	60.4
			Anchor Set	11	52.4
		Total	Total Test	53	100.0
			Anchor Set	21	100.0
Writing	7	CS 2	Total Test	21	39.6
			Anchor Set	9	45.0
		CS 3	Total Test	32	60.4
			Anchor Set	11	55.0
		Total	Total Test	53	100.0
			Anchor Set	20	100.0
Writing	8	CS 2	Total Test	21	39.6
			Anchor Set	10	50.0
		CS 3	Total Test	32	60.4
			Anchor Set	10	50.0
		Total	Total Test	53	100.0
			Anchor Set	20	100.0
Writing	9	CS 2	Total Test	21	39.6
			Anchor Set	8	44.4
		CS 3	Total Test	32	60.4
			Anchor Set	10	55.6
		Total	Total Test	53	100.0
			Anchor Set	18	100.0

\* Content area in which item(s) were removed from calibration.  
Count shown in this table does not include removed items.



**Table 149. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Writing (Concluded)**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Writing	10	CS 2	Total Test	21	39.6
			Anchor Set	8	42.1
		CS 3	Total Test	32	60.4
			Anchor Set	11	57.9
		Total	Total Test	53	100.0
			Anchor Set	19	100.0



**Table 150. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Science\*\***

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Science	5	CS 1/5	Total Test	30	41.1
		CS 2	Total Test	15	20.5
		CS 3	Total Test	13*	17.8
		CS 4	Total Test	15	20.5
		Total	Total Test	73*	100.0
Science	8	CS 1/5	Total Test	32	38.6
		CS 2	Total Test	17	20.5
		CS 3	Total Test	17	20.5
		CS 4	Total Test	17	20.5
		Total	Total Test	83	100.0
Science	10	CS 1/5	Total Test	30	37.0
		CS 2	Total Test	16*	19.8
		CS 3	Total Test	18	22.2
		CS 4	Total Test	17*	21.0
		Total	Total Test	81*	100.0

\* Content area in which item(s) were removed from calibration.

Count shown in this table does not include removed items.

\*\* A new scale was established for Science in 2008 and did not use anchor items.



**Table 151. CSAP Item and Anchor Count by Content Standard for  
Final Calibration Sample: Reading and Writing Spanish**

Content Area	Grade	Content Standard	Item Set	No. of Items	Percentage
Reading Spanish	3	CS 1	Total Test	40	100.0
			Anchor Set	18	100.0
		Total	Total Test	40	100.0
			Anchor Set	18	100.0
Writing Spanish	3	CS 2	Total Test	21	39.6
			Anchor Set	5	27.8
		CS 3	Total Test	32	60.4
			Anchor Set	13	72.2
		Total	Total Test	53	100.0
			Anchor Set	18	100.0
Reading Spanish	4	CS 1	Total Test	31	44.3
		CS 4	Total Test	14	20.0
		CS 5	Total Test	13	18.6
		CS 6	Total Test	12	17.1
		Total	Total Test	70	100.0
Writing Spanish	4	CS 2	Total Test	19	35.8
		CS 3	Total Test	34	64.2
		Total	Total Test	53	100.0

Grade 4 Spanish Reading and Writing were pre-equated and did not use anchor items.



**Table 152. Scale Score Descriptive Statistics by Gender**

Content Area	Grade	Gender											
		Female				Male				Total			
		N	Mean	SD	Median	N	Mean	SD	Median	N	Mean	SD	Median
Reading	3	28274	561	77.8	568	29378	547	87.6	558	57680	554	83.2	563
	4	28549	592	58.1	598	29450	580	64.6	589	58003	586	61.8	594
	5	27958	620	66.4	626	29044	607	72.1	617	57009	613	69.7	621
	6	27826	636	61.7	640	29020	620	67.1	628	56850	628	65.0	634
	7	27599	649	61.8	652	29175	628	64.9	635	56780	638	64.3	643
	8	27682	661	59.6	666	28904	643	64.5	651	56595	652	62.8	658
	9	28718	669	53.5	673	30273	652	60.5	660	58997	661	57.8	666
	10	27337	693	55.7	699	27930	670	64.0	679	55283	682	61.1	689
Spanish Reading	3	713	526	41.2	529	777	511	48.6	516	1490	519	45.8	523
	4	90	525	39.4	531	86	513	46.0	519	176	519	43.1	523
Writing	3	28286	474	52.1	472	29472	458	51.2	458	57763	466	52.3	465
	4	28519	496	52.9	495	29434	479	48.9	479	57957	488	51.7	487
	5	27959	519	58.0	519	29053	501	57.5	503	57019	510	58.4	511
	6	27847	538	62.1	536	29050	515	62.4	517	56901	526	63.3	526
	7	27604	567	68.2	567	29203	535	69.0	538	56813	551	70.3	552
	8	27716	577	73.8	578	28933	544	74.1	546	56658	560	75.8	562
	9	28742	577	76.7	577	30328	545	77.3	549	59076	561	78.7	562
	10	27359	590	83.3	590	27931	554	87.5	558	55306	572	87.3	575
Spanish Writing	3	712	517	70.8	519	769	487	70.5	487	1481	501	72.2	502
	4	89	508	36.3	510	85	490	38.9	490	174	500	38.6	500
Mathematics	3	28979	462	90.7	463	30241	465	93.6	467	59228	464	92.2	465
	4	28634	487	78.0	489	29574	490	79.3	493	58216	489	78.7	491
	5	27988	519	69.9	520	29105	521	74.8	524	57096	520	72.5	522
	6	27872	538	72.6	540	29101	537	78.0	541	56975	537	75.4	540
	7	27627	549	69.7	552	29247	548	76.8	553	56880	548	73.4	552
	8	27722	566	70.8	570	28990	570	77.0	574	56718	568	74.1	572
	9	28822	575	68.2	580	30468	578	74.0	584	59296	577	71.3	582
	10	27457	586	69.8	592	28106	586	77.9	595	55568	586	74.0	594
Science	5	27964	490	61.7	495	29086	497	65.1	502	57053	493	63.6	498
	8	27743	492	60.6	498	28961	498	66.0	506	56705	495	63.5	502
	10	27470	496	58.2	502	28107	498	65.4	507	55585	497	62.0	505



**Table 153. Scale Score Descriptive Statistics by Content Standard**

Content Area	Grade	Content Standard																				
		1			2			3			4			5			6			Total		
		Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median
Reading	3	554	83.2	563	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	554	83.2	563
Reading	4	588	69.7	594	.	.	.	.	.	.	586	96.5	593	585	97.2	594	585	85.7	592	586	61.8	594
Reading	5	619	86.9	620	.	.	.	.	.	.	611	98.3	621	615	90.2	622	616	94.8	621	613	69.7	621
Reading	6	631	74.8	635	.	.	.	.	.	.	624	84.1	633	649	119.1	634	622	91.0	634	628	65.0	634
Reading	7	640	72.7	643	.	.	.	.	.	.	638	77.4	644	640	84.4	645	638	82.6	643	638	64.3	643
Reading	8	652	69.7	657	.	.	.	.	.	.	653	82.4	660	654	90.8	659	652	76.4	657	652	62.8	658
Reading	9	662	64.0	667	.	.	.	.	.	.	662	75.2	667	667	84.2	666	659	74.8	664	661	57.8	666
Reading	10	683	68.6	689	.	.	.	.	.	.	682	77.6	689	687	87.8	689	679	80.1	687	682	61.1	689
Spanish Reading	3	519	45.8	523	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	519	45.8	523
Spanish Reading	4	513	63.3	525	.	.	.	.	.	.	516	59.2	522	511	79.0	527	513	54.1	514	519	43.1	523
Writing	3	.	.	.	468	58.3	466	472	65.7	465	.	.	.	.	.	.	.	.	.	466	52.3	465
Writing	4	.	.	.	489	56.4	487	492	65.4	487	.	.	.	.	.	.	.	.	.	488	51.7	487
Writing	5	.	.	.	512	64.3	511	513	67.3	511	.	.	.	.	.	.	.	.	.	510	58.4	511
Writing	6	.	.	.	528	69.9	526	530	75.4	527	.	.	.	.	.	.	.	.	.	526	63.3	526
Writing	7	.	.	.	552	76.9	552	553	78.7	553	.	.	.	.	.	.	.	.	.	551	70.3	552
Writing	8	.	.	.	562	83.4	561	562	84.2	562	.	.	.	.	.	.	.	.	.	560	75.8	562
Writing	9	.	.	.	562	84.7	562	564	88.6	563	.	.	.	.	.	.	.	.	.	561	78.7	562
Writing	10	.	.	.	574	95.4	573	575	95.7	575	.	.	.	.	.	.	.	.	.	572	87.3	575
Spanish Writing	3	.	.	.	502	80.1	504	506	81.4	502	.	.	.	.	.	.	.	.	.	501	72.2	502
Spanish Writing	4	.	.	.	496	40.2	494	500	47.3	504	.	.	.	.	.	.	.	.	.	500	38.6	500
Mathematics	3	483	138.5	472	470	118.4	464	.	.	.	470	107.1	466	.	.	.	479	126.2	466	464	92.2	465
Mathematics	4	494	100.2	492	511	127.3	489	496	110.7	492	500	102.1	492	.	.	.	503	115.0	492	489	78.7	491
Mathematics	5	538	112.4	522	528	96.4	522	525	93.9	523	526	92.1	522	.	.	.	527	98.9	524	520	72.5	522
Mathematics	6	540	103.4	541	538	92.5	541	550	112.4	542	539	87.4	540	.	.	.	567	139.7	544	537	75.4	540
Mathematics	7	549	83.8	553	550	92.4	552	545	90.7	553	546	84.1	551	.	.	.	.	.	.	548	73.4	552
Mathematics	8	565	89.4	572	570	89.8	571	569	95.5	574	564	87.4	572	.	.	.	.	.	.	568	74.1	572
Mathematics	9	568	103.5	583	578	78.5	582	575	82.6	583	555	107.0	583	.	.	.	.	.	.	577	71.3	582
Mathematics	10	574	103.4	595	586	83.7	594	585	82.0	593	577	90.5	593	.	.	.	.	.	.	586	74.0	594
Science	5	499	82.1	498	493	77.1	499	502	91.6	499	499	88.4	497	.	.	.	.	.	.	493	63.6	498
Science	8	495	68.4	502	491	80.3	501	490	81.3	501	486	88.5	502	.	.	.	.	.	.	495	63.5	502
Science	10	497	67.2	505	490	81.1	504	498	75.2	504	497	76.0	506	.	.	.	.	.	.	497	62.0	505



**Table 154. Scale Score Descriptive Statistics by Subcontent Area**

Content Area		Grade	Subcontent Area																								Total		
			1			2			3			4			5			6			7			8					
			Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median	Mean	SD	Median
Reading	3	555	95.4	564	545	119.4	563	572	126.6	564	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	554	83.2	563	
Reading	4	586	70.2	594	588	80.6	593	646	168.6	591	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	586	61.8	594	
Reading	5	615	79.6	622	614	93.0	621	649	152.5	621	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	613	69.7	621	
Reading	6	627	73.1	635	621	94.7	633	658	132.1	635	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	628	65.0	634	
Reading	7	644	87.7	646	637	76.6	643	667	135.9	645	639	78.7	643	.	.	.	.	.	.	.	.	.	.	.	.	638	64.3	643	
Reading	8	702	168.4	674	652	69.3	658	656	110.8	659	648	84.0	658	.	.	.	.	.	.	.	.	.	.	.	.	652	62.8	658	
Reading	9	663	76.7	664	663	65.6	667	665	112.6	667	655	88.0	666	.	.	.	.	.	.	.	.	.	.	.	.	661	57.8	666	
Reading	10	681	72.5	688	688	100.0	690	692	110.5	693	680	79.1	688	.	.	.	.	.	.	.	.	.	.	.	.	682	61.1	689	
Spanish Reading	3	518	56.7	523	518	60.4	521	518	71.2	522	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	519	45.8	523	
Spanish Reading	4	517	45.5	521	518	52.7	526	515	97.9	528	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	519	43.1	523	
Writing	3	.	.	.	.	.	.	.	.	.	469	59.8	470	.	.	.	.	.	.	474	81.0	466	487	87.3	467	466	52.3	465	
Writing	4	.	.	.	.	.	.	.	.	.	489	64.7	487	517	112.7	495	506	92.3	488	493	95.6	488	488	51.7	487	488	51.7	487	
Writing	5	.	.	.	.	.	.	.	.	.	512	75.2	510	535	120.2	536	516	76.4	512	513	109.4	510	510	58.4	511	510	58.4	511	
Writing	6	.	.	.	.	.	.	.	.	.	533	83.4	530	558	138.4	538	533	90.4	527	532	95.3	528	526	63.3	526	526	63.3	526	
Writing	7	.	.	.	.	.	.	.	.	.	553	89.0	550	580	142.7	572	552	90.9	554	556	101.2	553	551	70.3	552	551	70.3	552	
Writing	8	.	.	.	.	.	.	.	.	.	564	91.9	561	580	131.2	612	568	108.4	564	559	102.4	562	560	75.8	562	560	75.8	562	
Writing	9	.	.	.	.	.	.	.	.	.	567	98.2	563	569	118.8	498	579	127.9	564	562	100.9	565	561	78.7	562	561	78.7	562	
Writing	10	.	.	.	.	.	.	.	.	.	579	109.3	572	590	142.5	635	576	108.7	576	579	117.5	576	572	87.3	575	572	87.3	575	
Spanish Writing	3	.	.	.	.	.	.	.	.	.	507	94.6	512	.	.	.	511	94.6	505	514	120.6	507	501	72.2	502	501	72.2	502	
Spanish Writing	4	.	.	.	.	.	.	.	.	.	493	50.2	493	487	66.6	490	499	60.0	504	490	74.5	507	500	38.6	500	500	38.6	500	
Mathematics	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	464	92.2	465	
Mathematics	4	498	103.8	493	512	129.3	491	513	132.3	482	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	489	78.7	491	
Mathematics	5	547	128.3	523	529	103.1	526	529	102.0	521	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	520	72.5	522	
Mathematics	6	555	131.4	541	540	99.7	541	539	97.0	539	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	537	75.4	540	
Mathematics	7	547	85.0	551	532	123.1	553	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	548	73.4	552	
Mathematics	8	572	95.2	572	562	97.2	572	557	108.7	569	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	568	74.1	572	
Mathematics	9	576	81.5	582	564	102.7	581	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	577	71.3	582	
Mathematics	10	588	85.8	593	587	101.8	602	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	586	74.0	594	
Science	5	512	113.3	499	523	140.3	498	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	493	63.6	498	
Science	8	495	76.8	502	500	86.8	502	495	89.6	502	488	90.2	500	483	96.9	503	.	.	.	.	.	.	.	.	.	495	63.5	502	
Science	10	498	71.0	506	509	113.5	504	.	.	.	487	88.9	506	497	84.7	502	500	84.8	505	.	.	.	.	.	.	497	62.0	505	



**Table 155. Raw Score Descriptive Statistics by Content Standard**

Content Area		Content Standard																				Total							
		1				2				3				4				5								6			
		Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.
Reading	3	32	10.8	34	62.0	.	.	.	.	.	.	.	.	11	3.5	12	61.7	11	4.0	11	58.9	9	3.7	9	50.5	56	16.3	59	62.0
Reading	4	26	6.8	27	69.2	.	.	.	.	.	.	.	.	11	4.0	12	56.5	12	3.8	13	61.9	11	3.6	11	54.5	56	15.6	60	62.0
Reading	5	21	5.1	22	68.4	.	.	.	.	.	.	.	.	10	3.6	10	48.9	15	4.0	16	76.4	10	4.0	10	48.6	56	14.9	58	61.6
Reading	6	20	5.5	21	63.7	.	.	.	.	.	.	.	.	12	3.4	12	58.4	12	3.8	13	62.3	11	3.6	11	58.2	55	14.6	57	61.0
Reading	7	19	5.7	19	60.3	.	.	.	.	.	.	.	.	13	3.6	14	65.1	13	4.4	14	64.6	11	3.8	11	54.9	56	16.0	58	61.1
Reading	8	20	6.0	21	63.2	.	.	.	.	.	.	.	.	13	4.0	14	64.2	13	4.3	14	65.9	11	4.2	11	51.6	58	16.8	61	61.4
Reading	9	19	5.7	20	63.2	.	.	.	.	.	.	.	.	13	3.8	13	60.5	14	4.1	14	67.7	10	4.4	10	48.6	55	16.2	58	60.3
Spanish Reading	3	30	9.9	32	58.3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30	9.9	32	58.3
Spanish Reading	4	21	7.7	21	56.2	.	.	.	.	.	.	.	.	9	3.6	9	48.2	9	3.7	9	48.9	8	2.9	8	43.6	46	16.0	46	50.7
Writing	3	.	.	.	.	18	3.2	19	76.4	25	5.0	26	77.9	.	.	.	.	.	.	.	.	.	.	.	.	43	7.8	45	77.2
Writing	4	.	.	.	.	25	5.2	26	68.8	25	5.8	26	75.4	.	.	.	.	.	.	.	.	.	.	.	.	50	10.4	52	71.9
Writing	5	.	.	.	.	25	5.2	25	68.5	24	5.8	25	72.5	.	.	.	.	.	.	.	.	.	.	.	.	49	10.3	51	70.4
Writing	6	.	.	.	.	26	5.2	26	70.9	23	6.1	24	70.7	.	.	.	.	.	.	.	.	.	.	.	.	49	10.6	51	70.8
Writing	7	.	.	.	.	24	5.3	25	66.9	22	5.9	22	65.6	.	.	.	.	.	.	.	.	.	.	.	.	46	10.6	47	66.2
Writing	8	.	.	.	.	25	5.0	25	68.7	21	6.1	22	64.9	.	.	.	.	.	.	.	.	.	.	.	.	46	10.5	48	66.8
Writing	9	.	.	.	.	23	5.6	24	65.1	22	5.9	23	67.6	.	.	.	.	.	.	.	.	.	.	.	.	46	10.8	47	66.3
Writing	10	.	.	.	.	24	5.5	25	67.3	21	6.2	22	65.1	.	.	.	.	.	.	.	.	.	.	.	.	46	11.0	48	66.3
Spanish Writing	3	.	.	.	.	15	4.8	15	62.0	23	5.9	24	72.2	.	.	.	.	.	.	.	.	.	.	.	.	38	10.1	40	67.8
Spanish Writing	4	.	.	.	.	17	4.7	16	48.7	18	5.8	17	50.2	.	.	.	.	.	.	.	.	.	.	.	.	34	9.5	33	49.5
Mathematics	3	6	1.9	6	72.1	9	3.2	9	66.6	.	.	.	.	12	3.2	13	73.0	.	.	.	.	7	2.3	8	71.1	34	9.3	36	70.7
Mathematics	4	11	4.1	12	62.7	11	2.9	11	75.4	9	3.3	9	64.0	22	4.9	23	77.1	.	.	.	.	14	4.1	15	72.7	67	17.2	70	71.2
Mathematics	5	14	4.0	15	73.1	13	4.0	13	66.5	13	3.9	13	67.7	13	4.3	14	66.0	.	.	.	.	13	4.1	13	67.9	65	18.4	68	68.3
Mathematics	6	10	4.1	10	59.4	11	4.0	11	58.4	11	3.4	12	71.2	14	4.3	14	62.7	.	.	.	.	10	3.0	10	73.5	56	16.8	58	64.3
Mathematics	7	14	5.4	14	55.5	9	3.9	9	55.7	9	3.7	9	49.6	12	4.8	11	44.8	.	.	.	.	.	.	.	.	44	16.2	44	51.1
Mathematics	8	10	5.0	9	45.7	12	4.7	12	56.8	10	3.8	10	56.3	12	5.6	11	44.7	.	.	.	.	.	.	.	.	44	17.4	42	50.3
Mathematics	9	8	4.0	8	47.2	12	5.1	12	49.6	11	4.4	10	47.9	7	4.3	6	31.6	.	.	.	.	.	.	.	.	38	16.2	36	44.1
Mathematics	10	7	3.3	6	42.3	13	5.9	13	50.0	9	3.6	9	41.2	8	4.8	7	34.9	.	.	.	.	.	.	.	.	37	16.0	34	42.3
Science	5	25	6.6	27	72.2	10	3.1	10	56.8	11	2.8	12	70.1	11	3.1	11	63.7	.	.	.	.	.	.	.	.	57	13.9	60	66.9
Science	8	23	8.2	23	56.5	9	3.6	8	43.3	10	3.9	10	49.6	8	3.3	7	38.2	.	.	.	.	.	.	.	.	49	16.9	49	48.7
Science	10	22	7.3	23	55.2	8	3.7	7	39.8	11	3.7	11	52.9	10	3.6	10	53.2	.	.	.	.	.	.	.	.	50	16.3	51	51.3



**Table 156. Raw Score Descriptive Statistics by Subcontent Area**

Content Area	Grade	Subcontent Area															
		1				2				3				4			
		Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.
Reading	3	14	5.1	15	62.8	11	4.6	11	55.6	7	2.2	8	72.4	.	.	.	.
Reading	4	23	7.3	24	58.2	15	4.4	16	64.3	8	2.2	8	76.9	.	.	.	.
Reading	5	24	6.7	25	61.5	13	4.7	13	57.2	7	2.1	8	74.6	.	.	.	.
Reading	6	22	6.6	23	55.2	9	3.5	9	49.0	10	2.5	10	76.5	.	.	.	.
Reading	7	12	3.6	13	66.7	12	4.1	13	53.9	7	2.1	7	70.6	12	3.7	12	55.5
Reading	8	4	1.5	5	70.4	23	6.6	24	63.9	6	2.1	6	61.0	9	3.4	9	49.3
Reading	9	12	3.9	12	58.4	20	5.6	21	66.4	6	2.3	6	60.3	7	2.8	7	49.1
Reading	10	16	5.3	17	58.5	8	2.9	9	64.9	6	2.1	7	64.3	11	4.1	11	50.7
Spanish Reading	3	15	5.0	15	60.7	9	3.6	9	54.9	7	2.5	7	58.1	.	.	.	.
Spanish Reading	4	18	7.1	18	47.3	13	4.6	13	52.2	7	2.5	7	62.2	.	.	.	.
Writing	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Writing	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spanish Writing	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Spanish Writing	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mathematics	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Mathematics	4	12	3.8	13	69.0	10	2.7	10	75.0	8	2.2	8	73.2	.	.	.	.
Mathematics	5	10	3.2	11	73.6	9	3.0	10	66.2	11	3.1	11	70.2	.	.	.	.
Mathematics	6	9	3.2	9	67.5	9	3.2	9	59.4	7	2.6	7	56.7	.	.	.	.
Mathematics	7	7	3.7	6	40.1	5	2.4	5	46.3	.	.	.	.	.	.	.	.
Mathematics	8	10	3.8	10	56.5	7	3.5	7	46.9	5	3.4	5	38.9	.	.	.	.
Mathematics	9	7	3.7	7	43.9	7	4.4	6	37.8	.	.	.	.	.	.	.	.
Mathematics	10	7	3.0	7	48.6	3	1.6	3	37.6	.	.	.	.	.	.	.	.
Science	5	12	3.4	13	71.7	10	2.9	11	73.0	.	.	.	.	.	.	.	.
Science	8	11	4.5	12	54.7	10	3.8	10	58.2	6	2.4	6	47.1	.	.	.	.
Science	10	13	4.3	13	55.8	7	2.9	8	60.4	.	.	.	.	6	3.0	5	39.1



**Table 156. Raw Score Descriptive Statistics by Subcontent Area (Concluded)**

Content Area		Grade	Subcontent Area																Total			
			5				6				7				8							
			Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.	Mean	SD	Median	Mean % of Max.
Reading	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	32	10.8	34	62.0		
Reading	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	56	16.3	59	62.0		
Reading	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	56	15.6	60	62.0		
Reading	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	56	14.9	58	61.6		
Reading	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	55	14.6	57	61.0		
Reading	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	56	16.0	58	61.1		
Reading	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	58	16.8	61	61.4		
Reading	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	55	16.2	58	60.3		
Spanish Reading	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	30	9.9	32	58.3		
Spanish Reading	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	46	16.0	46	50.7		
Writing	3	15	2.8	16	75.7	.	.	.	.	10	2.3	10	73.9	13	2.7	13	79.7	43	7.8	45	77.2	
Writing	4	11	2.8	11	59.4	9	1.7	9	78.7	16	3.5	17	79.8	7	2.6	7	63.5	50	10.4	52	71.9	
Writing	5	10	2.4	10	61.0	8	1.7	9	77.1	20	5.0	22	74.7	6	2.4	6	62.4	49	10.3	51	70.4	
Writing	6	12	2.6	12	68.6	9	1.6	9	79.3	16	4.3	16	70.9	11	3.5	12	66.0	49	10.6	51	70.8	
Writing	7	11	2.8	11	62.5	9	1.6	9	78.5	12	3.7	13	62.2	12	3.9	12	65.3	46	10.6	47	66.2	
Writing	8	13	3.0	13	65.0	8	1.5	9	76.3	12	3.5	12	68.9	10	3.8	11	58.0	46	10.5	48	66.8	
Writing	9	12	3.1	12	65.4	8	1.5	7	70.8	11	3.4	12	70.7	12	3.6	12	61.6	46	10.8	47	66.3	
Writing	10	12	3.2	13	64.6	8	1.6	9	74.5	13	4.1	13	63.7	10	3.2	10	64.0	46	11.0	48	66.3	
Spanish Writing	3	9	3.7	10	61.9	.	.	.	.	15	3.8	15	73.3	7	2.5	7	66.9	38	10.1	40	67.8	
Spanish Writing	4	8	2.8	8	43.1	6	2.1	6	50.5	10	3.9	10	54.2	6	2.5	6	43.7	34	9.5	33	49.5	
Mathematics	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	34	9.3	36	70.7		
Mathematics	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	67	17.2	70	71.2		
Mathematics	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	65	18.4	68	68.3		
Mathematics	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	56	16.8	58	64.3		
Mathematics	7	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	44	16.2	44	51.1		
Mathematics	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	44	17.4	42	50.3		
Mathematics	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	38	16.2	36	44.1		
Mathematics	10	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	37	16.0	34	42.3		
Science	5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	57	13.9	60	66.9		
Science	8	7	2.8	7	50.5	6	2.5	5	39.5	.	.	.	.	.	.	.	49	16.9	49	48.7		
Science	10	6	2.4	6	48.0	8	2.8	8	56.9	.	.	.	.	.	.	.	50	16.3	51	51.3		



**Table 157. Reading Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
150	518	0.90	518	0.90	216	3	0.01	625	1.08	267	2	0.00	768	1.33
153	1	0.00	519	0.90	217	1	0.00	626	1.09	269	2	0.00	770	1.33
154	1	0.00	520	0.90	218	4	0.01	630	1.09	270	1	0.00	771	1.34
156	1	0.00	521	0.90	219	3	0.01	633	1.10	271	1	0.00	772	1.34
159	1	0.00	522	0.90	220	3	0.01	636	1.10	272	3	0.01	775	1.34
160	2	0.00	524	0.91	221	2	0.00	638	1.11	273	5	0.01	780	1.35
161	1	0.00	525	0.91	223	2	0.00	640	1.11	274	7	0.01	787	1.36
163	1	0.00	526	0.91	224	1	0.00	641	1.11	275	3	0.01	790	1.37
164	1	0.00	527	0.91	225	2	0.00	643	1.11	277	5	0.01	795	1.38
167	1	0.00	528	0.92	226	3	0.01	646	1.12	278	3	0.01	798	1.38
175	1	0.00	529	0.92	227	1	0.00	647	1.12	279	2	0.00	800	1.39
176	1	0.00	530	0.92	228	3	0.01	650	1.13	280	4	0.01	804	1.39
178	1	0.00	531	0.92	229	3	0.01	653	1.13	281	3	0.01	807	1.40
180	2	0.00	533	0.92	230	1	0.00	654	1.13	282	2	0.00	809	1.40
181	2	0.00	535	0.93	231	4	0.01	658	1.14	283	5	0.01	814	1.41
182	3	0.01	538	0.93	232	2	0.00	660	1.14	284	3	0.01	817	1.42
183	1	0.00	539	0.93	233	2	0.00	662	1.15	285	3	0.01	820	1.42
184	2	0.00	541	0.94	234	1	0.00	663	1.15	286	2	0.00	822	1.43
185	3	0.01	544	0.94	235	3	0.01	666	1.15	287	1	0.00	823	1.43
186	2	0.00	546	0.95	236	6	0.01	672	1.17	288	4	0.01	827	1.43
187	1	0.00	547	0.95	237	2	0.00	674	1.17	289	5	0.01	832	1.44
188	2	0.00	549	0.95	238	3	0.01	677	1.17	290	4	0.01	836	1.45
189	2	0.00	551	0.96	239	5	0.01	682	1.18	291	4	0.01	840	1.46
190	3	0.01	554	0.96	240	3	0.01	685	1.19	292	1	0.00	841	1.46
191	3	0.01	557	0.97	241	1	0.00	686	1.19	293	4	0.01	845	1.46
192	3	0.01	560	0.97	242	5	0.01	691	1.20	294	3	0.01	848	1.47
193	2	0.00	562	0.97	243	1	0.00	692	1.20	295	4	0.01	852	1.48
194	4	0.01	566	0.98	244	2	0.00	694	1.20	296	3	0.01	855	1.48
195	2	0.00	568	0.98	245	3	0.01	697	1.21	297	8	0.01	863	1.50
196	2	0.00	570	0.99	246	5	0.01	702	1.22	298	1	0.00	864	1.50
197	2	0.00	572	0.99	248	2	0.00	704	1.22	299	4	0.01	868	1.50
198	1	0.00	573	0.99	249	1	0.00	705	1.22	300	5	0.01	873	1.51
199	3	0.01	576	1.00	250	3	0.01	708	1.23	301	3	0.01	876	1.52
200	5	0.01	581	1.01	251	5	0.01	713	1.24	302	4	0.01	880	1.53
201	3	0.01	584	1.01	252	2	0.00	715	1.24	303	5	0.01	885	1.53
202	1	0.00	585	1.01	253	4	0.01	719	1.25	304	6	0.01	891	1.54
203	3	0.01	588	1.02	254	2	0.00	721	1.25	305	5	0.01	896	1.55
204	2	0.00	590	1.02	255	3	0.01	724	1.26	306	7	0.01	903	1.57
205	3	0.01	593	1.03	256	6	0.01	730	1.27	307	6	0.01	909	1.58
206	4	0.01	597	1.04	257	3	0.01	733	1.27	308	8	0.01	917	1.59
207	4	0.01	601	1.04	258	2	0.00	735	1.27	309	5	0.01	922	1.60
208	1	0.00	602	1.04	259	5	0.01	740	1.28	310	2	0.00	924	1.60
209	3	0.01	605	1.05	260	7	0.01	747	1.30	311	5	0.01	929	1.61
210	5	0.01	610	1.06	261	4	0.01	751	1.30	312	6	0.01	935	1.62
211	1	0.00	611	1.06	262	4	0.01	755	1.31	313	4	0.01	939	1.63
212	1	0.00	612	1.06	263	2	0.00	757	1.31	314	5	0.01	944	1.64
213	3	0.01	615	1.07	264	3	0.01	760	1.32	315	7	0.01	951	1.65
214	5	0.01	620	1.07	265	3	0.01	763	1.32	316	8	0.01	959	1.66
215	2	0.00	622	1.08	266	3	0.01	766	1.33	317	10	0.02	969	1.68



**Table 157. Reading Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
318	8	0.01	977	1.69	367	14	0.02	1398	2.42	416	45	0.08	2813	4.88
319	8	0.01	985	1.71	368	15	0.03	1413	2.45	417	41	0.07	2854	4.95
320	8	0.01	993	1.72	369	18	0.03	1431	2.48	418	45	0.08	2899	5.03
321	6	0.01	999	1.73	370	15	0.03	1446	2.51	419	37	0.06	2936	5.09
322	2	0.00	1001	1.74	371	13	0.02	1459	2.53	420	40	0.07	2976	5.16
323	1	0.00	1002	1.74	372	16	0.03	1475	2.56	421	49	0.08	3025	5.24
324	7	0.01	1009	1.75	373	19	0.03	1494	2.59	422	39	0.07	3064	5.31
325	7	0.01	1016	1.76	374	22	0.04	1516	2.63	423	40	0.07	3104	5.38
326	8	0.01	1024	1.78	375	17	0.03	1533	2.66	424	50	0.09	3154	5.47
327	7	0.01	1031	1.79	376	26	0.05	1559	2.70	425	44	0.08	3198	5.54
328	5	0.01	1036	1.80	377	15	0.03	1574	2.73	426	59	0.10	3257	5.65
329	5	0.01	1041	1.80	378	23	0.04	1597	2.77	427	51	0.09	3308	5.74
330	10	0.02	1051	1.82	379	21	0.04	1618	2.81	428	53	0.09	3361	5.83
331	7	0.01	1058	1.83	380	17	0.03	1635	2.83	429	55	0.10	3416	5.92
332	6	0.01	1064	1.84	381	16	0.03	1651	2.86	430	58	0.10	3474	6.02
333	4	0.01	1068	1.85	382	21	0.04	1672	2.90	431	56	0.10	3530	6.12
334	6	0.01	1074	1.86	383	21	0.04	1693	2.94	432	58	0.10	3588	6.22
335	8	0.01	1082	1.88	384	16	0.03	1709	2.96	433	60	0.10	3648	6.32
336	7	0.01	1089	1.89	385	26	0.05	1735	3.01	434	76	0.13	3724	6.46
337	8	0.01	1097	1.90	386	19	0.03	1754	3.04	435	53	0.09	3777	6.55
338	7	0.01	1104	1.91	387	21	0.04	1775	3.08	436	63	0.11	3840	6.66
339	6	0.01	1110	1.92	388	30	0.05	1805	3.13	437	69	0.12	3909	6.78
340	4	0.01	1114	1.93	389	28	0.05	1833	3.18	438	75	0.13	3984	6.91
341	3	0.01	1117	1.94	390	20	0.03	1853	3.21	439	66	0.11	4050	7.02
342	5	0.01	1122	1.95	391	27	0.05	1880	3.26	440	67	0.12	4117	7.14
343	13	0.02	1135	1.97	392	29	0.05	1909	3.31	441	59	0.10	4176	7.24
344	8	0.01	1143	1.98	393	19	0.03	1928	3.34	442	93	0.16	4269	7.40
345	7	0.01	1150	1.99	394	37	0.06	1965	3.41	443	76	0.13	4345	7.53
346	10	0.02	1160	2.01	395	30	0.05	1995	3.46	444	74	0.13	4419	7.66
347	9	0.02	1169	2.03	396	37	0.06	2032	3.52	445	71	0.12	4490	7.78
348	10	0.02	1179	2.04	397	26	0.05	2058	3.57	446	79	0.14	4569	7.92
349	11	0.02	1190	2.06	398	20	0.03	2078	3.60	447	80	0.14	4649	8.06
350	7	0.01	1197	2.08	399	31	0.05	2109	3.66	448	89	0.15	4738	8.21
351	12	0.02	1209	2.10	400	34	0.06	2143	3.72	449	75	0.13	4813	8.34
352	10	0.02	1219	2.11	401	33	0.06	2176	3.77	450	97	0.17	4910	8.51
353	6	0.01	1225	2.12	402	39	0.07	2215	3.84	451	84	0.15	4994	8.66
354	13	0.02	1238	2.15	403	34	0.06	2249	3.90	452	85	0.15	5079	8.81
355	11	0.02	1249	2.17	404	39	0.07	2288	3.97	453	80	0.14	5159	8.94
356	8	0.01	1257	2.18	405	42	0.07	2330	4.04	454	85	0.15	5244	9.09
357	12	0.02	1269	2.20	406	54	0.09	2384	4.13	455	90	0.16	5334	9.25
358	18	0.03	1287	2.23	407	46	0.08	2430	4.21	456	80	0.14	5414	9.39
359	12	0.02	1299	2.25	408	39	0.07	2469	4.28	457	93	0.16	5507	9.55
360	9	0.02	1308	2.27	409	37	0.06	2506	4.34	458	84	0.15	5591	9.69
361	15	0.03	1323	2.29	410	41	0.07	2547	4.42	459	93	0.16	5684	9.85
362	11	0.02	1334	2.31	411	40	0.07	2587	4.49	460	94	0.16	5778	10.02
363	10	0.02	1344	2.33	412	48	0.08	2635	4.57	461	96	0.17	5874	10.18
364	11	0.02	1355	2.35	413	51	0.09	2686	4.66	462	104	0.18	5978	10.36
365	12	0.02	1367	2.37	414	46	0.08	2732	4.74	463	104	0.18	6082	10.54
366	17	0.03	1384	2.40	415	36	0.06	2768	4.80	464	119	0.21	6201	10.75



**Table 157. Reading Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
465	101	0.18	6302	10.93	514	220	0.38	14193	24.61	563	358	0.62	28990	50.26
466	94	0.16	6396	11.09	515	229	0.40	14422	25.00	564	383	0.66	29373	50.92
467	97	0.17	6493	11.26	516	239	0.41	14661	25.42	565	353	0.61	29726	51.54
468	131	0.23	6624	11.48	517	207	0.36	14868	25.78	566	340	0.59	30066	52.13
469	126	0.22	6750	11.70	518	265	0.46	15133	26.24	567	320	0.55	30386	52.68
470	123	0.21	6873	11.92	519	264	0.46	15397	26.69	568	369	0.64	30755	53.32
471	104	0.18	6977	12.10	520	253	0.44	15650	27.13	569	389	0.67	31144	53.99
472	108	0.19	7085	12.28	521	268	0.46	15918	27.60	570	376	0.65	31520	54.65
473	104	0.18	7189	12.46	522	278	0.48	16196	28.08	571	355	0.62	31875	55.26
474	125	0.22	7314	12.68	523	264	0.46	16460	28.54	572	300	0.52	32175	55.78
475	118	0.20	7432	12.88	524	252	0.44	16712	28.97	573	371	0.64	32546	56.43
476	104	0.18	7536	13.07	525	235	0.41	16947	29.38	574	353	0.61	32899	57.04
477	128	0.22	7664	13.29	526	285	0.49	17232	29.88	575	357	0.62	33256	57.66
478	131	0.23	7795	13.51	527	301	0.52	17533	30.40	576	344	0.60	33600	58.25
479	125	0.22	7920	13.73	528	284	0.49	17817	30.89	577	365	0.63	33965	58.89
480	121	0.21	8041	13.94	529	280	0.49	18097	31.37	578	355	0.62	34320	59.50
481	138	0.24	8179	14.18	530	266	0.46	18363	31.84	579	358	0.62	34678	60.12
482	139	0.24	8318	14.42	531	279	0.48	18642	32.32	580	345	0.60	35023	60.72
483	121	0.21	8439	14.63	532	345	0.60	18987	32.92	581	363	0.63	35386	61.35
484	135	0.23	8574	14.86	533	265	0.46	19252	33.38	582	373	0.65	35759	62.00
485	139	0.24	8713	15.11	534	275	0.48	19527	33.85	583	353	0.61	36112	62.61
486	139	0.24	8852	15.35	535	282	0.49	19809	34.34	584	361	0.63	36473	63.23
487	177	0.31	9029	15.65	536	301	0.52	20110	34.86	585	340	0.59	36813	63.82
488	132	0.23	9161	15.88	537	328	0.57	20438	35.43	586	336	0.58	37149	64.41
489	157	0.27	9318	16.15	538	298	0.52	20736	35.95	587	353	0.61	37502	65.02
490	160	0.28	9478	16.43	539	302	0.52	21038	36.47	588	343	0.59	37845	65.61
491	153	0.27	9631	16.70	540	322	0.56	21360	37.03	589	359	0.62	38204	66.23
492	167	0.29	9798	16.99	541	317	0.55	21677	37.58	590	321	0.56	38525	66.79
493	183	0.32	9981	17.30	542	296	0.51	21973	38.09	591	335	0.58	38860	67.37
494	182	0.32	10163	17.62	543	315	0.55	22288	38.64	592	324	0.56	39184	67.93
495	171	0.30	10334	17.92	544	310	0.54	22598	39.18	593	337	0.58	39521	68.52
496	179	0.31	10513	18.23	545	342	0.59	22940	39.77	594	348	0.60	39869	69.12
497	176	0.31	10689	18.53	546	303	0.53	23243	40.30	595	326	0.57	40195	69.69
498	177	0.31	10866	18.84	547	342	0.59	23585	40.89	596	314	0.54	40509	70.23
499	181	0.31	11047	19.15	548	302	0.52	23887	41.41	597	335	0.58	40844	70.81
500	181	0.31	11228	19.47	549	359	0.62	24246	42.04	598	319	0.55	41163	71.36
501	205	0.36	11433	19.82	550	342	0.59	24588	42.63	599	334	0.58	41497	71.94
502	189	0.33	11622	20.15	551	336	0.58	24924	43.21	600	353	0.61	41850	72.56
503	201	0.35	11823	20.50	552	325	0.56	25249	43.77	601	321	0.56	42171	73.11
504	197	0.34	12020	20.84	553	334	0.58	25583	44.35	602	302	0.52	42473	73.64
505	203	0.35	12223	21.19	554	355	0.62	25938	44.97	603	323	0.56	42796	74.20
506	200	0.35	12423	21.54	555	342	0.59	26280	45.56	604	329	0.57	43125	74.77
507	191	0.33	12614	21.87	556	351	0.61	26631	46.17	605	305	0.53	43430	75.29
508	198	0.34	12812	22.21	557	346	0.60	26977	46.77	606	305	0.53	43735	75.82
509	219	0.38	13031	22.59	558	327	0.57	27304	47.34	607	315	0.55	44050	76.37
510	230	0.40	13261	22.99	559	326	0.57	27630	47.90	608	302	0.52	44352	76.89
511	222	0.38	13483	23.38	560	350	0.61	27980	48.51	609	266	0.46	44618	77.35
512	230	0.40	13713	23.77	561	307	0.53	28287	49.04	610	285	0.49	44903	77.85
513	260	0.45	13973	24.23	562	345	0.60	28632	49.64	611	272	0.47	45175	78.32



**Table 157. Reading Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
612	278	0.48	45453	78.80	661	108	0.19	54585	94.63	710	20	0.03	57074	98.95
613	284	0.49	45737	79.29	662	89	0.15	54674	94.79	711	18	0.03	57092	98.98
614	273	0.47	46010	79.77	663	76	0.13	54750	94.92	712	15	0.03	57107	99.01
615	261	0.45	46271	80.22	664	75	0.13	54825	95.05	713	11	0.02	57118	99.03
616	261	0.45	46532	80.67	665	96	0.17	54921	95.22	714	20	0.03	57138	99.06
617	258	0.45	46790	81.12	666	94	0.16	55015	95.38	715	23	0.04	57161	99.10
618	261	0.45	47051	81.57	667	85	0.15	55100	95.53	716	14	0.02	57175	99.12
619	253	0.44	47304	82.01	668	80	0.14	55180	95.67	717	9	0.02	57184	99.14
620	250	0.43	47554	82.44	669	79	0.14	55259	95.80	718	10	0.02	57194	99.16
621	254	0.44	47808	82.88	670	69	0.12	55328	95.92	719	10	0.02	57204	99.17
622	259	0.45	48067	83.33	671	75	0.13	55403	96.05	720	5	0.01	57209	99.18
623	256	0.44	48323	83.78	672	80	0.14	55483	96.19	721	39	0.07	57248	99.25
624	216	0.37	48539	84.15	673	67	0.12	55550	96.31	722	26	0.05	57274	99.30
625	221	0.38	48760	84.54	674	62	0.11	55612	96.41	723	9	0.02	57283	99.31
626	207	0.36	48967	84.89	675	60	0.10	55672	96.52	724	13	0.02	57296	99.33
627	223	0.39	49190	85.28	676	74	0.13	55746	96.65	725	14	0.02	57310	99.36
628	214	0.37	49404	85.65	677	66	0.11	55812	96.76	726	25	0.04	57335	99.40
629	203	0.35	49607	86.00	678	71	0.12	55883	96.88	727	20	0.03	57355	99.44
630	222	0.38	49829	86.39	679	48	0.08	55931	96.97	728	3	0.01	57358	99.44
631	192	0.33	50021	86.72	680	50	0.09	55981	97.05	729	6	0.01	57364	99.45
632	201	0.35	50222	87.07	681	66	0.11	56047	97.17	730	7	0.01	57371	99.46
633	195	0.34	50417	87.41	682	49	0.08	56096	97.25	731	19	0.03	57390	99.50
634	195	0.34	50612	87.75	683	47	0.08	56143	97.34	732	8	0.01	57398	99.51
635	207	0.36	50819	88.11	684	35	0.06	56178	97.40	733	4	0.01	57402	99.52
636	177	0.31	50996	88.41	685	54	0.09	56232	97.49	735	15	0.03	57417	99.54
637	172	0.30	51168	88.71	686	46	0.08	56278	97.57	737	7	0.01	57424	99.56
638	210	0.36	51378	89.07	687	59	0.10	56337	97.67	738	6	0.01	57430	99.57
639	195	0.34	51573	89.41	688	52	0.09	56389	97.76	739	1	0.00	57431	99.57
640	190	0.33	51763	89.74	689	31	0.05	56420	97.82	740	2	0.00	57433	99.57
641	168	0.29	51931	90.03	690	56	0.10	56476	97.91	741	7	0.01	57440	99.58
642	145	0.25	52076	90.28	691	35	0.06	56511	97.97	743	1	0.00	57441	99.59
643	156	0.27	52232	90.55	692	31	0.05	56542	98.03	744	3	0.01	57444	99.59
644	164	0.28	52396	90.84	693	36	0.06	56578	98.09	745	4	0.01	57448	99.60
645	153	0.27	52549	91.10	694	41	0.07	56619	98.16	746	3	0.01	57451	99.60
646	162	0.28	52711	91.39	695	42	0.07	56661	98.23	747	6	0.01	57457	99.61
647	145	0.25	52856	91.64	696	21	0.04	56682	98.27	748	13	0.02	57470	99.64
648	134	0.23	52990	91.87	697	38	0.07	56720	98.34	749	4	0.01	57474	99.64
649	157	0.27	53147	92.14	698	36	0.06	56756	98.40	750	8	0.01	57482	99.66
650	123	0.21	53270	92.35	699	40	0.07	56796	98.47	751	1	0.00	57483	99.66
651	138	0.24	53408	92.59	700	38	0.07	56834	98.53	752	4	0.01	57487	99.67
652	137	0.24	53545	92.83	701	21	0.04	56855	98.57	753	1	0.00	57488	99.67
653	115	0.20	53660	93.03	702	23	0.04	56878	98.61	754	35	0.06	57523	99.73
654	125	0.22	53785	93.25	703	45	0.08	56923	98.69	756	17	0.03	57540	99.76
655	122	0.21	53907	93.46	704	21	0.04	56944	98.72	757	6	0.01	57546	99.77
656	139	0.24	54046	93.70	705	25	0.04	56969	98.77	758	1	0.00	57547	99.77
657	119	0.21	54165	93.91	706	39	0.07	57008	98.83	760	13	0.02	57560	99.79
658	102	0.18	54267	94.08	707	22	0.04	57030	98.87	761	6	0.01	57566	99.80
659	98	0.17	54365	94.25	708	11	0.02	57041	98.89	762	6	0.01	57572	99.81
660	112	0.19	54477	94.45	709	13	0.02	57054	98.91	764	2	0.00	57574	99.82



**Table 157. Reading Grade 3 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
765	1	0.00	57575	99.82
766	1	0.00	57576	99.82
769	8	0.01	57584	99.83
770	2	0.00	57586	99.84
779	3	0.01	57589	99.84
783	5	0.01	57594	99.85
786	3	0.01	57597	99.86
787	2	0.00	57599	99.86
795	81	0.14	57680	100.00



**Table 158. Spanish Reading Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	8	0.54	8	0.54	450	2	0.13	96	6.44	499	8	0.54	444	29.80
331	1	0.07	9	0.60	451	3	0.20	99	6.64	500	10	0.67	454	30.47
349	1	0.07	10	0.67	452	3	0.20	102	6.85	501	3	0.20	457	30.67
358	1	0.07	11	0.74	453	6	0.40	108	7.25	502	13	0.87	470	31.54
359	1	0.07	12	0.81	454	6	0.40	114	7.65	503	12	0.81	482	32.35
363	1	0.07	13	0.87	455	5	0.34	119	7.99	504	18	1.21	500	33.56
373	1	0.07	14	0.94	456	2	0.13	121	8.12	505	9	0.60	509	34.16
375	1	0.07	15	1.01	457	1	0.07	122	8.19	506	17	1.14	526	35.30
386	1	0.07	16	1.07	458	3	0.20	125	8.39	507	12	0.81	538	36.11
390	1	0.07	17	1.14	459	5	0.34	130	8.72	508	8	0.54	546	36.64
391	2	0.13	19	1.28	460	8	0.54	138	9.26	509	14	0.94	560	37.58
392	1	0.07	20	1.34	461	5	0.34	143	9.60	510	13	0.87	573	38.46
394	1	0.07	21	1.41	462	4	0.27	147	9.87	511	18	1.21	591	39.66
397	2	0.13	23	1.54	463	4	0.27	151	10.13	512	13	0.87	604	40.54
399	1	0.07	24	1.61	464	2	0.13	153	10.27	513	12	0.81	616	41.34
400	1	0.07	25	1.68	465	7	0.47	160	10.74	514	13	0.87	629	42.21
407	2	0.13	27	1.81	466	4	0.27	164	11.01	515	8	0.54	637	42.75
408	2	0.13	29	1.95	467	4	0.27	168	11.28	516	24	1.61	661	44.36
409	1	0.07	30	2.01	468	7	0.47	175	11.74	517	16	1.07	677	45.44
411	1	0.07	31	2.08	469	6	0.40	181	12.15	518	15	1.01	692	46.44
413	2	0.13	33	2.21	470	10	0.67	191	12.82	519	8	0.54	700	46.98
414	2	0.13	35	2.35	471	2	0.13	193	12.95	520	9	0.60	709	47.58
417	1	0.07	36	2.42	472	1	0.07	194	13.02	521	16	1.07	725	48.66
419	1	0.07	37	2.48	473	3	0.20	197	13.22	522	16	1.07	741	49.73
421	3	0.20	40	2.68	474	5	0.34	202	13.56	523	19	1.28	760	51.01
422	2	0.13	42	2.82	475	3	0.20	205	13.76	524	10	0.67	770	51.68
423	1	0.07	43	2.89	476	7	0.47	212	14.23	525	21	1.41	791	53.09
424	1	0.07	44	2.95	477	9	0.60	221	14.83	526	16	1.07	807	54.16
425	2	0.13	46	3.09	478	7	0.47	228	15.30	527	16	1.07	823	55.23
426	2	0.13	48	3.22	479	8	0.54	236	15.84	528	16	1.07	839	56.31
428	1	0.07	49	3.29	480	8	0.54	244	16.38	529	9	0.60	848	56.91
430	4	0.27	53	3.56	481	9	0.60	253	16.98	530	19	1.28	867	58.19
432	2	0.13	55	3.69	482	6	0.40	259	17.38	531	10	0.67	877	58.86
434	1	0.07	56	3.76	483	11	0.74	270	18.12	532	14	0.94	891	59.80
435	1	0.07	57	3.83	484	9	0.60	279	18.72	533	16	1.07	907	60.87
436	1	0.07	58	3.89	485	11	0.74	290	19.46	534	12	0.81	919	61.68
437	4	0.27	62	4.16	486	10	0.67	300	20.13	535	23	1.54	942	63.22
438	1	0.07	63	4.23	487	7	0.47	307	20.60	536	20	1.34	962	64.56
439	2	0.13	65	4.36	488	9	0.60	316	21.21	537	20	1.34	982	65.91
440	3	0.20	68	4.56	489	11	0.74	327	21.95	538	7	0.47	989	66.38
441	2	0.13	70	4.70	490	16	1.07	343	23.02	539	17	1.14	1006	67.52
442	1	0.07	71	4.77	491	4	0.27	347	23.29	540	10	0.67	1016	68.19
443	2	0.13	73	4.90	492	9	0.60	356	23.89	541	12	0.81	1028	68.99
444	2	0.13	75	5.03	493	13	0.87	369	24.77	542	14	0.94	1042	69.93
445	4	0.27	79	5.30	494	17	1.14	386	25.91	543	10	0.67	1052	70.60
446	4	0.27	83	5.57	495	18	1.21	404	27.11	544	19	1.28	1071	71.88
447	2	0.13	85	5.70	496	13	0.87	417	27.99	545	11	0.74	1082	72.62
448	6	0.40	91	6.11	497	7	0.47	424	28.46	546	8	0.54	1090	73.15
449	3	0.20	94	6.31	498	12	0.81	436	29.26	547	12	0.81	1102	73.96



**Table 158. Spanish Reading Grade 3 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
548	16	1.07	1118	75.03	600	2	0.13	1458	97.85
549	22	1.48	1140	76.51	601	3	0.20	1461	98.05
550	7	0.47	1147	76.98	602	3	0.20	1464	98.26
551	15	1.01	1162	77.99	603	1	0.07	1465	98.32
552	10	0.67	1172	78.66	604	3	0.20	1468	98.52
553	11	0.74	1183	79.40	606	2	0.13	1470	98.66
554	18	1.21	1201	80.60	607	2	0.13	1472	98.79
555	13	0.87	1214	81.48	609	1	0.07	1473	98.86
556	10	0.67	1224	82.15	612	1	0.07	1474	98.93
557	9	0.60	1233	82.75	616	2	0.13	1476	99.06
558	11	0.74	1244	83.49	617	1	0.07	1477	99.13
559	7	0.47	1251	83.96	618	2	0.13	1479	99.26
560	11	0.74	1262	84.70	621	1	0.07	1480	99.33
561	7	0.47	1269	85.17	623	1	0.07	1481	99.40
562	11	0.74	1280	85.91	625	1	0.07	1482	99.46
563	12	0.81	1292	86.71	633	1	0.07	1483	99.53
564	16	1.07	1308	87.79	634	1	0.07	1484	99.60
565	6	0.40	1314	88.19	640	1	0.07	1485	99.66
566	5	0.34	1319	88.52	642	1	0.07	1486	99.73
567	7	0.47	1326	88.99	655	1	0.07	1487	99.80
568	7	0.47	1333	89.46	656	1	0.07	1488	99.87
569	7	0.47	1340	89.93	681	1	0.07	1489	99.93
570	8	0.54	1348	90.47	719	1	0.07	1490	100.00
571	10	0.67	1358	91.14					
572	6	0.40	1364	91.54					
573	5	0.34	1369	91.88					
574	7	0.47	1376	92.35					
575	7	0.47	1383	92.82					
576	3	0.20	1386	93.02					
577	5	0.34	1391	93.36					
578	4	0.27	1395	93.62					
579	8	0.54	1403	94.16					
580	3	0.20	1406	94.36					
581	6	0.40	1412	94.77					
582	4	0.27	1416	95.03					
583	3	0.20	1419	95.23					
584	5	0.34	1424	95.57					
585	2	0.13	1426	95.70					
586	4	0.27	1430	95.97					
587	3	0.20	1433	96.17					
588	4	0.27	1437	96.44					
589	3	0.20	1440	96.64					
590	5	0.34	1445	96.98					
591	3	0.20	1448	97.18					
592	3	0.20	1451	97.38					
593	2	0.13	1453	97.52					
595	1	0.07	1454	97.58					
597	1	0.07	1455	97.65					
599	1	0.07	1456	97.72					



**Table 159. Writing Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
150	47	0.08	47	0.08	283	3	0.01	131	0.23	332	14	0.02	439	0.76
181	2	0.00	49	0.08	284	4	0.01	135	0.23	333	8	0.01	447	0.77
187	2	0.00	51	0.09	285	7	0.01	142	0.25	334	11	0.02	458	0.79
189	3	0.01	54	0.09	286	2	0.00	144	0.25	335	12	0.02	470	0.81
190	1	0.00	55	0.10	287	2	0.00	146	0.25	336	17	0.03	487	0.84
192	1	0.00	56	0.10	288	2	0.00	148	0.26	337	10	0.02	497	0.86
193	1	0.00	57	0.10	289	5	0.01	153	0.26	338	16	0.03	513	0.89
194	1	0.00	58	0.10	290	1	0.00	154	0.27	339	23	0.04	536	0.93
196	1	0.00	59	0.10	291	3	0.01	157	0.27	340	20	0.03	556	0.96
197	3	0.01	62	0.11	292	7	0.01	164	0.28	341	15	0.03	571	0.99
199	1	0.00	63	0.11	293	2	0.00	166	0.29	342	12	0.02	583	1.01
201	2	0.00	65	0.11	294	6	0.01	172	0.30	343	14	0.02	597	1.03
203	1	0.00	66	0.11	295	4	0.01	176	0.30	344	16	0.03	613	1.06
205	2	0.00	68	0.12	296	2	0.00	178	0.31	345	19	0.03	632	1.09
210	1	0.00	69	0.12	297	4	0.01	182	0.32	346	22	0.04	654	1.13
212	1	0.00	70	0.12	298	7	0.01	189	0.33	347	28	0.05	682	1.18
214	1	0.00	71	0.12	299	7	0.01	196	0.34	348	15	0.03	697	1.21
215	1	0.00	72	0.12	300	5	0.01	201	0.35	349	35	0.06	732	1.27
217	1	0.00	73	0.13	301	4	0.01	205	0.35	350	30	0.05	762	1.32
218	1	0.00	74	0.13	302	1	0.00	206	0.36	351	19	0.03	781	1.35
220	2	0.00	76	0.13	303	6	0.01	212	0.37	352	25	0.04	806	1.40
221	2	0.00	78	0.14	304	5	0.01	217	0.38	353	23	0.04	829	1.44
225	1	0.00	79	0.14	305	4	0.01	221	0.38	354	44	0.08	873	1.51
233	1	0.00	80	0.14	306	6	0.01	227	0.39	355	30	0.05	903	1.56
235	1	0.00	81	0.14	307	7	0.01	234	0.41	356	40	0.07	943	1.63
240	1	0.00	82	0.14	308	7	0.01	241	0.42	357	37	0.06	980	1.70
251	1	0.00	83	0.14	309	4	0.01	245	0.42	358	38	0.07	1018	1.76
252	1	0.00	84	0.15	310	6	0.01	251	0.43	359	44	0.08	1062	1.84
254	3	0.01	87	0.15	311	9	0.02	260	0.45	360	41	0.07	1103	1.91
256	1	0.00	88	0.15	312	3	0.01	263	0.46	361	42	0.07	1145	1.98
259	1	0.00	89	0.15	313	7	0.01	270	0.47	362	52	0.09	1197	2.07
261	1	0.00	90	0.16	314	10	0.02	280	0.48	363	49	0.08	1246	2.16
263	2	0.00	92	0.16	315	5	0.01	285	0.49	364	54	0.09	1300	2.25
265	1	0.00	93	0.16	316	8	0.01	293	0.51	365	40	0.07	1340	2.32
266	3	0.01	96	0.17	317	5	0.01	298	0.52	366	45	0.08	1385	2.40
267	1	0.00	97	0.17	318	6	0.01	304	0.53	367	51	0.09	1436	2.49
268	1	0.00	98	0.17	319	11	0.02	315	0.55	368	64	0.11	1500	2.60
269	3	0.01	101	0.17	320	1	0.00	316	0.55	369	56	0.10	1556	2.69
272	1	0.00	102	0.18	321	11	0.02	327	0.57	370	55	0.10	1611	2.79
273	4	0.01	106	0.18	322	6	0.01	333	0.58	371	64	0.11	1675	2.90
274	5	0.01	111	0.19	323	9	0.02	342	0.59	372	77	0.13	1752	3.03
275	2	0.00	113	0.20	324	11	0.02	353	0.61	373	70	0.12	1822	3.15
276	2	0.00	115	0.20	325	12	0.02	365	0.63	374	63	0.11	1885	3.26
277	2	0.00	117	0.20	326	10	0.02	375	0.65	375	76	0.13	1961	3.39
278	3	0.01	120	0.21	327	13	0.02	388	0.67	376	86	0.15	2047	3.54
279	3	0.01	123	0.21	328	8	0.01	396	0.69	377	89	0.15	2136	3.70
280	1	0.00	124	0.21	329	10	0.02	406	0.70	378	86	0.15	2222	3.85
281	2	0.00	126	0.22	330	11	0.02	417	0.72	379	95	0.16	2317	4.01
282	2	0.00	128	0.22	331	8	0.01	425	0.74	380	84	0.15	2401	4.16



**Table 159. Writing Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
381	102	0.18	2503	4.33	430	375	0.65	13474	23.33	479	433	0.75	35648	61.71
382	109	0.19	2612	4.52	431	329	0.57	13803	23.90	480	449	0.78	36097	62.49
383	117	0.20	2729	4.72	432	382	0.66	14185	24.56	481	481	0.83	36578	63.32
384	96	0.17	2825	4.89	433	378	0.65	14563	25.21	482	459	0.79	37037	64.12
385	109	0.19	2934	5.08	434	378	0.65	14941	25.87	483	409	0.71	37446	64.83
386	119	0.21	3053	5.29	435	424	0.73	15365	26.60	484	380	0.66	37826	65.48
387	112	0.19	3165	5.48	436	418	0.72	15783	27.32	485	417	0.72	38243	66.21
388	154	0.27	3319	5.75	437	396	0.69	16179	28.01	486	380	0.66	38623	66.86
389	126	0.22	3445	5.96	438	395	0.68	16574	28.69	487	424	0.73	39047	67.60
390	131	0.23	3576	6.19	439	461	0.80	17035	29.49	488	396	0.69	39443	68.28
391	136	0.24	3712	6.43	440	455	0.79	17490	30.28	489	398	0.69	39841	68.97
392	156	0.27	3868	6.70	441	449	0.78	17939	31.06	490	464	0.80	40305	69.78
393	142	0.25	4010	6.94	442	403	0.70	18342	31.75	491	413	0.71	40718	70.49
394	171	0.30	4181	7.24	443	446	0.77	18788	32.53	492	405	0.70	41123	71.19
395	152	0.26	4333	7.50	444	467	0.81	19255	33.33	493	331	0.57	41454	71.77
396	141	0.24	4474	7.75	445	442	0.77	19697	34.10	494	379	0.66	41833	72.42
397	153	0.26	4627	8.01	446	463	0.80	20160	34.90	495	328	0.57	42161	72.99
398	172	0.30	4799	8.31	447	458	0.79	20618	35.69	496	297	0.51	42458	73.50
399	184	0.32	4983	8.63	448	473	0.82	21091	36.51	497	355	0.61	42813	74.12
400	166	0.29	5149	8.91	449	447	0.77	21538	37.29	498	296	0.51	43109	74.63
401	194	0.34	5343	9.25	450	484	0.84	22022	38.12	499	320	0.55	43429	75.18
402	180	0.31	5523	9.56	451	466	0.81	22488	38.93	500	338	0.59	43767	75.77
403	198	0.34	5721	9.90	452	445	0.77	22933	39.70	501	374	0.65	44141	76.42
404	212	0.37	5933	10.27	453	473	0.82	23406	40.52	502	535	0.93	44676	77.34
405	221	0.38	6154	10.65	454	449	0.78	23855	41.30	503	346	0.60	45022	77.94
406	226	0.39	6380	11.05	455	479	0.83	24334	42.13	504	401	0.69	45423	78.64
407	198	0.34	6578	11.39	456	501	0.87	24835	42.99	505	305	0.53	45728	79.16
408	234	0.41	6812	11.79	457	486	0.84	25321	43.84	506	288	0.50	46016	79.66
409	229	0.40	7041	12.19	458	459	0.79	25780	44.63	507	290	0.50	46306	80.17
410	251	0.43	7292	12.62	459	472	0.82	26252	45.45	508	275	0.48	46581	80.64
411	236	0.41	7528	13.03	460	480	0.83	26732	46.28	509	228	0.39	46809	81.04
412	252	0.44	7780	13.47	461	515	0.89	27247	47.17	510	210	0.36	47019	81.40
413	272	0.47	8052	13.94	462	489	0.85	27736	48.02	511	214	0.37	47233	81.77
414	271	0.47	8323	14.41	463	499	0.86	28235	48.88	512	218	0.38	47451	82.15
415	267	0.46	8590	14.87	464	500	0.87	28735	49.75	513	207	0.36	47658	82.51
416	258	0.45	8848	15.32	465	480	0.83	29215	50.58	514	317	0.55	47975	83.05
417	293	0.51	9141	15.83	466	453	0.78	29668	51.36	515	358	0.62	48333	83.67
418	305	0.53	9446	16.35	467	505	0.87	30173	52.24	516	217	0.38	48550	84.05
419	286	0.50	9732	16.85	468	463	0.80	30636	53.04	517	752	1.30	49302	85.35
420	297	0.51	10029	17.36	469	471	0.82	31107	53.85	518	147	0.25	49449	85.61
421	327	0.57	10356	17.93	470	448	0.78	31555	54.63	519	327	0.57	49776	86.17
422	327	0.57	10683	18.49	471	472	0.82	32027	55.45	520	296	0.51	50072	86.69
423	326	0.56	11009	19.06	472	471	0.82	32498	56.26	521	320	0.55	50392	87.24
424	349	0.60	11358	19.66	473	473	0.82	32971	57.08	522	109	0.19	50501	87.43
425	323	0.56	11681	20.22	474	509	0.88	33480	57.96	523	150	0.26	50651	87.69
426	342	0.59	12023	20.81	475	443	0.77	33923	58.73	524	149	0.26	50800	87.95
427	336	0.58	12359	21.40	476	438	0.76	34361	59.49	525	94	0.16	50894	88.11
428	392	0.68	12751	22.07	477	410	0.71	34771	60.20	526	118	0.20	51012	88.31
429	348	0.60	13099	22.68	478	444	0.77	35215	60.96	527	153	0.26	51165	88.58



**Table 159. Writing Grade 3 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
528	133	0.23	51298	88.81	577	20	0.03	56663	98.10	660	1	0.00	57675	99.85
529	101	0.17	51399	88.98	578	10	0.02	56673	98.11	680	88	0.15	57763	100.00
530	119	0.21	51518	89.19	579	49	0.08	56722	98.20					
531	118	0.20	51636	89.39	580	14	0.02	56736	98.22					
532	111	0.19	51747	89.59	581	124	0.21	56860	98.44					
533	119	0.21	51866	89.79	582	12	0.02	56872	98.46					
534	1130	1.96	52996	91.75	583	16	0.03	56888	98.49					
535	88	0.15	53084	91.90	584	8	0.01	56896	98.50					
536	108	0.19	53192	92.09	585	40	0.07	56936	98.57					
537	137	0.24	53329	92.32	586	9	0.02	56945	98.58					
538	522	0.90	53851	93.23	587	82	0.14	57027	98.73					
539	69	0.12	53920	93.35	588	4	0.01	57031	98.73					
540	63	0.11	53983	93.46	589	8	0.01	57039	98.75					
541	96	0.17	54079	93.62	590	17	0.03	57056	98.78					
542	45	0.08	54124	93.70	591	129	0.22	57185	99.00					
543	41	0.07	54165	93.77	592	1	0.00	57186	99.00					
544	44	0.08	54209	93.85	593	50	0.09	57236	99.09					
545	45	0.08	54254	93.93	594	7	0.01	57243	99.10					
546	33	0.06	54287	93.98	596	16	0.03	57259	99.13					
547	369	0.64	54656	94.62	597	57	0.10	57316	99.23					
548	39	0.07	54695	94.69	598	1	0.00	57317	99.23					
549	44	0.08	54739	94.76	599	4	0.01	57321	99.23					
550	52	0.09	54791	94.85	600	3	0.01	57324	99.24					
551	295	0.51	55086	95.37	602	2	0.00	57326	99.24					
552	32	0.06	55118	95.42	603	5	0.01	57331	99.25					
553	33	0.06	55151	95.48	604	3	0.01	57334	99.26					
554	51	0.09	55202	95.57	605	2	0.00	57336	99.26					
555	130	0.23	55332	95.79	606	5	0.01	57341	99.27					
556	48	0.08	55380	95.87	607	19	0.03	57360	99.30					
557	32	0.06	55412	95.93	609	1	0.00	57361	99.30					
558	138	0.24	55550	96.17	610	34	0.06	57395	99.36					
559	31	0.05	55581	96.22	611	1	0.00	57396	99.36					
560	336	0.58	55917	96.80	612	2	0.00	57398	99.37					
561	39	0.07	55956	96.87	613	3	0.01	57401	99.37					
562	108	0.19	56064	97.06	614	6	0.01	57407	99.38					
563	13	0.02	56077	97.08	615	60	0.10	57467	99.49					
564	174	0.30	56251	97.38	617	5	0.01	57472	99.50					
565	9	0.02	56260	97.40	618	46	0.08	57518	99.58					
566	16	0.03	56276	97.43	619	3	0.01	57521	99.58					
567	28	0.05	56304	97.47	622	4	0.01	57525	99.59					
568	19	0.03	56323	97.51	623	3	0.01	57528	99.59					
569	10	0.02	56333	97.52	624	42	0.07	57570	99.67					
570	6	0.01	56339	97.53	627	4	0.01	57574	99.67					
571	58	0.10	56397	97.64	629	1	0.00	57575	99.67					
572	8	0.01	56405	97.65	631	1	0.00	57576	99.68					
573	18	0.03	56423	97.68	633	3	0.01	57579	99.68					
574	50	0.09	56473	97.77	637	54	0.09	57633	99.77					
575	10	0.02	56483	97.78	638	1	0.00	57634	99.78					
576	160	0.28	56643	98.06	652	40	0.07	57674	99.85					



**Table 160. Spanish Writing Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
250	9	0.61	9	0.61	390	4	0.27	92	6.21	443	4	0.27	278	18.77
252	1	0.07	10	0.68	391	2	0.14	94	6.35	444	4	0.27	282	19.04
263	1	0.07	11	0.74	393	2	0.14	96	6.48	445	6	0.41	288	19.45
279	1	0.07	12	0.81	394	3	0.20	99	6.68	446	4	0.27	292	19.72
288	1	0.07	13	0.88	395	1	0.07	100	6.75	447	5	0.34	297	20.05
295	1	0.07	14	0.95	396	1	0.07	101	6.82	448	9	0.61	306	20.66
304	1	0.07	15	1.01	398	3	0.20	104	7.02	449	5	0.34	311	21.00
305	1	0.07	16	1.08	399	1	0.07	105	7.09	450	9	0.61	320	21.61
312	1	0.07	17	1.15	400	5	0.34	110	7.43	451	5	0.34	325	21.94
316	2	0.14	19	1.28	401	1	0.07	111	7.49	452	5	0.34	330	22.28
319	1	0.07	20	1.35	402	6	0.41	117	7.90	453	5	0.34	335	22.62
320	1	0.07	21	1.42	403	2	0.14	119	8.04	454	7	0.47	342	23.09
326	1	0.07	22	1.49	404	2	0.14	121	8.17	455	5	0.34	347	23.43
329	1	0.07	23	1.55	405	6	0.41	127	8.58	456	6	0.41	353	23.84
331	1	0.07	24	1.62	406	4	0.27	131	8.85	457	3	0.20	356	24.04
335	1	0.07	25	1.69	407	2	0.14	133	8.98	458	7	0.47	363	24.51
338	1	0.07	26	1.76	408	3	0.20	136	9.18	459	6	0.41	369	24.92
340	3	0.20	29	1.96	410	4	0.27	140	9.45	460	12	0.81	381	25.73
342	4	0.27	33	2.23	411	4	0.27	144	9.72	461	7	0.47	388	26.20
343	1	0.07	34	2.30	412	5	0.34	149	10.06	462	12	0.81	400	27.01
345	1	0.07	35	2.36	413	5	0.34	154	10.40	463	10	0.68	410	27.68
346	1	0.07	36	2.43	414	5	0.34	159	10.74	464	11	0.74	421	28.43
348	1	0.07	37	2.50	415	7	0.47	166	11.21	465	11	0.74	432	29.17
354	1	0.07	38	2.57	416	5	0.34	171	11.55	466	15	1.01	447	30.18
356	2	0.14	40	2.70	418	6	0.41	177	11.95	467	7	0.47	454	30.65
357	2	0.14	42	2.84	419	2	0.14	179	12.09	468	7	0.47	461	31.13
358	2	0.14	44	2.97	420	3	0.20	182	12.29	469	7	0.47	468	31.60
360	1	0.07	45	3.04	421	4	0.27	186	12.56	470	10	0.68	478	32.28
361	1	0.07	46	3.11	422	2	0.14	188	12.69	471	14	0.95	492	33.22
363	1	0.07	47	3.17	423	4	0.27	192	12.96	472	8	0.54	500	33.76
364	2	0.14	49	3.31	424	3	0.20	195	13.17	473	10	0.68	510	34.44
365	3	0.20	52	3.51	425	5	0.34	200	13.50	474	10	0.68	520	35.11
368	1	0.07	53	3.58	426	3	0.20	203	13.71	475	3	0.20	523	35.31
369	2	0.14	55	3.71	427	1	0.07	204	13.77	476	7	0.47	530	35.79
370	1	0.07	56	3.78	428	1	0.07	205	13.84	477	5	0.34	535	36.12
374	2	0.14	58	3.92	429	2	0.14	207	13.98	478	8	0.54	543	36.66
375	3	0.20	61	4.12	430	5	0.34	212	14.31	479	11	0.74	554	37.41
376	2	0.14	63	4.25	431	7	0.47	219	14.79	480	10	0.68	564	38.08
377	4	0.27	67	4.52	432	4	0.27	223	15.06	481	10	0.68	574	38.76
378	5	0.34	72	4.86	433	1	0.07	224	15.12	482	6	0.41	580	39.16
380	1	0.07	73	4.93	434	9	0.61	233	15.73	483	5	0.34	585	39.50
381	3	0.20	76	5.13	435	5	0.34	238	16.07	484	8	0.54	593	40.04
382	2	0.14	78	5.27	436	2	0.14	240	16.21	485	8	0.54	601	40.58
383	1	0.07	79	5.33	437	4	0.27	244	16.48	486	11	0.74	612	41.32
384	1	0.07	80	5.40	438	7	0.47	251	16.95	487	13	0.88	625	42.20
385	1	0.07	81	5.47	439	3	0.20	254	17.15	488	11	0.74	636	42.94
387	3	0.20	84	5.67	440	7	0.47	261	17.62	489	8	0.54	644	43.48
388	2	0.14	86	5.81	441	4	0.27	265	17.89	490	4	0.27	648	43.75
389	2	0.14	88	5.94	442	9	0.61	274	18.50	491	10	0.68	658	44.43



**Table 160. Spanish Writing Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
492	7	0.47	665	44.90	541	7	0.47	1043	70.43	590	4	0.27	1333	90.01
493	9	0.61	674	45.51	542	8	0.54	1051	70.97	591	2	0.14	1335	90.14
494	12	0.81	686	46.32	543	7	0.47	1058	71.44	592	4	0.27	1339	90.41
495	8	0.54	694	46.86	544	6	0.41	1064	71.84	593	3	0.20	1342	90.61
496	10	0.68	704	47.54	545	10	0.68	1074	72.52	594	3	0.20	1345	90.82
497	7	0.47	711	48.01	546	10	0.68	1084	73.19	595	4	0.27	1349	91.09
498	9	0.61	720	48.62	547	6	0.41	1090	73.60	596	3	0.20	1352	91.29
499	7	0.47	727	49.09	548	6	0.41	1096	74.00	597	4	0.27	1356	91.56
500	4	0.27	731	49.36	549	7	0.47	1103	74.48	598	3	0.20	1359	91.76
501	4	0.27	735	49.63	550	8	0.54	1111	75.02	599	3	0.20	1362	91.96
502	9	0.61	744	50.24	551	4	0.27	1115	75.29	600	3	0.20	1365	92.17
503	12	0.81	756	51.05	552	11	0.74	1126	76.03	601	2	0.14	1367	92.30
504	8	0.54	764	51.59	553	7	0.47	1133	76.50	602	3	0.20	1370	92.51
505	4	0.27	768	51.86	554	9	0.61	1142	77.11	603	1	0.07	1371	92.57
506	5	0.34	773	52.19	555	11	0.74	1153	77.85	604	1	0.07	1372	92.64
507	5	0.34	778	52.53	556	6	0.41	1159	78.26	605	4	0.27	1376	92.91
508	7	0.47	785	53.00	557	3	0.20	1162	78.46	606	2	0.14	1378	93.05
509	6	0.41	791	53.41	558	3	0.20	1165	78.66	607	4	0.27	1382	93.32
510	14	0.95	805	54.36	559	4	0.27	1169	78.93	608	3	0.20	1385	93.52
511	16	1.08	821	55.44	560	3	0.20	1172	79.14	609	1	0.07	1386	93.59
512	8	0.54	829	55.98	561	6	0.41	1178	79.54	610	3	0.20	1389	93.79
513	4	0.27	833	56.25	562	10	0.68	1188	80.22	611	4	0.27	1393	94.06
514	9	0.61	842	56.85	563	5	0.34	1193	80.55	612	5	0.34	1398	94.40
515	9	0.61	851	57.46	564	3	0.20	1196	80.76	613	3	0.20	1401	94.60
516	6	0.41	857	57.87	565	5	0.34	1201	81.09	614	4	0.27	1405	94.87
517	12	0.81	869	58.68	566	5	0.34	1206	81.43	615	2	0.14	1407	95.00
518	7	0.47	876	59.15	567	5	0.34	1211	81.77	616	1	0.07	1408	95.07
519	11	0.74	887	59.89	568	5	0.34	1216	82.11	617	5	0.34	1413	95.41
520	10	0.68	897	60.57	569	6	0.41	1222	82.51	618	6	0.41	1419	95.81
521	7	0.47	904	61.04	570	9	0.61	1231	83.12	619	3	0.20	1422	96.02
522	8	0.54	912	61.58	571	7	0.47	1238	83.59	620	2	0.14	1424	96.15
523	5	0.34	917	61.92	572	10	0.68	1248	84.27	621	4	0.27	1428	96.42
524	6	0.41	923	62.32	573	9	0.61	1257	84.88	624	1	0.07	1429	96.49
525	5	0.34	928	62.66	574	5	0.34	1262	85.21	625	1	0.07	1430	96.56
526	4	0.27	932	62.93	575	6	0.41	1268	85.62	626	2	0.14	1432	96.69
527	6	0.41	938	63.34	576	4	0.27	1272	85.89	627	1	0.07	1433	96.76
528	6	0.41	944	63.74	577	8	0.54	1280	86.43	629	3	0.20	1436	96.96
529	10	0.68	954	64.42	578	3	0.20	1283	86.63	630	4	0.27	1440	97.23
530	11	0.74	965	65.16	579	3	0.20	1286	86.83	631	4	0.27	1444	97.50
531	8	0.54	973	65.70	580	4	0.27	1290	87.10	632	1	0.07	1445	97.57
532	6	0.41	979	66.10	581	3	0.20	1293	87.31	634	4	0.27	1449	97.84
533	10	0.68	989	66.78	582	5	0.34	1298	87.64	636	1	0.07	1450	97.91
534	9	0.61	998	67.39	583	7	0.47	1305	88.12	638	1	0.07	1451	97.97
535	6	0.41	1004	67.79	584	4	0.27	1309	88.39	640	1	0.07	1452	98.04
536	8	0.54	1012	68.33	585	8	0.54	1317	88.93	641	1	0.07	1453	98.11
537	6	0.41	1018	68.74	586	3	0.20	1320	89.13	644	1	0.07	1454	98.18
538	6	0.41	1024	69.14	587	5	0.34	1325	89.47	645	1	0.07	1455	98.24
539	5	0.34	1029	69.48	588	2	0.14	1327	89.60	647	3	0.20	1458	98.45
540	7	0.47	1036	69.95	589	2	0.14	1329	89.74	649	2	0.14	1460	98.58



**Table 160. Spanish Writing Grade 3 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
651	2	0.14	1462	98.72
661	1	0.07	1463	98.78
662	1	0.07	1464	98.85
665	1	0.07	1465	98.92
666	1	0.07	1466	98.99
670	1	0.07	1467	99.05
672	1	0.07	1468	99.12
673	3	0.20	1471	99.32
675	3	0.20	1474	99.53
676	1	0.07	1475	99.59
677	1	0.07	1476	99.66
701	2	0.14	1478	99.80
710	1	0.07	1479	99.86
715	1	0.07	1480	99.93
750	1	0.07	1481	100.00



**Table 161. Mathematics Grade 3 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
150	81	0.14	81	0.14	205	7	0.01	233	0.39	254	21	0.04	766	1.29
151	1	0.00	82	0.14	206	7	0.01	240	0.41	255	12	0.02	778	1.31
152	3	0.01	85	0.14	207	5	0.01	245	0.41	256	16	0.03	794	1.34
154	1	0.00	86	0.15	208	4	0.01	249	0.42	257	18	0.03	812	1.37
156	1	0.00	87	0.15	209	6	0.01	255	0.43	258	22	0.04	834	1.41
157	2	0.00	89	0.15	210	6	0.01	261	0.44	259	25	0.04	859	1.45
158	3	0.01	92	0.16	211	8	0.01	269	0.45	260	22	0.04	881	1.49
159	1	0.00	93	0.16	212	7	0.01	276	0.47	261	29	0.05	910	1.54
161	1	0.00	94	0.16	213	6	0.01	282	0.48	262	22	0.04	932	1.57
163	1	0.00	95	0.16	214	4	0.01	286	0.48	263	24	0.04	956	1.61
164	1	0.00	96	0.16	215	6	0.01	292	0.49	264	25	0.04	981	1.66
165	4	0.01	100	0.17	216	5	0.01	297	0.50	265	18	0.03	999	1.69
166	2	0.00	102	0.17	217	8	0.01	305	0.51	266	41	0.07	1040	1.76
167	3	0.01	105	0.18	218	2	0.00	307	0.52	267	27	0.05	1067	1.80
168	4	0.01	109	0.18	219	7	0.01	314	0.53	268	17	0.03	1084	1.83
171	3	0.01	112	0.19	220	5	0.01	319	0.54	269	24	0.04	1108	1.87
172	3	0.01	115	0.19	221	3	0.01	322	0.54	270	24	0.04	1132	1.91
173	4	0.01	119	0.20	222	12	0.02	334	0.56	271	22	0.04	1154	1.95
174	2	0.00	121	0.20	223	8	0.01	342	0.58	272	24	0.04	1178	1.99
175	1	0.00	122	0.21	224	8	0.01	350	0.59	273	32	0.05	1210	2.04
176	4	0.01	126	0.21	225	13	0.02	363	0.61	274	25	0.04	1235	2.09
177	1	0.00	127	0.21	226	9	0.02	372	0.63	275	24	0.04	1259	2.13
178	3	0.01	130	0.22	227	7	0.01	379	0.64	276	41	0.07	1300	2.19
179	5	0.01	135	0.23	228	10	0.02	389	0.66	277	41	0.07	1341	2.26
180	4	0.01	139	0.23	229	17	0.03	406	0.69	278	37	0.06	1378	2.33
181	2	0.00	141	0.24	230	8	0.01	414	0.70	279	38	0.06	1416	2.39
182	2	0.00	143	0.24	231	9	0.02	423	0.71	280	33	0.06	1449	2.45
183	3	0.01	146	0.25	232	5	0.01	428	0.72	281	32	0.05	1481	2.50
184	3	0.01	149	0.25	233	13	0.02	441	0.74	282	52	0.09	1533	2.59
185	2	0.00	151	0.25	234	11	0.02	452	0.76	283	37	0.06	1570	2.65
186	1	0.00	152	0.26	235	19	0.03	471	0.80	284	50	0.08	1620	2.74
187	4	0.01	156	0.26	236	13	0.02	484	0.82	285	44	0.07	1664	2.81
188	3	0.01	159	0.27	237	6	0.01	490	0.83	286	42	0.07	1706	2.88
189	4	0.01	163	0.28	238	14	0.02	504	0.85	287	37	0.06	1743	2.94
190	2	0.00	165	0.28	239	10	0.02	514	0.87	288	33	0.06	1776	3.00
191	2	0.00	167	0.28	240	15	0.03	529	0.89	289	40	0.07	1816	3.07
192	4	0.01	171	0.29	241	9	0.02	538	0.91	290	45	0.08	1861	3.14
193	3	0.01	174	0.29	242	11	0.02	549	0.93	291	43	0.07	1904	3.21
194	6	0.01	180	0.30	243	14	0.02	563	0.95	292	54	0.09	1958	3.31
195	7	0.01	187	0.32	244	12	0.02	575	0.97	293	46	0.08	2004	3.38
196	4	0.01	191	0.32	245	28	0.05	603	1.02	294	53	0.09	2057	3.47
197	5	0.01	196	0.33	246	17	0.03	620	1.05	295	37	0.06	2094	3.54
198	6	0.01	202	0.34	247	19	0.03	639	1.08	296	54	0.09	2148	3.63
199	3	0.01	205	0.35	248	12	0.02	651	1.10	297	50	0.08	2198	3.71
200	3	0.01	208	0.35	249	19	0.03	670	1.13	298	48	0.08	2246	3.79
201	2	0.00	210	0.35	250	19	0.03	689	1.16	299	47	0.08	2293	3.87
202	6	0.01	216	0.36	251	18	0.03	707	1.19	300	31	0.05	2324	3.92
203	6	0.01	222	0.37	252	21	0.04	728	1.23	301	66	0.11	2390	4.04
204	4	0.01	226	0.38	253	17	0.03	745	1.26	302	49	0.08	2439	4.12



**Table 161. Mathematics Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
303	48	0.08	2487	4.20	352	117	0.20	6648	11.22	401	206	0.35	14324	24.18
304	59	0.10	2546	4.30	353	105	0.18	6753	11.40	402	179	0.30	14503	24.49
305	56	0.09	2602	4.39	354	111	0.19	6864	11.59	403	213	0.36	14716	24.85
306	58	0.10	2660	4.49	355	123	0.21	6987	11.80	404	216	0.36	14932	25.21
307	68	0.11	2728	4.61	356	123	0.21	7110	12.00	405	215	0.36	15147	25.57
308	50	0.08	2778	4.69	357	113	0.19	7223	12.20	406	211	0.36	15358	25.93
309	59	0.10	2837	4.79	358	121	0.20	7344	12.40	407	199	0.34	15557	26.27
310	60	0.10	2897	4.89	359	148	0.25	7492	12.65	408	194	0.33	15751	26.59
311	54	0.09	2951	4.98	360	132	0.22	7624	12.87	409	197	0.33	15948	26.93
312	56	0.09	3007	5.08	361	110	0.19	7734	13.06	410	183	0.31	16131	27.24
313	57	0.10	3064	5.17	362	136	0.23	7870	13.29	411	195	0.33	16326	27.56
314	57	0.10	3121	5.27	363	129	0.22	7999	13.51	412	208	0.35	16534	27.92
315	75	0.13	3196	5.40	364	134	0.23	8133	13.73	413	205	0.35	16739	28.26
316	55	0.09	3251	5.49	365	143	0.24	8276	13.97	414	233	0.39	16972	28.66
317	74	0.12	3325	5.61	366	138	0.23	8414	14.21	415	210	0.35	17182	29.01
318	75	0.13	3400	5.74	367	156	0.26	8570	14.47	416	231	0.39	17413	29.40
319	81	0.14	3481	5.88	368	152	0.26	8722	14.73	417	211	0.36	17624	29.76
320	67	0.11	3548	5.99	369	171	0.29	8893	15.01	418	220	0.37	17844	30.13
321	75	0.13	3623	6.12	370	159	0.27	9052	15.28	419	224	0.38	18068	30.51
322	74	0.12	3697	6.24	371	129	0.22	9181	15.50	420	249	0.42	18317	30.93
323	95	0.16	3792	6.40	372	127	0.21	9308	15.72	421	203	0.34	18520	31.27
324	71	0.12	3863	6.52	373	141	0.24	9449	15.95	422	217	0.37	18737	31.64
325	78	0.13	3941	6.65	374	158	0.27	9607	16.22	423	217	0.37	18954	32.00
326	80	0.14	4021	6.79	375	137	0.23	9744	16.45	424	221	0.37	19175	32.37
327	86	0.15	4107	6.93	376	169	0.29	9913	16.74	425	250	0.42	19425	32.80
328	78	0.13	4185	7.07	377	135	0.23	10048	16.96	426	234	0.40	19659	33.19
329	90	0.15	4275	7.22	378	183	0.31	10231	17.27	427	224	0.38	19883	33.57
330	103	0.17	4378	7.39	379	160	0.27	10391	17.54	428	241	0.41	20124	33.98
331	93	0.16	4471	7.55	380	168	0.28	10559	17.83	429	225	0.38	20349	34.36
332	85	0.14	4556	7.69	381	152	0.26	10711	18.08	430	258	0.44	20607	34.79
333	93	0.16	4649	7.85	382	167	0.28	10878	18.37	431	235	0.40	20842	35.19
334	99	0.17	4748	8.02	383	174	0.29	11052	18.66	432	277	0.47	21119	35.66
335	99	0.17	4847	8.18	384	164	0.28	11216	18.94	433	226	0.38	21345	36.04
336	90	0.15	4937	8.34	385	164	0.28	11380	19.21	434	253	0.43	21598	36.47
337	101	0.17	5038	8.51	386	163	0.28	11543	19.49	435	254	0.43	21852	36.89
338	106	0.18	5144	8.69	387	185	0.31	11728	19.80	436	255	0.43	22107	37.33
339	102	0.17	5246	8.86	388	154	0.26	11882	20.06	437	261	0.44	22368	37.77
340	93	0.16	5339	9.01	389	196	0.33	12078	20.39	438	260	0.44	22628	38.20
341	110	0.19	5449	9.20	390	182	0.31	12260	20.70	439	278	0.47	22906	38.67
342	103	0.17	5552	9.37	391	176	0.30	12436	21.00	440	270	0.46	23176	39.13
343	106	0.18	5658	9.55	392	184	0.31	12620	21.31	441	262	0.44	23438	39.57
344	91	0.15	5749	9.71	393	200	0.34	12820	21.65	442	266	0.45	23704	40.02
345	124	0.21	5873	9.92	394	186	0.31	13006	21.96	443	247	0.42	23951	40.44
346	108	0.18	5981	10.10	395	179	0.30	13185	22.26	444	251	0.42	24202	40.86
347	120	0.20	6101	10.30	396	189	0.32	13374	22.58	445	253	0.43	24455	41.29
348	94	0.16	6195	10.46	397	177	0.30	13551	22.88	446	256	0.43	24711	41.72
349	109	0.18	6304	10.64	398	192	0.32	13743	23.20	447	252	0.43	24963	42.15
350	121	0.20	6425	10.85	399	173	0.29	13916	23.50	448	254	0.43	25217	42.58
351	106	0.18	6531	11.03	400	202	0.34	14118	23.84	449	262	0.44	25479	43.02



**Table 161. Mathematics Grade 3 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
450	285	0.48	25764	43.50	499	266	0.45	39041	65.92	548	158	0.27	49452	83.49
451	265	0.45	26029	43.95	500	263	0.44	39304	66.36	549	176	0.30	49628	83.79
452	286	0.48	26315	44.43	501	296	0.50	39600	66.86	550	140	0.24	49768	84.03
453	268	0.45	26583	44.88	502	232	0.39	39832	67.25	551	159	0.27	49927	84.30
454	263	0.44	26846	45.33	503	252	0.43	40084	67.68	552	148	0.25	50075	84.55
455	266	0.45	27112	45.78	504	227	0.38	40311	68.06	553	141	0.24	50216	84.78
456	282	0.48	27394	46.25	505	251	0.42	40562	68.48	554	157	0.27	50373	85.05
457	256	0.43	27650	46.68	506	226	0.38	40788	68.87	555	135	0.23	50508	85.28
458	263	0.44	27913	47.13	507	240	0.41	41028	69.27	556	153	0.26	50661	85.54
459	267	0.45	28180	47.58	508	263	0.44	41291	69.72	557	137	0.23	50798	85.77
460	264	0.45	28444	48.02	509	227	0.38	41518	70.10	558	152	0.26	50950	86.02
461	268	0.45	28712	48.48	510	230	0.39	41748	70.49	559	127	0.21	51077	86.24
462	282	0.48	28994	48.95	511	224	0.38	41972	70.87	560	163	0.28	51240	86.51
463	291	0.49	29285	49.44	512	234	0.40	42206	71.26	561	137	0.23	51377	86.74
464	248	0.42	29533	49.86	513	255	0.43	42461	71.69	562	122	0.21	51499	86.95
465	291	0.49	29824	50.35	514	289	0.49	42750	72.18	563	131	0.22	51630	87.17
466	265	0.45	30089	50.80	515	215	0.36	42965	72.54	564	147	0.25	51777	87.42
467	314	0.53	30403	51.33	516	230	0.39	43195	72.93	565	154	0.26	51931	87.68
468	280	0.47	30683	51.80	517	222	0.37	43417	73.30	566	112	0.19	52043	87.87
469	257	0.43	30940	52.24	518	219	0.37	43636	73.67	567	131	0.22	52174	88.09
470	291	0.49	31231	52.73	519	251	0.42	43887	74.10	568	125	0.21	52299	88.30
471	293	0.49	31524	53.22	520	238	0.40	44125	74.50	569	127	0.21	52426	88.52
472	280	0.47	31804	53.70	521	217	0.37	44342	74.87	570	129	0.22	52555	88.73
473	277	0.47	32081	54.17	522	222	0.37	44564	75.24	571	99	0.17	52654	88.90
474	259	0.44	32340	54.60	523	206	0.35	44770	75.59	572	113	0.19	52767	89.09
475	248	0.42	32588	55.02	524	192	0.32	44962	75.91	573	88	0.15	52855	89.24
476	276	0.47	32864	55.49	525	206	0.35	45168	76.26	574	109	0.18	52964	89.42
477	263	0.44	33127	55.93	526	203	0.34	45371	76.60	575	112	0.19	53076	89.61
478	312	0.53	33439	56.46	527	204	0.34	45575	76.95	576	95	0.16	53171	89.77
479	272	0.46	33711	56.92	528	210	0.35	45785	77.30	577	139	0.23	53310	90.01
480	277	0.47	33988	57.39	529	196	0.33	45981	77.63	578	67	0.11	53377	90.12
481	280	0.47	34268	57.86	530	210	0.35	46191	77.99	579	103	0.17	53480	90.30
482	248	0.42	34516	58.28	531	208	0.35	46399	78.34	580	79	0.13	53559	90.43
483	264	0.45	34780	58.72	532	197	0.33	46596	78.67	581	100	0.17	53659	90.60
484	269	0.45	35049	59.18	533	192	0.32	46788	79.00	582	139	0.23	53798	90.83
485	257	0.43	35306	59.61	534	202	0.34	46990	79.34	583	111	0.19	53909	91.02
486	277	0.47	35583	60.08	535	189	0.32	47179	79.66	584	58	0.10	53967	91.12
487	284	0.48	35867	60.56	536	176	0.30	47355	79.95	585	90	0.15	54057	91.27
488	246	0.42	36113	60.97	537	190	0.32	47545	80.27	586	86	0.15	54143	91.41
489	306	0.52	36419	61.49	538	169	0.29	47714	80.56	587	88	0.15	54231	91.56
490	266	0.45	36685	61.94	539	185	0.31	47899	80.87	588	170	0.29	54401	91.85
491	282	0.48	36967	62.41	540	164	0.28	48063	81.15	589	86	0.15	54487	92.00
492	247	0.42	37214	62.83	541	176	0.30	48239	81.45	590	71	0.12	54558	92.12
493	291	0.49	37505	63.32	542	187	0.32	48426	81.76	591	64	0.11	54622	92.22
494	237	0.40	37742	63.72	543	194	0.33	48620	82.09	592	64	0.11	54686	92.33
495	248	0.42	37990	64.14	544	163	0.28	48783	82.36	593	70	0.12	54756	92.45
496	256	0.43	38246	64.57	545	186	0.31	48969	82.68	594	84	0.14	54840	92.59
497	279	0.47	38525	65.05	546	161	0.27	49130	82.95	595	129	0.22	54969	92.81
498	250	0.42	38775	65.47	547	164	0.28	49294	83.23	596	50	0.08	55019	92.89



**Table 161. Mathematics Grade 3 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
597	59	0.10	55078	92.99	651	157	0.27	57363	96.85
598	69	0.12	55147	93.11	653	65	0.11	57428	96.96
599	39	0.07	55186	93.18	654	206	0.35	57634	97.31
600	44	0.07	55230	93.25	655	2	0.00	57636	97.31
601	62	0.10	55292	93.35	656	18	0.03	57654	97.34
602	49	0.08	55341	93.44	662	51	0.09	57705	97.43
603	34	0.06	55375	93.49	664	22	0.04	57727	97.47
604	78	0.13	55453	93.63	665	67	0.11	57794	97.58
605	184	0.31	55637	93.94	668	60	0.10	57854	97.68
606	33	0.06	55670	93.99	669	73	0.12	57927	97.80
607	14	0.02	55684	94.02	672	185	0.31	58112	98.12
608	20	0.03	55704	94.05	674	125	0.21	58237	98.33
609	51	0.09	55755	94.14	677	50	0.08	58287	98.41
610	29	0.05	55784	94.19	696	139	0.23	58426	98.65
611	60	0.10	55844	94.29	699	18	0.03	58444	98.68
612	101	0.17	55945	94.46	700	784	1.32	59228	100.00
613	154	0.26	56099	94.72					
614	65	0.11	56164	94.83					
615	45	0.08	56209	94.90					
616	15	0.03	56224	94.93					
617	63	0.11	56287	95.03					
618	26	0.04	56313	95.08					
619	41	0.07	56354	95.15					
620	48	0.08	56402	95.23					
621	49	0.08	56451	95.31					
622	150	0.25	56601	95.56					
623	93	0.16	56694	95.72					
624	16	0.03	56710	95.75					
625	74	0.12	56784	95.87					
626	14	0.02	56798	95.90					
627	20	0.03	56818	95.93					
628	18	0.03	56836	95.96					
629	32	0.05	56868	96.02					
630	37	0.06	56905	96.08					
631	2	0.00	56907	96.08					
632	28	0.05	56935	96.13					
633	3	0.01	56938	96.13					
634	34	0.06	56972	96.19					
635	67	0.11	57039	96.30					
636	27	0.05	57066	96.35					
637	14	0.02	57080	96.37					
638	4	0.01	57084	96.38					
639	47	0.08	57131	96.46					
640	23	0.04	57154	96.50					
643	9	0.02	57163	96.51					
645	19	0.03	57182	96.55					
647	15	0.03	57197	96.57					
648	6	0.01	57203	96.58					
649	3	0.01	57206	96.59					



**Table 162. Reading Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
180	270	0.47	270	0.47	348	2	0.00	356	0.61	399	6	0.01	553	0.95
198	1	0.00	271	0.47	349	2	0.00	358	0.62	400	11	0.02	564	0.97
203	1	0.00	272	0.47	350	5	0.01	363	0.63	401	12	0.02	576	0.99
206	1	0.00	273	0.47	351	1	0.00	364	0.63	402	9	0.02	585	1.01
214	1	0.00	274	0.47	353	6	0.01	370	0.64	403	10	0.02	595	1.03
217	2	0.00	276	0.48	354	2	0.00	372	0.64	404	7	0.01	602	1.04
222	2	0.00	278	0.48	355	2	0.00	374	0.64	405	6	0.01	608	1.05
223	1	0.00	279	0.48	356	3	0.01	377	0.65	406	13	0.02	621	1.07
229	1	0.00	280	0.48	357	2	0.00	379	0.65	407	10	0.02	631	1.09
241	1	0.00	281	0.48	358	3	0.01	382	0.66	408	14	0.02	645	1.11
255	1	0.00	282	0.49	359	3	0.01	385	0.66	409	9	0.02	654	1.13
267	1	0.00	283	0.49	361	3	0.01	388	0.67	410	7	0.01	661	1.14
273	1	0.00	284	0.49	362	4	0.01	392	0.68	411	8	0.01	669	1.15
280	1	0.00	285	0.49	363	5	0.01	397	0.68	412	15	0.03	684	1.18
282	1	0.00	286	0.49	364	5	0.01	402	0.69	413	4	0.01	688	1.19
283	1	0.00	287	0.49	365	4	0.01	406	0.70	414	8	0.01	696	1.20
284	1	0.00	288	0.50	366	3	0.01	409	0.71	415	4	0.01	700	1.21
287	1	0.00	289	0.50	367	1	0.00	410	0.71	416	6	0.01	706	1.22
291	1	0.00	290	0.50	368	5	0.01	415	0.72	417	11	0.02	717	1.24
293	2	0.00	292	0.50	369	2	0.00	417	0.72	418	21	0.04	738	1.27
296	1	0.00	293	0.51	370	2	0.00	419	0.72	419	12	0.02	750	1.29
298	1	0.00	294	0.51	371	3	0.01	422	0.73	420	14	0.02	764	1.32
304	1	0.00	295	0.51	372	3	0.01	425	0.73	421	11	0.02	775	1.34
306	1	0.00	296	0.51	373	4	0.01	429	0.74	422	12	0.02	787	1.36
307	1	0.00	297	0.51	374	5	0.01	434	0.75	423	14	0.02	801	1.38
312	2	0.00	299	0.52	375	1	0.00	435	0.75	424	25	0.04	826	1.42
314	4	0.01	303	0.52	376	5	0.01	440	0.76	425	11	0.02	837	1.44
315	1	0.00	304	0.52	377	7	0.01	447	0.77	426	19	0.03	856	1.48
316	3	0.01	307	0.53	378	2	0.00	449	0.77	427	13	0.02	869	1.50
318	1	0.00	308	0.53	379	4	0.01	453	0.78	428	20	0.03	889	1.53
321	1	0.00	309	0.53	380	2	0.00	455	0.78	429	19	0.03	908	1.57
323	1	0.00	310	0.53	381	4	0.01	459	0.79	430	18	0.03	926	1.60
324	2	0.00	312	0.54	382	5	0.01	464	0.80	431	21	0.04	947	1.63
328	1	0.00	313	0.54	383	3	0.01	467	0.81	432	16	0.03	963	1.66
329	3	0.01	316	0.54	384	4	0.01	471	0.81	433	15	0.03	978	1.69
330	3	0.01	319	0.55	385	3	0.01	474	0.82	434	15	0.03	993	1.71
331	2	0.00	321	0.55	386	5	0.01	479	0.83	435	8	0.01	1001	1.73
332	1	0.00	322	0.56	387	5	0.01	484	0.83	436	18	0.03	1019	1.76
334	5	0.01	327	0.56	388	7	0.01	491	0.85	437	15	0.03	1034	1.78
335	2	0.00	329	0.57	389	6	0.01	497	0.86	438	18	0.03	1052	1.81
337	2	0.00	331	0.57	390	3	0.01	500	0.86	439	18	0.03	1070	1.84
339	1	0.00	332	0.57	391	9	0.02	509	0.88	440	19	0.03	1089	1.88
340	5	0.01	337	0.58	392	6	0.01	515	0.89	441	20	0.03	1109	1.91
341	1	0.00	338	0.58	393	2	0.00	517	0.89	442	15	0.03	1124	1.94
343	4	0.01	342	0.59	394	8	0.01	525	0.91	443	25	0.04	1149	1.98
344	2	0.00	344	0.59	395	4	0.01	529	0.91	444	17	0.03	1166	2.01
345	3	0.01	347	0.60	396	8	0.01	537	0.93	445	31	0.05	1197	2.06
346	3	0.01	350	0.60	397	8	0.01	545	0.94	446	18	0.03	1215	2.09
347	4	0.01	354	0.61	398	2	0.00	547	0.94	447	27	0.05	1242	2.14



**Table 162. Reading Grade 4 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
448	16	0.03	1258	2.17	497	88	0.15	3855	6.65	546	255	0.44	11829	20.39
449	33	0.06	1291	2.23	498	102	0.18	3957	6.82	547	233	0.40	12062	20.80
450	28	0.05	1319	2.27	499	104	0.18	4061	7.00	548	265	0.46	12327	21.25
451	29	0.05	1348	2.32	500	107	0.18	4168	7.19	549	245	0.42	12572	21.67
452	24	0.04	1372	2.37	501	86	0.15	4254	7.33	550	265	0.46	12837	22.13
453	29	0.05	1401	2.42	502	105	0.18	4359	7.52	551	261	0.45	13098	22.58
454	38	0.07	1439	2.48	503	102	0.18	4461	7.69	552	274	0.47	13372	23.05
455	36	0.06	1475	2.54	504	93	0.16	4554	7.85	553	313	0.54	13685	23.59
456	40	0.07	1515	2.61	505	115	0.20	4669	8.05	554	307	0.53	13992	24.12
457	38	0.07	1553	2.68	506	107	0.18	4776	8.23	555	279	0.48	14271	24.60
458	36	0.06	1589	2.74	507	103	0.18	4879	8.41	556	311	0.54	14582	25.14
459	31	0.05	1620	2.79	508	116	0.20	4995	8.61	557	322	0.56	14904	25.70
460	35	0.06	1655	2.85	509	108	0.19	5103	8.80	558	336	0.58	15240	26.27
461	30	0.05	1685	2.91	510	125	0.22	5228	9.01	559	290	0.50	15530	26.77
462	39	0.07	1724	2.97	511	121	0.21	5349	9.22	560	297	0.51	15827	27.29
463	34	0.06	1758	3.03	512	134	0.23	5483	9.45	561	357	0.62	16184	27.90
464	29	0.05	1787	3.08	513	121	0.21	5604	9.66	562	349	0.60	16533	28.50
465	32	0.06	1819	3.14	514	115	0.20	5719	9.86	563	336	0.58	16869	29.08
466	45	0.08	1864	3.21	515	119	0.21	5838	10.06	564	349	0.60	17218	29.68
467	42	0.07	1906	3.29	516	127	0.22	5965	10.28	565	345	0.59	17563	30.28
468	57	0.10	1963	3.38	517	140	0.24	6105	10.53	566	334	0.58	17897	30.86
469	40	0.07	2003	3.45	518	154	0.27	6259	10.79	567	333	0.57	18230	31.43
470	40	0.07	2043	3.52	519	151	0.26	6410	11.05	568	354	0.61	18584	32.04
471	48	0.08	2091	3.60	520	152	0.26	6562	11.31	569	366	0.63	18950	32.67
472	51	0.09	2142	3.69	521	146	0.25	6708	11.56	570	350	0.60	19300	33.27
473	55	0.09	2197	3.79	522	157	0.27	6865	11.84	571	360	0.62	19660	33.89
474	41	0.07	2238	3.86	523	148	0.26	7013	12.09	572	352	0.61	20012	34.50
475	56	0.10	2294	3.95	524	172	0.30	7185	12.39	573	397	0.68	20409	35.19
476	44	0.08	2338	4.03	525	164	0.28	7349	12.67	574	409	0.71	20818	35.89
477	61	0.11	2399	4.14	526	191	0.33	7540	13.00	575	443	0.76	21261	36.66
478	54	0.09	2453	4.23	527	153	0.26	7693	13.26	576	383	0.66	21644	37.32
479	61	0.11	2514	4.33	528	177	0.31	7870	13.57	577	413	0.71	22057	38.03
480	60	0.10	2574	4.44	529	178	0.31	8048	13.88	578	377	0.65	22434	38.68
481	67	0.12	2641	4.55	530	183	0.32	8231	14.19	579	377	0.65	22811	39.33
482	57	0.10	2698	4.65	531	195	0.34	8426	14.53	580	417	0.72	23228	40.05
483	65	0.11	2763	4.76	532	220	0.38	8646	14.91	581	414	0.71	23642	40.76
484	62	0.11	2825	4.87	533	185	0.32	8831	15.23	582	412	0.71	24054	41.47
485	69	0.12	2894	4.99	534	188	0.32	9019	15.55	583	420	0.72	24474	42.19
486	50	0.09	2944	5.08	535	194	0.33	9213	15.88	584	416	0.72	24890	42.91
487	88	0.15	3032	5.23	536	210	0.36	9423	16.25	585	437	0.75	25327	43.66
488	88	0.15	3120	5.38	537	206	0.36	9629	16.60	586	462	0.80	25789	44.46
489	73	0.13	3193	5.50	538	213	0.37	9842	16.97	587	398	0.69	26187	45.15
490	70	0.12	3263	5.63	539	238	0.41	10080	17.38	588	438	0.76	26625	45.90
491	68	0.12	3331	5.74	540	238	0.41	10318	17.79	589	463	0.80	27088	46.70
492	91	0.16	3422	5.90	541	263	0.45	10581	18.24	590	395	0.68	27483	47.38
493	84	0.14	3506	6.04	542	264	0.46	10845	18.70	591	475	0.82	27958	48.20
494	79	0.14	3585	6.18	543	240	0.41	11085	19.11	592	473	0.82	28431	49.02
495	92	0.16	3677	6.34	544	259	0.45	11344	19.56	593	491	0.85	28922	49.86
496	90	0.16	3767	6.49	545	230	0.40	11574	19.95	594	501	0.86	29423	50.73



**Table 162. Reading Grade 4 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
595	463	0.80	29886	51.52	644	294	0.51	50361	86.82	693	46	0.08	57361	98.89
596	459	0.79	30345	52.32	645	309	0.53	50670	87.36	694	40	0.07	57401	98.96
597	517	0.89	30862	53.21	646	261	0.45	50931	87.81	695	26	0.04	57427	99.01
598	443	0.76	31305	53.97	647	288	0.50	51219	88.30	696	28	0.05	57455	99.06
599	460	0.79	31765	54.76	648	256	0.44	51475	88.75	697	40	0.07	57495	99.12
600	477	0.82	32242	55.59	649	257	0.44	51732	89.19	698	33	0.06	57528	99.18
601	443	0.76	32685	56.35	650	253	0.44	51985	89.62	699	30	0.05	57558	99.23
602	473	0.82	33158	57.17	651	218	0.38	52203	90.00	700	20	0.03	57578	99.27
603	509	0.88	33667	58.04	652	229	0.39	52432	90.40	701	24	0.04	57602	99.31
604	536	0.92	34203	58.97	653	223	0.38	52655	90.78	702	18	0.03	57620	99.34
605	455	0.78	34658	59.75	654	221	0.38	52876	91.16	703	23	0.04	57643	99.38
606	513	0.88	35171	60.64	655	212	0.37	53088	91.53	704	22	0.04	57665	99.42
607	494	0.85	35665	61.49	656	210	0.36	53298	91.89	705	20	0.03	57685	99.45
608	423	0.73	36088	62.22	657	216	0.37	53514	92.26	706	18	0.03	57703	99.48
609	489	0.84	36577	63.06	658	197	0.34	53711	92.60	707	14	0.02	57717	99.51
610	445	0.77	37022	63.83	659	182	0.31	53893	92.91	708	17	0.03	57734	99.54
611	511	0.88	37533	64.71	660	190	0.33	54083	93.24	709	12	0.02	57746	99.56
612	471	0.81	38004	65.52	661	182	0.31	54265	93.56	710	13	0.02	57759	99.58
613	470	0.81	38474	66.33	662	180	0.31	54445	93.87	711	14	0.02	57773	99.60
614	417	0.72	38891	67.05	663	154	0.27	54599	94.13	712	17	0.03	57790	99.63
615	441	0.76	39332	67.81	664	153	0.26	54752	94.40	713	8	0.01	57798	99.65
616	471	0.81	39803	68.62	665	149	0.26	54901	94.65	714	7	0.01	57805	99.66
617	434	0.75	40237	69.37	666	138	0.24	55039	94.89	715	11	0.02	57816	99.68
618	452	0.78	40689	70.15	667	153	0.26	55192	95.15	716	6	0.01	57822	99.69
619	436	0.75	41125	70.90	668	133	0.23	55325	95.38	717	8	0.01	57830	99.70
620	432	0.74	41557	71.65	669	127	0.22	55452	95.60	718	13	0.02	57843	99.72
621	439	0.76	41996	72.40	670	125	0.22	55577	95.82	719	7	0.01	57850	99.74
622	437	0.75	42433	73.16	671	128	0.22	55705	96.04	720	6	0.01	57856	99.75
623	412	0.71	42845	73.87	672	123	0.21	55828	96.25	721	8	0.01	57864	99.76
624	410	0.71	43255	74.57	673	116	0.20	55944	96.45	722	8	0.01	57872	99.77
625	416	0.72	43671	75.29	674	94	0.16	56038	96.61	723	5	0.01	57877	99.78
626	412	0.71	44083	76.00	675	95	0.16	56133	96.78	724	7	0.01	57884	99.79
627	427	0.74	44510	76.74	676	97	0.17	56230	96.94	725	6	0.01	57890	99.81
628	418	0.72	44928	77.46	677	87	0.15	56317	97.09	726	7	0.01	57897	99.82
629	369	0.64	45297	78.09	678	98	0.17	56415	97.26	727	4	0.01	57901	99.82
630	390	0.67	45687	78.77	679	86	0.15	56501	97.41	728	5	0.01	57906	99.83
631	392	0.68	46079	79.44	680	83	0.14	56584	97.55	729	8	0.01	57914	99.85
632	385	0.66	46464	80.11	681	93	0.16	56677	97.71	730	4	0.01	57918	99.85
633	393	0.68	46857	80.78	682	62	0.11	56739	97.82	731	6	0.01	57924	99.86
634	349	0.60	47206	81.39	683	67	0.12	56806	97.94	732	4	0.01	57928	99.87
635	316	0.54	47522	81.93	684	66	0.11	56872	98.05	733	3	0.01	57931	99.88
636	346	0.60	47868	82.53	685	71	0.12	56943	98.17	734	2	0.00	57933	99.88
637	308	0.53	48176	83.06	686	52	0.09	56995	98.26	735	1	0.00	57934	99.88
638	328	0.57	48504	83.62	687	64	0.11	57059	98.37	736	3	0.01	57937	99.89
639	305	0.53	48809	84.15	688	51	0.09	57110	98.46	737	2	0.00	57939	99.89
640	334	0.58	49143	84.72	689	47	0.08	57157	98.54	738	8	0.01	57947	99.90
641	301	0.52	49444	85.24	690	53	0.09	57210	98.63	739	3	0.01	57950	99.91
642	330	0.57	49774	85.81	691	62	0.11	57272	98.74	740	1	0.00	57951	99.91
643	293	0.51	50067	86.32	692	43	0.07	57315	98.81	741	8	0.01	57959	99.92



**Table 162. Reading Grade 4 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %
742	1	0.00	57960	99.93
744	2	0.00	57962	99.93
745	4	0.01	57966	99.94
746	3	0.01	57969	99.94
747	1	0.00	57970	99.94
748	2	0.00	57972	99.95
750	1	0.00	57973	99.95
752	3	0.01	57976	99.95
753	2	0.00	57978	99.96
755	1	0.00	57979	99.96
756	1	0.00	57980	99.96
758	2	0.00	57982	99.96
759	1	0.00	57983	99.97
761	1	0.00	57984	99.97
762	3	0.01	57987	99.97
765	2	0.00	57989	99.98
769	3	0.01	57992	99.98
770	1	0.00	57993	99.98
772	1	0.00	57994	99.98
773	1	0.00	57995	99.99
775	1	0.00	57996	99.99
776	1	0.00	57997	99.99
780	1	0.00	57998	99.99
781	1	0.00	57999	99.99
782	1	0.00	58000	99.99
784	1	0.00	58001	100.00
785	1	0.00	58002	100.00
842	1	0.00	58003	100.00



**Table 163. Spanish Reading Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
356	1	0.57	1	0.57	520	1	0.57	81	46.02	587	1	0.57	172	97.73
414	1	0.57	2	1.14	521	5	2.84	86	48.86	592	1	0.57	173	98.30
415	1	0.57	3	1.70	522	1	0.57	87	49.43	601	1	0.57	174	98.86
429	1	0.57	4	2.27	523	4	2.27	91	51.70	606	1	0.57	175	99.43
432	1	0.57	5	2.84	524	2	1.14	93	52.84	607	1	0.57	176	100.00
433	2	1.14	7	3.98	525	1	0.57	94	53.41					
443	2	1.14	9	5.11	526	1	0.57	95	53.98					
446	2	1.14	11	6.25	527	1	0.57	96	54.55					
447	2	1.14	13	7.39	529	1	0.57	97	55.11					
452	1	0.57	14	7.95	530	1	0.57	98	55.68					
453	1	0.57	15	8.52	531	1	0.57	99	56.25					
454	2	1.14	17	9.66	532	3	1.70	102	57.95					
455	1	0.57	18	10.23	534	2	1.14	104	59.09					
457	1	0.57	19	10.80	535	1	0.57	105	59.66					
460	1	0.57	20	11.36	536	1	0.57	106	60.23					
464	2	1.14	22	12.50	537	4	2.27	110	62.50					
465	1	0.57	23	13.07	538	1	0.57	111	63.07					
466	1	0.57	24	13.64	540	3	1.70	114	64.77					
467	1	0.57	25	14.20	541	2	1.14	116	65.91					
468	2	1.14	27	15.34	542	1	0.57	117	66.48					
470	1	0.57	28	15.91	544	4	2.27	121	68.75					
474	1	0.57	29	16.48	545	3	1.70	124	70.45					
476	2	1.14	31	17.61	546	1	0.57	125	71.02					
478	2	1.14	33	18.75	547	2	1.14	127	72.16					
479	2	1.14	35	19.89	548	1	0.57	128	72.73					
483	3	1.70	38	21.59	549	2	1.14	130	73.86					
484	2	1.14	40	22.73	550	1	0.57	131	74.43					
485	1	0.57	41	23.30	552	4	2.27	135	76.70					
492	1	0.57	42	23.86	553	2	1.14	137	77.84					
494	1	0.57	43	24.43	554	2	1.14	139	78.98					
496	1	0.57	44	25.00	555	3	1.70	142	80.68					
497	1	0.57	45	25.57	558	2	1.14	144	81.82					
499	1	0.57	46	26.14	559	1	0.57	145	82.39					
500	3	1.70	49	27.84	562	1	0.57	146	82.95					
501	5	2.84	54	30.68	563	1	0.57	147	83.52					
502	1	0.57	55	31.25	564	3	1.70	150	85.23					
503	1	0.57	56	31.82	565	1	0.57	151	85.80					
504	1	0.57	57	32.39	566	1	0.57	152	86.36					
505	2	1.14	59	33.52	567	1	0.57	153	86.93					
506	1	0.57	60	34.09	568	3	1.70	156	88.64					
507	1	0.57	61	34.66	569	4	2.27	160	90.91					
508	3	1.70	64	36.36	570	1	0.57	161	91.48					
509	5	2.84	69	39.20	571	1	0.57	162	92.05					
510	2	1.14	71	40.34	572	4	2.27	166	94.32					
511	3	1.70	74	42.05	573	1	0.57	167	94.89					
515	1	0.57	75	42.61	574	1	0.57	168	95.45					
516	1	0.57	76	43.18	581	1	0.57	169	96.02					
517	2	1.14	78	44.32	582	1	0.57	170	96.59					
518	2	1.14	80	45.45	584	1	0.57	171	97.16					



**Table 164. Writing Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
190	7	0.01	7	0.01	306	2	0.00	68	0.12	356	8	0.01	382	0.66
191	1	0.00	8	0.01	307	1	0.00	69	0.12	357	14	0.02	396	0.68
193	1	0.00	9	0.02	308	3	0.01	72	0.12	358	12	0.02	408	0.70
197	2	0.00	11	0.02	310	1	0.00	73	0.13	359	13	0.02	421	0.73
203	1	0.00	12	0.02	311	3	0.01	76	0.13	360	13	0.02	434	0.75
209	1	0.00	13	0.02	312	4	0.01	80	0.14	361	16	0.03	450	0.78
212	2	0.00	15	0.03	313	3	0.01	83	0.14	362	25	0.04	475	0.82
216	2	0.00	17	0.03	314	1	0.00	84	0.14	363	21	0.04	496	0.86
223	1	0.00	18	0.03	315	1	0.00	85	0.15	364	23	0.04	519	0.90
224	2	0.00	20	0.03	316	3	0.01	88	0.15	365	26	0.04	545	0.94
225	1	0.00	21	0.04	317	2	0.00	90	0.16	366	22	0.04	567	0.98
226	1	0.00	22	0.04	318	5	0.01	95	0.16	367	29	0.05	596	1.03
227	1	0.00	23	0.04	319	1	0.00	96	0.17	368	30	0.05	626	1.08
228	1	0.00	24	0.04	320	3	0.01	99	0.17	369	32	0.06	658	1.14
229	2	0.00	26	0.04	321	1	0.00	100	0.17	370	29	0.05	687	1.19
230	1	0.00	27	0.05	322	3	0.01	103	0.18	371	23	0.04	710	1.23
232	1	0.00	28	0.05	323	3	0.01	106	0.18	372	26	0.04	736	1.27
238	1	0.00	29	0.05	324	3	0.01	109	0.19	373	28	0.05	764	1.32
242	1	0.00	30	0.05	325	4	0.01	113	0.19	374	42	0.07	806	1.39
247	1	0.00	31	0.05	326	4	0.01	117	0.20	375	30	0.05	836	1.44
255	1	0.00	32	0.06	327	6	0.01	123	0.21	376	34	0.06	870	1.50
256	1	0.00	33	0.06	328	1	0.00	124	0.21	377	32	0.06	902	1.56
259	1	0.00	34	0.06	329	7	0.01	131	0.23	378	36	0.06	938	1.62
260	1	0.00	35	0.06	330	6	0.01	137	0.24	379	41	0.07	979	1.69
263	1	0.00	36	0.06	331	4	0.01	141	0.24	380	49	0.08	1028	1.77
267	1	0.00	37	0.06	332	4	0.01	145	0.25	381	39	0.07	1067	1.84
268	2	0.00	39	0.07	333	4	0.01	149	0.26	382	47	0.08	1114	1.92
269	1	0.00	40	0.07	334	4	0.01	153	0.26	383	50	0.09	1164	2.01
274	1	0.00	41	0.07	335	6	0.01	159	0.27	384	55	0.09	1219	2.10
279	1	0.00	42	0.07	336	8	0.01	167	0.29	385	56	0.10	1275	2.20
280	1	0.00	43	0.07	337	9	0.02	176	0.30	386	57	0.10	1332	2.30
281	1	0.00	44	0.08	338	9	0.02	185	0.32	387	50	0.09	1382	2.38
283	2	0.00	46	0.08	339	9	0.02	194	0.33	388	64	0.11	1446	2.49
284	1	0.00	47	0.08	340	5	0.01	199	0.34	389	54	0.09	1500	2.59
285	2	0.00	49	0.08	341	7	0.01	206	0.36	390	55	0.09	1555	2.68
287	2	0.00	51	0.09	342	9	0.02	215	0.37	391	64	0.11	1619	2.79
289	1	0.00	52	0.09	343	7	0.01	222	0.38	392	80	0.14	1699	2.93
292	1	0.00	53	0.09	344	11	0.02	233	0.40	393	60	0.10	1759	3.04
293	1	0.00	54	0.09	345	11	0.02	244	0.42	394	72	0.12	1831	3.16
294	1	0.00	55	0.09	346	14	0.02	258	0.45	395	68	0.12	1899	3.28
295	1	0.00	56	0.10	347	9	0.02	267	0.46	396	89	0.15	1988	3.43
296	1	0.00	57	0.10	348	15	0.03	282	0.49	397	70	0.12	2058	3.55
298	1	0.00	58	0.10	349	14	0.02	296	0.51	398	100	0.17	2158	3.72
299	1	0.00	59	0.10	350	13	0.02	309	0.53	399	99	0.17	2257	3.89
300	1	0.00	60	0.10	351	16	0.03	325	0.56	400	104	0.18	2361	4.07
301	2	0.00	62	0.11	352	11	0.02	336	0.58	401	96	0.17	2457	4.24
302	1	0.00	63	0.11	353	7	0.01	343	0.59	402	88	0.15	2545	4.39
304	1	0.00	64	0.11	354	16	0.03	359	0.62	403	123	0.21	2668	4.60
305	2	0.00	66	0.11	355	15	0.03	374	0.65	404	107	0.18	2775	4.79



**Table 164. Writing Grade 4 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
405	106	0.18	2881	4.97	454	393	0.68	14580	25.16	503	423	0.73	36823	63.54
406	120	0.21	3001	5.18	455	377	0.65	14957	25.81	504	439	0.76	37262	64.29
407	135	0.23	3136	5.41	456	401	0.69	15358	26.50	505	455	0.79	37717	65.08
408	120	0.21	3256	5.62	457	379	0.65	15737	27.15	506	419	0.72	38136	65.80
409	113	0.19	3369	5.81	458	388	0.67	16125	27.82	507	438	0.76	38574	66.56
410	125	0.22	3494	6.03	459	412	0.71	16537	28.53	508	444	0.77	39018	67.32
411	132	0.23	3626	6.26	460	412	0.71	16949	29.24	509	432	0.75	39450	68.07
412	136	0.23	3762	6.49	461	421	0.73	17370	29.97	510	412	0.71	39862	68.78
413	152	0.26	3914	6.75	462	423	0.73	17793	30.70	511	460	0.79	40322	69.57
414	144	0.25	4058	7.00	463	409	0.71	18202	31.41	512	409	0.71	40731	70.28
415	165	0.28	4223	7.29	464	405	0.70	18607	32.10	513	453	0.78	41184	71.06
416	158	0.27	4381	7.56	465	463	0.80	19070	32.90	514	406	0.70	41590	71.76
417	149	0.26	4530	7.82	466	422	0.73	19492	33.63	515	368	0.63	41958	72.40
418	147	0.25	4677	8.07	467	430	0.74	19922	34.37	516	420	0.72	42378	73.12
419	170	0.29	4847	8.36	468	435	0.75	20357	35.12	517	366	0.63	42744	73.75
420	179	0.31	5026	8.67	469	437	0.75	20794	35.88	518	456	0.79	43200	74.54
421	189	0.33	5215	9.00	470	453	0.78	21247	36.66	519	362	0.62	43562	75.16
422	158	0.27	5373	9.27	471	454	0.78	21701	37.44	520	357	0.62	43919	75.78
423	184	0.32	5557	9.59	472	458	0.79	22159	38.23	521	352	0.61	44271	76.39
424	183	0.32	5740	9.90	473	458	0.79	22617	39.02	522	340	0.59	44611	76.97
425	202	0.35	5942	10.25	474	475	0.82	23092	39.84	523	348	0.60	44959	77.57
426	182	0.31	6124	10.57	475	479	0.83	23571	40.67	524	332	0.57	45291	78.15
427	231	0.40	6355	10.97	476	485	0.84	24056	41.51	525	350	0.60	45641	78.75
428	252	0.43	6607	11.40	477	471	0.81	24527	42.32	526	304	0.52	45945	79.27
429	206	0.36	6813	11.76	478	440	0.76	24967	43.08	527	339	0.58	46284	79.86
430	262	0.45	7075	12.21	479	473	0.82	25440	43.89	528	331	0.57	46615	80.43
431	238	0.41	7313	12.62	480	435	0.75	25875	44.65	529	313	0.54	46928	80.97
432	236	0.41	7549	13.03	481	488	0.84	26363	45.49	530	316	0.55	47244	81.52
433	245	0.42	7794	13.45	482	494	0.85	26857	46.34	531	291	0.50	47535	82.02
434	259	0.45	8053	13.89	483	469	0.81	27326	47.15	532	260	0.45	47795	82.47
435	308	0.53	8361	14.43	484	491	0.85	27817	48.00	533	256	0.44	48051	82.91
436	280	0.48	8641	14.91	485	459	0.79	28276	48.79	534	294	0.51	48345	83.42
437	298	0.51	8939	15.42	486	451	0.78	28727	49.57	535	280	0.48	48625	83.90
438	280	0.48	9219	15.91	487	490	0.85	29217	50.41	536	288	0.50	48913	84.40
439	275	0.47	9494	16.38	488	481	0.83	29698	51.24	537	266	0.46	49179	84.85
440	294	0.51	9788	16.89	489	487	0.84	30185	52.08	538	228	0.39	49407	85.25
441	294	0.51	10082	17.40	490	462	0.80	30647	52.88	539	210	0.36	49617	85.61
442	301	0.52	10383	17.92	491	472	0.81	31119	53.69	540	281	0.48	49898	86.09
443	310	0.53	10693	18.45	492	457	0.79	31576	54.48	541	236	0.41	50134	86.50
444	335	0.58	11028	19.03	493	513	0.89	32089	55.37	542	262	0.45	50396	86.95
445	332	0.57	11360	19.60	494	519	0.90	32608	56.26	543	215	0.37	50611	87.33
446	328	0.57	11688	20.17	495	446	0.77	33054	57.03	544	260	0.45	50871	87.77
447	353	0.61	12041	20.78	496	471	0.81	33525	57.84	545	187	0.32	51058	88.10
448	336	0.58	12377	21.36	497	470	0.81	33995	58.66	546	189	0.33	51247	88.42
449	346	0.60	12723	21.95	498	495	0.85	34490	59.51	547	211	0.36	51458	88.79
450	351	0.61	13074	22.56	499	459	0.79	34949	60.30	548	197	0.34	51655	89.13
451	361	0.62	13435	23.18	500	511	0.88	35460	61.18	549	236	0.41	51891	89.53
452	381	0.66	13816	23.84	501	479	0.83	35939	62.01	550	185	0.32	52076	89.85
453	371	0.64	14187	24.48	502	461	0.80	36400	62.81	551	155	0.27	52231	90.12



**Table 164. Writing Grade 4 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
552	181	0.31	52412	90.43	601	41	0.07	56870	98.12	655	45	0.08	57785	99.70
553	158	0.27	52570	90.71	602	16	0.03	56886	98.15	656	15	0.03	57800	99.73
554	180	0.31	52750	91.02	603	28	0.05	56914	98.20	657	5	0.01	57805	99.74
555	184	0.32	52934	91.33	604	72	0.12	56986	98.32	658	9	0.02	57814	99.75
556	182	0.31	53116	91.65	605	14	0.02	57000	98.35	659	1	0.00	57815	99.75
557	169	0.29	53285	91.94	606	22	0.04	57022	98.39	661	19	0.03	57834	99.79
558	153	0.26	53438	92.20	607	23	0.04	57045	98.43	664	9	0.02	57843	99.80
559	164	0.28	53602	92.49	608	120	0.21	57165	98.63	665	4	0.01	57847	99.81
560	117	0.20	53719	92.69	609	37	0.06	57202	98.70	671	1	0.00	57848	99.81
561	148	0.26	53867	92.94	610	11	0.02	57213	98.72	677	1	0.00	57849	99.81
562	108	0.19	53975	93.13	611	16	0.03	57229	98.74	678	2	0.00	57851	99.82
563	129	0.22	54104	93.35	612	21	0.04	57250	98.78	681	6	0.01	57857	99.83
564	130	0.22	54234	93.58	613	23	0.04	57273	98.82	692	13	0.02	57870	99.85
565	125	0.22	54359	93.79	614	5	0.01	57278	98.83	694	23	0.04	57893	99.89
566	157	0.27	54516	94.06	615	8	0.01	57286	98.84	695	1	0.00	57894	99.89
567	111	0.19	54627	94.25	616	18	0.03	57304	98.87	704	35	0.06	57929	99.95
568	90	0.16	54717	94.41	617	4	0.01	57308	98.88	711	9	0.02	57938	99.97
569	104	0.18	54821	94.59	618	10	0.02	57318	98.90	730	19	0.03	57957	100.00
570	79	0.14	54900	94.73	619	8	0.01	57326	98.91					
571	95	0.16	54995	94.89	620	25	0.04	57351	98.95					
572	93	0.16	55088	95.05	621	14	0.02	57365	98.98					
573	71	0.12	55159	95.17	622	10	0.02	57375	99.00					
574	100	0.17	55259	95.34	623	6	0.01	57381	99.01					
575	105	0.18	55364	95.53	624	10	0.02	57391	99.02					
576	92	0.16	55456	95.68	625	87	0.15	57478	99.17					
577	94	0.16	55550	95.85	626	24	0.04	57502	99.21					
578	85	0.15	55635	95.99	627	22	0.04	57524	99.25					
579	44	0.08	55679	96.07	628	6	0.01	57530	99.26					
580	82	0.14	55761	96.21	629	15	0.03	57545	99.29					
581	68	0.12	55829	96.33	630	24	0.04	57569	99.33					
582	63	0.11	55892	96.44	631	15	0.03	57584	99.36					
583	50	0.09	55942	96.52	632	32	0.06	57616	99.41					
584	61	0.11	56003	96.63	633	5	0.01	57621	99.42					
585	58	0.10	56061	96.73	634	1	0.00	57622	99.42					
586	53	0.09	56114	96.82	635	2	0.00	57624	99.43					
587	71	0.12	56185	96.94	636	6	0.01	57630	99.44					
588	85	0.15	56270	97.09	637	3	0.01	57633	99.44					
589	36	0.06	56306	97.15	639	4	0.01	57637	99.45					
590	56	0.10	56362	97.25	640	3	0.01	57640	99.45					
591	76	0.13	56438	97.38	641	8	0.01	57648	99.47					
592	60	0.10	56498	97.48	642	4	0.01	57652	99.47					
593	30	0.05	56528	97.53	643	1	0.00	57653	99.48					
594	61	0.11	56589	97.64	644	1	0.00	57654	99.48					
595	69	0.12	56658	97.76	645	1	0.00	57655	99.48					
596	22	0.04	56680	97.80	646	1	0.00	57656	99.48					
597	32	0.06	56712	97.85	647	11	0.02	57667	99.50					
598	39	0.07	56751	97.92	648	31	0.05	57698	99.55					
599	23	0.04	56774	97.96	650	7	0.01	57705	99.57					
600	55	0.09	56829	98.05	654	35	0.06	57740	99.63					



**Table 165. Spanish Writing Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
404	1	0.57	1	0.57	501	3	1.72	90	51.72
405	1	0.57	2	1.15	502	1	0.57	91	52.30
414	1	0.57	3	1.72	503	1	0.57	92	52.87
420	1	0.57	4	2.30	504	1	0.57	93	53.45
422	1	0.57	5	2.87	505	3	1.72	96	55.17
427	1	0.57	6	3.45	506	2	1.15	98	56.32
438	1	0.57	7	4.02	508	2	1.15	100	57.47
439	2	1.15	9	5.17	510	5	2.87	105	60.34
440	1	0.57	10	5.75	511	2	1.15	107	61.49
442	2	1.15	12	6.90	512	2	1.15	109	62.64
443	1	0.57	13	7.47	513	2	1.15	111	63.79
445	1	0.57	14	8.05	514	1	0.57	112	64.37
446	3	1.72	17	9.77	515	1	0.57	113	64.94
449	2	1.15	19	10.92	517	1	0.57	114	65.52
451	4	2.30	23	13.22	518	2	1.15	116	66.67
452	1	0.57	24	13.79	519	3	1.72	119	68.39
454	1	0.57	25	14.37	520	1	0.57	120	68.97
455	1	0.57	26	14.94	522	3	1.72	123	70.69
457	1	0.57	27	15.52	526	2	1.15	125	71.84
458	1	0.57	28	16.09	527	2	1.15	127	72.99
461	1	0.57	29	16.67	528	4	2.30	131	75.29
463	1	0.57	30	17.24	530	2	1.15	133	76.44
464	2	1.15	32	18.39	531	3	1.72	136	78.16
465	1	0.57	33	18.97	532	1	0.57	137	78.74
466	3	1.72	36	20.69	534	2	1.15	139	79.89
467	1	0.57	37	21.26	535	4	2.30	143	82.18
468	2	1.15	39	22.41	536	1	0.57	144	82.76
470	2	1.15	41	23.56	537	1	0.57	145	83.33
471	4	2.30	45	25.86	538	1	0.57	146	83.91
474	1	0.57	46	26.44	541	3	1.72	149	85.63
475	1	0.57	47	27.01	542	4	2.30	153	87.93
476	2	1.15	49	28.16	545	1	0.57	154	88.51
477	4	2.30	53	30.46	547	1	0.57	155	89.08
478	2	1.15	55	31.61	548	1	0.57	156	89.66
479	2	1.15	57	32.76	549	2	1.15	158	90.80
480	2	1.15	59	33.91	554	2	1.15	160	91.95
482	3	1.72	62	35.63	555	2	1.15	162	93.10
486	1	0.57	63	36.21	557	1	0.57	163	93.68
488	2	1.15	65	37.36	558	2	1.15	165	94.83
489	2	1.15	67	38.51	559	2	1.15	167	95.98
490	4	2.30	71	40.80	562	2	1.15	169	97.13
491	3	1.72	74	42.53	568	1	0.57	170	97.70
492	2	1.15	76	43.68	572	1	0.57	171	98.28
493	3	1.72	79	45.40	575	1	0.57	172	98.85
494	2	1.15	81	46.55	599	1	0.57	173	99.43
495	1	0.57	82	47.13	600	1	0.57	174	100.00
496	2	1.15	84	48.28					
498	2	1.15	86	49.43					
499	1	0.57	87	50.00					



**Table 166. Mathematics Grade 4 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
180	44	0.08	44	0.08	247	9	0.02	182	0.31	296	13	0.02	693	1.19
181	1	0.00	45	0.08	248	3	0.01	185	0.32	297	13	0.02	706	1.21
184	1	0.00	46	0.08	249	3	0.01	188	0.32	298	16	0.03	722	1.24
186	1	0.00	47	0.08	250	9	0.02	197	0.34	299	17	0.03	739	1.27
187	1	0.00	48	0.08	251	6	0.01	203	0.35	300	14	0.02	753	1.29
188	4	0.01	52	0.09	252	8	0.01	211	0.36	301	19	0.03	772	1.33
191	1	0.00	53	0.09	253	3	0.01	214	0.37	302	19	0.03	791	1.36
195	2	0.00	55	0.09	254	4	0.01	218	0.37	303	20	0.03	811	1.39
198	2	0.00	57	0.10	255	5	0.01	223	0.38	304	22	0.04	833	1.43
199	1	0.00	58	0.10	256	2	0.00	225	0.39	305	20	0.03	853	1.47
202	1	0.00	59	0.10	257	1	0.00	226	0.39	306	25	0.04	878	1.51
203	6	0.01	65	0.11	258	3	0.01	229	0.39	307	23	0.04	901	1.55
204	2	0.00	67	0.12	259	9	0.02	238	0.41	308	21	0.04	922	1.58
205	2	0.00	69	0.12	260	11	0.02	249	0.43	309	20	0.03	942	1.62
206	3	0.01	72	0.12	261	10	0.02	259	0.44	310	24	0.04	966	1.66
209	2	0.00	74	0.13	262	5	0.01	264	0.45	311	24	0.04	990	1.70
210	1	0.00	75	0.13	263	7	0.01	271	0.47	312	25	0.04	1015	1.74
211	3	0.01	78	0.13	264	6	0.01	277	0.48	313	30	0.05	1045	1.80
212	1	0.00	79	0.14	265	4	0.01	281	0.48	314	30	0.05	1075	1.85
213	2	0.00	81	0.14	266	5	0.01	286	0.49	315	30	0.05	1105	1.90
214	3	0.01	84	0.14	267	8	0.01	294	0.51	316	25	0.04	1130	1.94
215	3	0.01	87	0.15	268	12	0.02	306	0.53	317	31	0.05	1161	1.99
219	3	0.01	90	0.15	269	10	0.02	316	0.54	318	33	0.06	1194	2.05
221	5	0.01	95	0.16	270	11	0.02	327	0.56	319	39	0.07	1233	2.12
222	1	0.00	96	0.16	271	10	0.02	337	0.58	320	29	0.05	1262	2.17
223	4	0.01	100	0.17	272	3	0.01	340	0.58	321	28	0.05	1290	2.22
224	1	0.00	101	0.17	273	7	0.01	347	0.60	322	37	0.06	1327	2.28
225	1	0.00	102	0.18	274	12	0.02	359	0.62	323	27	0.05	1354	2.33
226	3	0.01	105	0.18	275	11	0.02	370	0.64	324	41	0.07	1395	2.40
227	3	0.01	108	0.19	276	10	0.02	380	0.65	325	34	0.06	1429	2.45
228	4	0.01	112	0.19	277	7	0.01	387	0.66	326	48	0.08	1477	2.54
229	3	0.01	115	0.20	278	5	0.01	392	0.67	327	37	0.06	1514	2.60
230	3	0.01	118	0.20	279	13	0.02	405	0.70	328	35	0.06	1549	2.66
231	4	0.01	122	0.21	280	12	0.02	417	0.72	329	33	0.06	1582	2.72
232	3	0.01	125	0.21	281	18	0.03	435	0.75	330	38	0.07	1620	2.78
233	2	0.00	127	0.22	282	18	0.03	453	0.78	331	31	0.05	1651	2.84
234	2	0.00	129	0.22	283	8	0.01	461	0.79	332	39	0.07	1690	2.90
235	2	0.00	131	0.23	284	11	0.02	472	0.81	333	46	0.08	1736	2.98
236	2	0.00	133	0.23	285	15	0.03	487	0.84	334	44	0.08	1780	3.06
237	5	0.01	138	0.24	286	12	0.02	499	0.86	335	43	0.07	1823	3.13
238	4	0.01	142	0.24	287	23	0.04	522	0.90	336	38	0.07	1861	3.20
239	6	0.01	148	0.25	288	14	0.02	536	0.92	337	43	0.07	1904	3.27
240	1	0.00	149	0.26	289	16	0.03	552	0.95	338	44	0.08	1948	3.35
241	2	0.00	151	0.26	290	15	0.03	567	0.97	339	36	0.06	1984	3.41
242	6	0.01	157	0.27	291	25	0.04	592	1.02	340	44	0.08	2028	3.48
243	3	0.01	160	0.27	292	32	0.05	624	1.07	341	37	0.06	2065	3.55
244	5	0.01	165	0.28	293	19	0.03	643	1.10	342	59	0.10	2124	3.65
245	5	0.01	170	0.29	294	20	0.03	663	1.14	343	58	0.10	2182	3.75
246	3	0.01	173	0.30	295	17	0.03	680	1.17	344	52	0.09	2234	3.84



**Table 166. Mathematics Grade 4 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
345	53	0.09	2287	3.93	394	122	0.21	6561	11.27	443	236	0.41	15536	26.69
346	51	0.09	2338	4.02	395	125	0.21	6686	11.48	444	212	0.36	15748	27.05
347	52	0.09	2390	4.11	396	135	0.23	6821	11.72	445	268	0.46	16016	27.51
348	71	0.12	2461	4.23	397	123	0.21	6944	11.93	446	258	0.44	16274	27.95
349	49	0.08	2510	4.31	398	148	0.25	7092	12.18	447	243	0.42	16517	28.37
350	54	0.09	2564	4.40	399	141	0.24	7233	12.42	448	245	0.42	16762	28.79
351	44	0.08	2608	4.48	400	131	0.23	7364	12.65	449	271	0.47	17033	29.26
352	68	0.12	2676	4.60	401	133	0.23	7497	12.88	450	217	0.37	17250	29.63
353	74	0.13	2750	4.72	402	147	0.25	7644	13.13	451	267	0.46	17517	30.09
354	54	0.09	2804	4.82	403	154	0.26	7798	13.39	452	237	0.41	17754	30.50
355	58	0.10	2862	4.92	404	127	0.22	7925	13.61	453	254	0.44	18008	30.93
356	68	0.12	2930	5.03	405	144	0.25	8069	13.86	454	292	0.50	18300	31.43
357	68	0.12	2998	5.15	406	157	0.27	8226	14.13	455	260	0.45	18560	31.88
358	53	0.09	3051	5.24	407	148	0.25	8374	14.38	456	251	0.43	18811	32.31
359	58	0.10	3109	5.34	408	173	0.30	8547	14.68	457	249	0.43	19060	32.74
360	61	0.10	3170	5.45	409	164	0.28	8711	14.96	458	274	0.47	19334	33.21
361	65	0.11	3235	5.56	410	137	0.24	8848	15.20	459	256	0.44	19590	33.65
362	77	0.13	3312	5.69	411	151	0.26	8999	15.46	460	270	0.46	19860	34.11
363	69	0.12	3381	5.81	412	173	0.30	9172	15.76	461	293	0.50	20153	34.62
364	79	0.14	3460	5.94	413	182	0.31	9354	16.07	462	280	0.48	20433	35.10
365	85	0.15	3545	6.09	414	168	0.29	9522	16.36	463	295	0.51	20728	35.61
366	73	0.13	3618	6.21	415	169	0.29	9691	16.65	464	289	0.50	21017	36.10
367	89	0.15	3707	6.37	416	187	0.32	9878	16.97	465	283	0.49	21300	36.59
368	77	0.13	3784	6.50	417	179	0.31	10057	17.28	466	279	0.48	21579	37.07
369	82	0.14	3866	6.64	418	183	0.31	10240	17.59	467	315	0.54	21894	37.61
370	72	0.12	3938	6.76	419	142	0.24	10382	17.83	468	296	0.51	22190	38.12
371	108	0.19	4046	6.95	420	183	0.31	10565	18.15	469	304	0.52	22494	38.64
372	91	0.16	4137	7.11	421	157	0.27	10722	18.42	470	282	0.48	22776	39.12
373	93	0.16	4230	7.27	422	216	0.37	10938	18.79	471	312	0.54	23088	39.66
374	90	0.15	4320	7.42	423	182	0.31	11120	19.10	472	313	0.54	23401	40.20
375	96	0.16	4416	7.59	424	196	0.34	11316	19.44	473	344	0.59	23745	40.79
376	107	0.18	4523	7.77	425	194	0.33	11510	19.77	474	315	0.54	24060	41.33
377	106	0.18	4629	7.95	426	187	0.32	11697	20.09	475	320	0.55	24380	41.88
378	89	0.15	4718	8.10	427	204	0.35	11901	20.44	476	322	0.55	24702	42.43
379	131	0.23	4849	8.33	428	236	0.41	12137	20.85	477	299	0.51	25001	42.95
380	108	0.19	4957	8.51	429	183	0.31	12320	21.16	478	267	0.46	25268	43.40
381	109	0.19	5066	8.70	430	204	0.35	12524	21.51	479	307	0.53	25575	43.93
382	93	0.16	5159	8.86	431	206	0.35	12730	21.87	480	298	0.51	25873	44.44
383	112	0.19	5271	9.05	432	246	0.42	12976	22.29	481	304	0.52	26177	44.97
384	95	0.16	5366	9.22	433	248	0.43	13224	22.72	482	296	0.51	26473	45.47
385	121	0.21	5487	9.43	434	249	0.43	13473	23.14	483	342	0.59	26815	46.06
386	113	0.19	5600	9.62	435	248	0.43	13721	23.57	484	301	0.52	27116	46.58
387	113	0.19	5713	9.81	436	243	0.42	13964	23.99	485	305	0.52	27421	47.10
388	116	0.20	5829	10.01	437	224	0.38	14188	24.37	486	274	0.47	27695	47.57
389	125	0.21	5954	10.23	438	226	0.39	14414	24.76	487	292	0.50	27987	48.07
390	98	0.17	6052	10.40	439	201	0.35	14615	25.10	488	322	0.55	28309	48.63
391	129	0.22	6181	10.62	440	223	0.38	14838	25.49	489	309	0.53	28618	49.16
392	129	0.22	6310	10.84	441	221	0.38	15059	25.87	490	334	0.57	28952	49.73
393	129	0.22	6439	11.06	442	241	0.41	15300	26.28	491	297	0.51	29249	50.24



**Table 166. Mathematics Grade 4 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
492	288	0.49	29537	50.74	541	254	0.44	44047	75.66	590	128	0.22	53413	91.75
493	309	0.53	29846	51.27	542	256	0.44	44303	76.10	591	116	0.20	53529	91.95
494	328	0.56	30174	51.83	543	249	0.43	44552	76.53	592	112	0.19	53641	92.14
495	296	0.51	30470	52.34	544	233	0.40	44785	76.93	593	106	0.18	53747	92.32
496	288	0.49	30758	52.83	545	265	0.46	45050	77.38	594	118	0.20	53865	92.53
497	345	0.59	31103	53.43	546	230	0.40	45280	77.78	595	104	0.18	53969	92.70
498	323	0.55	31426	53.98	547	259	0.44	45539	78.22	596	105	0.18	54074	92.89
499	279	0.48	31705	54.46	548	244	0.42	45783	78.64	597	92	0.16	54166	93.04
500	297	0.51	32002	54.97	549	222	0.38	46005	79.02	598	92	0.16	54258	93.20
501	284	0.49	32286	55.46	550	256	0.44	46261	79.46	599	94	0.16	54352	93.36
502	307	0.53	32593	55.99	551	257	0.44	46518	79.91	600	106	0.18	54458	93.54
503	319	0.55	32912	56.53	552	213	0.37	46731	80.27	601	93	0.16	54551	93.70
504	316	0.54	33228	57.08	553	238	0.41	46969	80.68	602	92	0.16	54643	93.86
505	287	0.49	33515	57.57	554	239	0.41	47208	81.09	603	94	0.16	54737	94.02
506	306	0.53	33821	58.10	555	216	0.37	47424	81.46	604	74	0.13	54811	94.15
507	347	0.60	34168	58.69	556	232	0.40	47656	81.86	605	86	0.15	54897	94.30
508	304	0.52	34472	59.21	557	225	0.39	47881	82.25	606	74	0.13	54971	94.43
509	292	0.50	34764	59.72	558	233	0.40	48114	82.65	607	77	0.13	55048	94.56
510	296	0.51	35060	60.22	559	199	0.34	48313	82.99	608	72	0.12	55120	94.68
511	337	0.58	35397	60.80	560	222	0.38	48535	83.37	609	89	0.15	55209	94.83
512	306	0.53	35703	61.33	561	192	0.33	48727	83.70	610	76	0.13	55285	94.97
513	317	0.54	36020	61.87	562	208	0.36	48935	84.06	611	71	0.12	55356	95.09
514	302	0.52	36322	62.39	563	181	0.31	49116	84.37	612	84	0.14	55440	95.23
515	315	0.54	36637	62.93	564	193	0.33	49309	84.70	613	55	0.09	55495	95.33
516	317	0.54	36954	63.48	565	199	0.34	49508	85.04	614	77	0.13	55572	95.46
517	284	0.49	37238	63.97	566	209	0.36	49717	85.40	615	72	0.12	55644	95.58
518	319	0.55	37557	64.51	567	176	0.30	49893	85.70	616	75	0.13	55719	95.71
519	316	0.54	37873	65.06	568	187	0.32	50080	86.02	617	73	0.13	55792	95.84
520	280	0.48	38153	65.54	569	158	0.27	50238	86.30	618	55	0.09	55847	95.93
521	298	0.51	38451	66.05	570	175	0.30	50413	86.60	619	58	0.10	55905	96.03
522	289	0.50	38740	66.55	571	167	0.29	50580	86.88	620	43	0.07	55948	96.10
523	295	0.51	39035	67.05	572	165	0.28	50745	87.17	621	55	0.09	56003	96.20
524	288	0.49	39323	67.55	573	180	0.31	50925	87.48	622	55	0.09	56058	96.29
525	293	0.50	39616	68.05	574	167	0.29	51092	87.76	623	53	0.09	56111	96.38
526	297	0.51	39913	68.56	575	182	0.31	51274	88.08	624	64	0.11	56175	96.49
527	294	0.51	40207	69.07	576	174	0.30	51448	88.37	625	36	0.06	56211	96.56
528	272	0.47	40479	69.53	577	142	0.24	51590	88.62	626	46	0.08	56257	96.63
529	281	0.48	40760	70.02	578	167	0.29	51757	88.91	627	44	0.08	56301	96.71
530	292	0.50	41052	70.52	579	160	0.27	51917	89.18	628	36	0.06	56337	96.77
531	310	0.53	41362	71.05	580	149	0.26	52066	89.44	629	39	0.07	56376	96.84
532	273	0.47	41635	71.52	581	142	0.24	52208	89.68	630	58	0.10	56434	96.94
533	287	0.49	41922	72.01	582	137	0.24	52345	89.92	631	42	0.07	56476	97.01
534	298	0.51	42220	72.52	583	157	0.27	52502	90.18	632	55	0.09	56531	97.11
535	252	0.43	42472	72.96	584	123	0.21	52625	90.40	633	52	0.09	56583	97.19
536	254	0.44	42726	73.39	585	123	0.21	52748	90.61	634	47	0.08	56630	97.28
537	270	0.46	42996	73.86	586	128	0.22	52876	90.83	635	38	0.07	56668	97.34
538	260	0.45	43256	74.30	587	131	0.23	53007	91.05	636	39	0.07	56707	97.41
539	252	0.43	43508	74.74	588	134	0.23	53141	91.28	637	45	0.08	56752	97.49
540	285	0.49	43793	75.23	589	144	0.25	53285	91.53	638	29	0.05	56781	97.54



**Table 166. Mathematics Grade 4 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
639	39	0.07	56820	97.60	688	4	0.01	57772	99.24
640	27	0.05	56847	97.65	689	13	0.02	57785	99.26
641	35	0.06	56882	97.71	690	4	0.01	57789	99.27
642	39	0.07	56921	97.78	691	7	0.01	57796	99.28
643	33	0.06	56954	97.83	692	16	0.03	57812	99.31
644	29	0.05	56983	97.88	693	6	0.01	57818	99.32
645	29	0.05	57012	97.93	694	5	0.01	57823	99.32
646	37	0.06	57049	98.00	696	10	0.02	57833	99.34
647	23	0.04	57072	98.03	698	1	0.00	57834	99.34
648	26	0.04	57098	98.08	699	18	0.03	57852	99.37
649	28	0.05	57126	98.13	700	11	0.02	57863	99.39
650	32	0.05	57158	98.18	701	6	0.01	57869	99.40
651	24	0.04	57182	98.22	702	13	0.02	57882	99.43
652	33	0.06	57215	98.28	704	4	0.01	57886	99.43
653	25	0.04	57240	98.32	705	4	0.01	57890	99.44
654	19	0.03	57259	98.36	708	6	0.01	57896	99.45
655	17	0.03	57276	98.39	709	6	0.01	57902	99.46
656	18	0.03	57294	98.42	711	1	0.00	57903	99.46
657	30	0.05	57324	98.47	712	4	0.01	57907	99.47
658	20	0.03	57344	98.50	715	8	0.01	57915	99.48
659	22	0.04	57366	98.54	720	2	0.00	57917	99.49
660	20	0.03	57386	98.57	721	22	0.04	57939	99.52
661	17	0.03	57403	98.60	722	1	0.00	57940	99.53
662	18	0.03	57421	98.63	723	5	0.01	57945	99.53
663	23	0.04	57444	98.67	724	7	0.01	57952	99.55
664	11	0.02	57455	98.69	725	2	0.00	57954	99.55
665	18	0.03	57473	98.72	730	8	0.01	57962	99.56
666	10	0.02	57483	98.74	732	57	0.10	58019	99.66
667	22	0.04	57505	98.78	733	11	0.02	58030	99.68
668	6	0.01	57511	98.79	735	9	0.02	58039	99.70
669	15	0.03	57526	98.81	737	18	0.03	58057	99.73
670	16	0.03	57542	98.84	739	2	0.00	58059	99.73
671	12	0.02	57554	98.86	741	11	0.02	58070	99.75
672	20	0.03	57574	98.90	745	1	0.00	58071	99.75
673	8	0.01	57582	98.91	746	8	0.01	58079	99.76
674	15	0.03	57597	98.94	747	6	0.01	58085	99.77
675	10	0.02	57607	98.95	774	39	0.07	58124	99.84
676	9	0.02	57616	98.97	780	92	0.16	58216	100.00
677	19	0.03	57635	99.00					
678	15	0.03	57650	99.03					
679	14	0.02	57664	99.05					
680	19	0.03	57683	99.08					
681	13	0.02	57696	99.11					
682	13	0.02	57709	99.13					
683	9	0.02	57718	99.14					
684	8	0.01	57726	99.16					
685	17	0.03	57743	99.19					
686	14	0.02	57757	99.21					
687	11	0.02	57768	99.23					



**Table 167. Reading Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
220	265	0.46	265	0.46	325	1	0.00	347	0.61	386	1	0.00	468	0.82
222	1	0.00	266	0.47	328	2	0.00	349	0.61	387	6	0.01	474	0.83
223	1	0.00	267	0.47	330	5	0.01	354	0.62	388	4	0.01	478	0.84
227	1	0.00	268	0.47	331	1	0.00	355	0.62	389	2	0.00	480	0.84
228	2	0.00	270	0.47	332	3	0.01	358	0.63	390	5	0.01	485	0.85
239	1	0.00	271	0.48	333	4	0.01	362	0.63	391	6	0.01	491	0.86
241	1	0.00	272	0.48	335	2	0.00	364	0.64	392	3	0.01	494	0.87
243	2	0.00	274	0.48	336	2	0.00	366	0.64	393	6	0.01	500	0.88
244	1	0.00	275	0.48	337	2	0.00	368	0.65	394	4	0.01	504	0.88
247	1	0.00	276	0.48	338	2	0.00	370	0.65	395	8	0.01	512	0.90
248	1	0.00	277	0.49	341	2	0.00	372	0.65	396	2	0.00	514	0.90
251	1	0.00	278	0.49	342	3	0.01	375	0.66	397	6	0.01	520	0.91
255	1	0.00	279	0.49	343	3	0.01	378	0.66	398	5	0.01	525	0.92
257	1	0.00	280	0.49	344	2	0.00	380	0.67	399	8	0.01	533	0.93
261	1	0.00	281	0.49	345	3	0.01	383	0.67	400	3	0.01	536	0.94
262	2	0.00	283	0.50	346	1	0.00	384	0.67	401	8	0.01	544	0.95
266	4	0.01	287	0.50	348	1	0.00	385	0.68	402	5	0.01	549	0.96
267	1	0.00	288	0.51	349	6	0.01	391	0.69	403	6	0.01	555	0.97
269	1	0.00	289	0.51	350	1	0.00	392	0.69	404	5	0.01	560	0.98
271	3	0.01	292	0.51	351	3	0.01	395	0.69	405	5	0.01	565	0.99
272	2	0.00	294	0.52	352	1	0.00	396	0.69	406	9	0.02	574	1.01
276	1	0.00	295	0.52	353	2	0.00	398	0.70	407	4	0.01	578	1.01
278	1	0.00	296	0.52	354	2	0.00	400	0.70	408	3	0.01	581	1.02
281	2	0.00	298	0.52	356	1	0.00	401	0.70	409	4	0.01	585	1.03
282	4	0.01	302	0.53	357	4	0.01	405	0.71	410	6	0.01	591	1.04
286	1	0.00	303	0.53	358	4	0.01	409	0.72	411	3	0.01	594	1.04
288	1	0.00	304	0.53	359	1	0.00	410	0.72	412	4	0.01	598	1.05
289	2	0.00	306	0.54	361	3	0.01	413	0.72	413	9	0.02	607	1.06
292	1	0.00	307	0.54	362	3	0.01	416	0.73	414	16	0.03	623	1.09
293	1	0.00	308	0.54	363	1	0.00	417	0.73	415	9	0.02	632	1.11
294	1	0.00	309	0.54	364	2	0.00	419	0.73	416	7	0.01	639	1.12
299	1	0.00	310	0.54	365	3	0.01	422	0.74	417	8	0.01	647	1.13
300	1	0.00	311	0.55	366	2	0.00	424	0.74	418	11	0.02	658	1.15
301	3	0.01	314	0.55	367	4	0.01	428	0.75	419	10	0.02	668	1.17
302	2	0.00	316	0.55	368	2	0.00	430	0.75	420	5	0.01	673	1.18
303	1	0.00	317	0.56	369	2	0.00	432	0.76	421	6	0.01	679	1.19
305	2	0.00	319	0.56	370	4	0.01	436	0.76	422	12	0.02	691	1.21
306	1	0.00	320	0.56	372	4	0.01	440	0.77	423	10	0.02	701	1.23
307	2	0.00	322	0.56	373	3	0.01	443	0.78	424	12	0.02	713	1.25
308	3	0.01	325	0.57	374	2	0.00	445	0.78	425	4	0.01	717	1.26
309	4	0.01	329	0.58	375	1	0.00	446	0.78	426	8	0.01	725	1.27
312	2	0.00	331	0.58	376	3	0.01	449	0.79	427	10	0.02	735	1.29
314	2	0.00	333	0.58	378	4	0.01	453	0.79	428	23	0.04	758	1.33
315	4	0.01	337	0.59	379	1	0.00	454	0.80	429	7	0.01	765	1.34
318	1	0.00	338	0.59	380	4	0.01	458	0.80	430	13	0.02	778	1.36
319	1	0.00	339	0.59	381	2	0.00	460	0.81	431	9	0.02	787	1.38
320	2	0.00	341	0.60	382	3	0.01	463	0.81	432	10	0.02	797	1.40
321	1	0.00	342	0.60	384	1	0.00	464	0.81	433	12	0.02	809	1.42
323	4	0.01	346	0.61	385	3	0.01	467	0.82	434	6	0.01	815	1.43



**Table 167. Reading Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
435	9	0.02	824	1.45	484	45	0.08	2180	3.82	533	124	0.22	6069	10.65
436	16	0.03	840	1.47	485	45	0.08	2225	3.90	534	123	0.22	6192	10.86
437	17	0.03	857	1.50	486	33	0.06	2258	3.96	535	116	0.20	6308	11.06
438	8	0.01	865	1.52	487	61	0.11	2319	4.07	536	101	0.18	6409	11.24
439	13	0.02	878	1.54	488	57	0.10	2376	4.17	537	166	0.29	6575	11.53
440	15	0.03	893	1.57	489	58	0.10	2434	4.27	538	135	0.24	6710	11.77
441	14	0.02	907	1.59	490	56	0.10	2490	4.37	539	148	0.26	6858	12.03
442	18	0.03	925	1.62	491	40	0.07	2530	4.44	540	153	0.27	7011	12.30
443	12	0.02	937	1.64	492	65	0.11	2595	4.55	541	98	0.17	7109	12.47
444	10	0.02	947	1.66	493	71	0.12	2666	4.68	542	158	0.28	7267	12.75
445	18	0.03	965	1.69	494	45	0.08	2711	4.76	543	144	0.25	7411	13.00
446	25	0.04	990	1.74	495	65	0.11	2776	4.87	544	166	0.29	7577	13.29
447	23	0.04	1013	1.78	496	68	0.12	2844	4.99	545	145	0.25	7722	13.55
448	29	0.05	1042	1.83	497	68	0.12	2912	5.11	546	183	0.32	7905	13.87
449	24	0.04	1066	1.87	498	64	0.11	2976	5.22	547	141	0.25	8046	14.11
450	20	0.04	1086	1.90	499	62	0.11	3038	5.33	548	158	0.28	8204	14.39
451	19	0.03	1105	1.94	500	65	0.11	3103	5.44	549	168	0.29	8372	14.69
452	12	0.02	1117	1.96	501	55	0.10	3158	5.54	550	175	0.31	8547	14.99
453	22	0.04	1139	2.00	502	67	0.12	3225	5.66	551	173	0.30	8720	15.30
454	30	0.05	1169	2.05	503	76	0.13	3301	5.79	552	171	0.30	8891	15.60
455	22	0.04	1191	2.09	504	77	0.14	3378	5.93	553	150	0.26	9041	15.86
456	31	0.05	1222	2.14	505	82	0.14	3460	6.07	554	163	0.29	9204	16.14
457	25	0.04	1247	2.19	506	69	0.12	3529	6.19	555	186	0.33	9390	16.47
458	20	0.04	1267	2.22	507	73	0.13	3602	6.32	556	177	0.31	9567	16.78
459	31	0.05	1298	2.28	508	76	0.13	3678	6.45	557	150	0.26	9717	17.04
460	25	0.04	1323	2.32	509	80	0.14	3758	6.59	558	182	0.32	9899	17.36
461	40	0.07	1363	2.39	510	80	0.14	3838	6.73	559	183	0.32	10082	17.68
462	27	0.05	1390	2.44	511	90	0.16	3928	6.89	560	198	0.35	10280	18.03
463	29	0.05	1419	2.49	512	79	0.14	4007	7.03	561	183	0.32	10463	18.35
464	29	0.05	1448	2.54	513	69	0.12	4076	7.15	562	213	0.37	10676	18.73
465	25	0.04	1473	2.58	514	97	0.17	4173	7.32	563	195	0.34	10871	19.07
466	27	0.05	1500	2.63	515	89	0.16	4262	7.48	564	192	0.34	11063	19.41
467	24	0.04	1524	2.67	516	76	0.13	4338	7.61	565	200	0.35	11263	19.76
468	25	0.04	1549	2.72	517	98	0.17	4436	7.78	566	216	0.38	11479	20.14
469	35	0.06	1584	2.78	518	88	0.15	4524	7.94	567	234	0.41	11713	20.55
470	40	0.07	1624	2.85	519	83	0.15	4607	8.08	568	238	0.42	11951	20.96
471	42	0.07	1666	2.92	520	113	0.20	4720	8.28	569	209	0.37	12160	21.33
472	36	0.06	1702	2.99	521	88	0.15	4808	8.43	570	255	0.45	12415	21.78
473	35	0.06	1737	3.05	522	86	0.15	4894	8.58	571	224	0.39	12639	22.17
474	30	0.05	1767	3.10	523	87	0.15	4981	8.74	572	255	0.45	12894	22.62
475	31	0.05	1798	3.15	524	102	0.18	5083	8.92	573	228	0.40	13122	23.02
476	39	0.07	1837	3.22	525	108	0.19	5191	9.11	574	243	0.43	13365	23.44
477	48	0.08	1885	3.31	526	103	0.18	5294	9.29	575	234	0.41	13599	23.85
478	39	0.07	1924	3.37	527	91	0.16	5385	9.45	576	246	0.43	13845	24.29
479	41	0.07	1965	3.45	528	119	0.21	5504	9.65	577	242	0.42	14087	24.71
480	45	0.08	2010	3.53	529	107	0.19	5611	9.84	578	248	0.44	14335	25.15
481	30	0.05	2040	3.58	530	103	0.18	5714	10.02	579	273	0.48	14608	25.62
482	58	0.10	2098	3.68	531	112	0.20	5826	10.22	580	256	0.45	14864	26.07
483	37	0.06	2135	3.75	532	119	0.21	5945	10.43	581	255	0.45	15119	26.52



**Table 167. Reading Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
582	251	0.44	15370	26.96	631	393	0.69	32557	57.11	680	211	0.37	49435	86.71
583	269	0.47	15639	27.43	632	393	0.69	32950	57.80	681	263	0.46	49698	87.18
584	281	0.49	15920	27.93	633	413	0.72	33363	58.52	682	228	0.40	49926	87.58
585	289	0.51	16209	28.43	634	426	0.75	33789	59.27	683	211	0.37	50137	87.95
586	292	0.51	16501	28.94	635	417	0.73	34206	60.00	684	233	0.41	50370	88.35
587	326	0.57	16827	29.52	636	367	0.64	34573	60.64	685	213	0.37	50583	88.73
588	287	0.50	17114	30.02	637	409	0.72	34982	61.36	686	232	0.41	50815	89.14
589	306	0.54	17420	30.56	638	402	0.71	35384	62.07	687	191	0.34	51006	89.47
590	325	0.57	17745	31.13	639	381	0.67	35765	62.74	688	196	0.34	51202	89.81
591	292	0.51	18037	31.64	640	385	0.68	36150	63.41	689	198	0.35	51400	90.16
592	325	0.57	18362	32.21	641	391	0.69	36541	64.10	690	183	0.32	51583	90.48
593	313	0.55	18675	32.76	642	406	0.71	36947	64.81	691	210	0.37	51793	90.85
594	315	0.55	18990	33.31	643	375	0.66	37322	65.47	692	177	0.31	51970	91.16
595	309	0.54	19299	33.85	644	388	0.68	37710	66.15	693	161	0.28	52131	91.44
596	305	0.54	19604	34.39	645	390	0.68	38100	66.83	694	172	0.30	52303	91.75
597	311	0.55	19915	34.93	646	424	0.74	38524	67.58	695	196	0.34	52499	92.09
598	335	0.59	20250	35.52	647	368	0.65	38892	68.22	696	157	0.28	52656	92.36
599	369	0.65	20619	36.17	648	390	0.68	39282	68.90	697	165	0.29	52821	92.65
600	349	0.61	20968	36.78	649	375	0.66	39657	69.56	698	144	0.25	52965	92.91
601	343	0.60	21311	37.38	650	380	0.67	40037	70.23	699	151	0.26	53116	93.17
602	349	0.61	21660	37.99	651	365	0.64	40402	70.87	700	129	0.23	53245	93.40
603	340	0.60	22000	38.59	652	352	0.62	40754	71.49	701	156	0.27	53401	93.67
604	289	0.51	22289	39.10	653	352	0.62	41106	72.10	702	146	0.26	53547	93.93
605	339	0.59	22628	39.69	654	338	0.59	41444	72.70	703	122	0.21	53669	94.14
606	338	0.59	22966	40.28	655	326	0.57	41770	73.27	704	114	0.20	53783	94.34
607	346	0.61	23312	40.89	656	362	0.63	42132	73.90	705	118	0.21	53901	94.55
608	350	0.61	23662	41.51	657	347	0.61	42479	74.51	706	110	0.19	54011	94.74
609	354	0.62	24016	42.13	658	379	0.66	42858	75.18	707	90	0.16	54101	94.90
610	341	0.60	24357	42.72	659	306	0.54	43164	75.71	708	106	0.19	54207	95.08
611	379	0.66	24736	43.39	660	360	0.63	43524	76.35	709	116	0.20	54323	95.29
612	385	0.68	25121	44.06	661	356	0.62	43880	76.97	710	112	0.20	54435	95.48
613	360	0.63	25481	44.70	662	346	0.61	44226	77.58	711	104	0.18	54539	95.67
614	353	0.62	25834	45.32	663	340	0.60	44566	78.17	712	83	0.15	54622	95.81
615	372	0.65	26206	45.97	664	351	0.62	44917	78.79	713	98	0.17	54720	95.98
616	402	0.71	26608	46.67	665	339	0.59	45256	79.38	714	79	0.14	54799	96.12
617	413	0.72	27021	47.40	666	323	0.57	45579	79.95	715	72	0.13	54871	96.25
618	397	0.70	27418	48.09	667	310	0.54	45889	80.49	716	78	0.14	54949	96.39
619	382	0.67	27800	48.76	668	297	0.52	46186	81.02	717	96	0.17	55045	96.55
620	363	0.64	28163	49.40	669	279	0.49	46465	81.50	718	79	0.14	55124	96.69
621	411	0.72	28574	50.12	670	321	0.56	46786	82.07	719	66	0.12	55190	96.81
622	422	0.74	28996	50.86	671	297	0.52	47083	82.59	720	71	0.12	55261	96.93
623	386	0.68	29382	51.54	672	283	0.50	47366	83.09	721	65	0.11	55326	97.05
624	384	0.67	29766	52.21	673	281	0.49	47647	83.58	722	67	0.12	55393	97.17
625	386	0.68	30152	52.89	674	261	0.46	47908	84.04	723	68	0.12	55461	97.28
626	382	0.67	30534	53.56	675	271	0.48	48179	84.51	724	71	0.12	55532	97.41
627	388	0.68	30922	54.24	676	269	0.47	48448	84.98	725	67	0.12	55599	97.53
628	393	0.69	31315	54.93	677	249	0.44	48697	85.42	726	54	0.09	55653	97.62
629	434	0.76	31749	55.69	678	262	0.46	48959	85.88	727	62	0.11	55715	97.73
630	415	0.73	32164	56.42	679	265	0.46	49224	86.34	728	55	0.10	55770	97.83



**Table 167. Reading Grade 5 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
729	49	0.09	55819	97.91	778	1	0.00	56853	99.73	840	1	0.00	56999	99.98
730	45	0.08	55864	97.99	779	12	0.02	56865	99.75	843	1	0.00	57000	99.98
731	55	0.10	55919	98.09	780	5	0.01	56870	99.76	851	1	0.00	57001	99.99
732	40	0.07	55959	98.16	781	4	0.01	56874	99.76	854	1	0.00	57002	99.99
733	29	0.05	55988	98.21	782	8	0.01	56882	99.78	869	1	0.00	57003	99.99
734	41	0.07	56029	98.28	783	4	0.01	56886	99.78	871	1	0.00	57004	99.99
735	39	0.07	56068	98.35	784	7	0.01	56893	99.80	874	1	0.00	57005	99.99
736	40	0.07	56108	98.42	785	8	0.01	56901	99.81	908	1	0.00	57006	99.99
737	37	0.06	56145	98.48	786	6	0.01	56907	99.82	928	1	0.00	57007	100.00
738	38	0.07	56183	98.55	787	3	0.01	56910	99.83	955	2	0.00	57009	100.00
739	34	0.06	56217	98.61	788	2	0.00	56912	99.83					
740	28	0.05	56245	98.66	789	4	0.01	56916	99.84					
741	24	0.04	56269	98.70	790	2	0.00	56918	99.84					
742	24	0.04	56293	98.74	791	1	0.00	56919	99.84					
743	29	0.05	56322	98.79	792	2	0.00	56921	99.85					
744	28	0.05	56350	98.84	793	3	0.01	56924	99.85					
745	25	0.04	56375	98.89	794	7	0.01	56931	99.86					
746	22	0.04	56397	98.93	795	4	0.01	56935	99.87					
747	28	0.05	56425	98.98	796	2	0.00	56937	99.87					
748	36	0.06	56461	99.04	797	2	0.00	56939	99.88					
749	21	0.04	56482	99.08	798	4	0.01	56943	99.88					
750	28	0.05	56510	99.12	799	2	0.00	56945	99.89					
751	19	0.03	56529	99.16	800	3	0.01	56948	99.89					
752	16	0.03	56545	99.19	801	2	0.00	56950	99.90					
753	22	0.04	56567	99.22	802	3	0.01	56953	99.90					
754	13	0.02	56580	99.25	804	1	0.00	56954	99.90					
755	14	0.02	56594	99.27	805	4	0.01	56958	99.91					
756	12	0.02	56606	99.29	806	4	0.01	56962	99.92					
757	18	0.03	56624	99.32	807	2	0.00	56964	99.92					
758	14	0.02	56638	99.35	808	1	0.00	56965	99.92					
759	13	0.02	56651	99.37	809	3	0.01	56968	99.93					
760	18	0.03	56669	99.40	810	4	0.01	56972	99.94					
761	11	0.02	56680	99.42	811	1	0.00	56973	99.94					
762	13	0.02	56693	99.45	812	1	0.00	56974	99.94					
763	18	0.03	56711	99.48	813	1	0.00	56975	99.94					
764	13	0.02	56724	99.50	814	1	0.00	56976	99.94					
765	10	0.02	56734	99.52	815	3	0.01	56979	99.95					
766	11	0.02	56745	99.54	816	1	0.00	56980	99.95					
767	12	0.02	56757	99.56	817	1	0.00	56981	99.95					
768	16	0.03	56773	99.59	819	1	0.00	56982	99.95					
769	17	0.03	56790	99.62	821	1	0.00	56983	99.95					
770	9	0.02	56799	99.63	827	3	0.01	56986	99.96					
771	10	0.02	56809	99.65	828	1	0.00	56987	99.96					
772	7	0.01	56816	99.66	830	4	0.01	56991	99.97					
773	11	0.02	56827	99.68	831	1	0.00	56992	99.97					
774	4	0.01	56831	99.69	832	1	0.00	56993	99.97					
775	7	0.01	56838	99.70	835	2	0.00	56995	99.98					
776	7	0.01	56845	99.71	836	2	0.00	56997	99.98					
777	7	0.01	56852	99.72	839	1	0.00	56998	99.98					



**Table 168. Writing Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
220	34	0.06	34	0.06	311	7	0.01	105	0.18	361	13	0.02	457	0.80
224	1	0.00	35	0.06	312	3	0.01	108	0.19	362	21	0.04	478	0.84
225	1	0.00	36	0.06	313	1	0.00	109	0.19	363	12	0.02	490	0.86
227	1	0.00	37	0.06	314	1	0.00	110	0.19	364	14	0.02	504	0.88
229	1	0.00	38	0.07	315	3	0.01	113	0.20	365	12	0.02	516	0.90
230	1	0.00	39	0.07	316	8	0.01	121	0.21	366	23	0.04	539	0.95
235	1	0.00	40	0.07	317	3	0.01	124	0.22	367	20	0.04	559	0.98
236	1	0.00	41	0.07	318	4	0.01	128	0.22	368	20	0.04	579	1.02
243	1	0.00	42	0.07	320	5	0.01	133	0.23	369	20	0.04	599	1.05
244	2	0.00	44	0.08	321	4	0.01	137	0.24	370	23	0.04	622	1.09
246	1	0.00	45	0.08	322	2	0.00	139	0.24	371	15	0.03	637	1.12
249	1	0.00	46	0.08	323	4	0.01	143	0.25	372	18	0.03	655	1.15
252	1	0.00	47	0.08	324	5	0.01	148	0.26	373	22	0.04	677	1.19
253	1	0.00	48	0.08	325	4	0.01	152	0.27	374	18	0.03	695	1.22
256	1	0.00	49	0.09	326	7	0.01	159	0.28	375	20	0.04	715	1.25
261	2	0.00	51	0.09	327	8	0.01	167	0.29	376	32	0.06	747	1.31
262	3	0.01	54	0.09	328	3	0.01	170	0.30	377	23	0.04	770	1.35
264	1	0.00	55	0.10	329	3	0.01	173	0.30	378	22	0.04	792	1.39
269	1	0.00	56	0.10	330	7	0.01	180	0.32	379	36	0.06	828	1.45
274	1	0.00	57	0.10	331	4	0.01	184	0.32	380	30	0.05	858	1.50
276	1	0.00	58	0.10	332	7	0.01	191	0.33	381	24	0.04	882	1.55
278	2	0.00	60	0.11	333	7	0.01	198	0.35	382	34	0.06	916	1.61
280	1	0.00	61	0.11	334	5	0.01	203	0.36	383	34	0.06	950	1.67
281	1	0.00	62	0.11	335	4	0.01	207	0.36	384	28	0.05	978	1.72
282	1	0.00	63	0.11	336	2	0.00	209	0.37	385	27	0.05	1005	1.76
283	3	0.01	66	0.12	337	8	0.01	217	0.38	386	30	0.05	1035	1.82
285	1	0.00	67	0.12	338	6	0.01	223	0.39	387	41	0.07	1076	1.89
286	1	0.00	68	0.12	339	7	0.01	230	0.40	388	53	0.09	1129	1.98
287	1	0.00	69	0.12	340	6	0.01	236	0.41	389	42	0.07	1171	2.05
288	1	0.00	70	0.12	341	7	0.01	243	0.43	390	31	0.05	1202	2.11
289	1	0.00	71	0.12	342	6	0.01	249	0.44	391	52	0.09	1254	2.20
291	1	0.00	72	0.13	343	4	0.01	253	0.44	392	32	0.06	1286	2.26
292	1	0.00	73	0.13	344	8	0.01	261	0.46	393	56	0.10	1342	2.35
293	1	0.00	74	0.13	345	13	0.02	274	0.48	394	42	0.07	1384	2.43
294	1	0.00	75	0.13	346	9	0.02	283	0.50	395	43	0.08	1427	2.50
296	1	0.00	76	0.13	347	7	0.01	290	0.51	396	55	0.10	1482	2.60
297	1	0.00	77	0.14	348	9	0.02	299	0.52	397	42	0.07	1524	2.67
298	1	0.00	78	0.14	349	15	0.03	314	0.55	398	55	0.10	1579	2.77
299	2	0.00	80	0.14	350	6	0.01	320	0.56	399	48	0.08	1627	2.85
300	2	0.00	82	0.14	351	11	0.02	331	0.58	400	58	0.10	1685	2.96
301	1	0.00	83	0.15	352	14	0.02	345	0.61	401	70	0.12	1755	3.08
303	2	0.00	85	0.15	353	13	0.02	358	0.63	402	66	0.12	1821	3.19
304	2	0.00	87	0.15	354	17	0.03	375	0.66	403	65	0.11	1886	3.31
305	2	0.00	89	0.16	355	14	0.02	389	0.68	404	63	0.11	1949	3.42
306	1	0.00	90	0.16	356	7	0.01	396	0.69	405	71	0.12	2020	3.54
307	3	0.01	93	0.16	357	18	0.03	414	0.73	406	64	0.11	2084	3.65
308	1	0.00	94	0.16	358	9	0.02	423	0.74	407	78	0.14	2162	3.79
309	2	0.00	96	0.17	359	12	0.02	435	0.76	408	85	0.15	2247	3.94
310	2	0.00	98	0.17	360	9	0.02	444	0.78	409	85	0.15	2332	4.09



**Table 168. Writing Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
410	96	0.17	2428	4.26	459	250	0.44	10480	18.38	508	440	0.77	27594	48.39
411	91	0.16	2519	4.42	460	282	0.49	10762	18.87	509	443	0.78	28037	49.17
412	105	0.18	2624	4.60	461	257	0.45	11019	19.33	510	396	0.69	28433	49.87
413	107	0.19	2731	4.79	462	251	0.44	11270	19.77	511	412	0.72	28845	50.59
414	94	0.16	2825	4.95	463	246	0.43	11516	20.20	512	393	0.69	29238	51.28
415	115	0.20	2940	5.16	464	264	0.46	11780	20.66	513	423	0.74	29661	52.02
416	115	0.20	3055	5.36	465	274	0.48	12054	21.14	514	429	0.75	30090	52.77
417	93	0.16	3148	5.52	466	293	0.51	12347	21.65	515	440	0.77	30530	53.54
418	115	0.20	3263	5.72	467	226	0.40	12573	22.05	516	437	0.77	30967	54.31
419	107	0.19	3370	5.91	468	277	0.49	12850	22.54	517	423	0.74	31390	55.05
420	120	0.21	3490	6.12	469	305	0.53	13155	23.07	518	395	0.69	31785	55.74
421	121	0.21	3611	6.33	470	299	0.52	13454	23.60	519	432	0.76	32217	56.50
422	102	0.18	3713	6.51	471	310	0.54	13764	24.14	520	420	0.74	32637	57.24
423	122	0.21	3835	6.73	472	305	0.53	14069	24.67	521	466	0.82	33103	58.06
424	109	0.19	3944	6.92	473	324	0.57	14393	25.24	522	413	0.72	33516	58.78
425	152	0.27	4096	7.18	474	297	0.52	14690	25.76	523	385	0.68	33901	59.46
426	127	0.22	4223	7.41	475	325	0.57	15015	26.33	524	423	0.74	34324	60.20
427	110	0.19	4333	7.60	476	312	0.55	15327	26.88	525	383	0.67	34707	60.87
428	127	0.22	4460	7.82	477	348	0.61	15675	27.49	526	429	0.75	35136	61.62
429	144	0.25	4604	8.07	478	326	0.57	16001	28.06	527	426	0.75	35562	62.37
430	138	0.24	4742	8.32	479	368	0.65	16369	28.71	528	429	0.75	35991	63.12
431	141	0.25	4883	8.56	480	359	0.63	16728	29.34	529	412	0.72	36403	63.84
432	158	0.28	5041	8.84	481	340	0.60	17068	29.93	530	356	0.62	36759	64.47
433	154	0.27	5195	9.11	482	342	0.60	17410	30.53	531	334	0.59	37093	65.05
434	163	0.29	5358	9.40	483	356	0.62	17766	31.16	532	374	0.66	37467	65.71
435	164	0.29	5522	9.68	484	360	0.63	18126	31.79	533	414	0.73	37881	66.44
436	159	0.28	5681	9.96	485	335	0.59	18461	32.38	534	374	0.66	38255	67.09
437	166	0.29	5847	10.25	486	342	0.60	18803	32.98	535	354	0.62	38609	67.71
438	160	0.28	6007	10.54	487	387	0.68	19190	33.66	536	350	0.61	38959	68.33
439	154	0.27	6161	10.81	488	360	0.63	19550	34.29	537	354	0.62	39313	68.95
440	178	0.31	6339	11.12	489	392	0.69	19942	34.97	538	406	0.71	39719	69.66
441	196	0.34	6535	11.46	490	385	0.68	20327	35.65	539	370	0.65	40089	70.31
442	195	0.34	6730	11.80	491	384	0.67	20711	36.32	540	371	0.65	40460	70.96
443	226	0.40	6956	12.20	492	390	0.68	21101	37.01	541	338	0.59	40798	71.55
444	192	0.34	7148	12.54	493	359	0.63	21460	37.64	542	345	0.61	41143	72.16
445	180	0.32	7328	12.85	494	386	0.68	21846	38.31	543	347	0.61	41490	72.77
446	217	0.38	7545	13.23	495	382	0.67	22228	38.98	544	356	0.62	41846	73.39
447	194	0.34	7739	13.57	496	454	0.80	22682	39.78	545	346	0.61	42192	74.00
448	221	0.39	7960	13.96	497	405	0.71	23087	40.49	546	312	0.55	42504	74.54
449	208	0.36	8168	14.33	498	359	0.63	23446	41.12	547	361	0.63	42865	75.18
450	193	0.34	8361	14.66	499	409	0.72	23855	41.84	548	310	0.54	43175	75.72
451	215	0.38	8576	15.04	500	373	0.65	24228	42.49	549	350	0.61	43525	76.33
452	230	0.40	8806	15.44	501	425	0.75	24653	43.24	550	304	0.53	43829	76.87
453	241	0.42	9047	15.87	502	394	0.69	25047	43.93	551	313	0.55	44142	77.42
454	235	0.41	9282	16.28	503	436	0.76	25483	44.69	552	330	0.58	44472	78.00
455	243	0.43	9525	16.70	504	410	0.72	25893	45.41	553	318	0.56	44790	78.55
456	226	0.40	9751	17.10	505	432	0.76	26325	46.17	554	340	0.60	45130	79.15
457	224	0.39	9975	17.49	506	408	0.72	26733	46.88	555	293	0.51	45423	79.66
458	255	0.45	10230	17.94	507	421	0.74	27154	47.62	556	296	0.52	45719	80.18



**Table 168. Writing Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
557	289	0.51	46008	80.69	606	100	0.18	54438	95.47	655	23	0.04	56532	99.15
558	293	0.51	46301	81.20	607	93	0.16	54531	95.64	656	16	0.03	56548	99.17
559	250	0.44	46551	81.64	608	72	0.13	54603	95.76	657	29	0.05	56577	99.22
560	273	0.48	46824	82.12	609	71	0.12	54674	95.89	658	8	0.01	56585	99.24
561	231	0.41	47055	82.53	610	60	0.11	54734	95.99	659	15	0.03	56600	99.27
562	271	0.48	47326	83.00	611	50	0.09	54784	96.08	660	17	0.03	56617	99.29
563	262	0.46	47588	83.46	612	58	0.10	54842	96.18	661	8	0.01	56625	99.31
564	261	0.46	47849	83.92	613	53	0.09	54895	96.27	662	16	0.03	56641	99.34
565	261	0.46	48110	84.38	614	74	0.13	54969	96.40	663	6	0.01	56647	99.35
566	246	0.43	48356	84.81	615	71	0.12	55040	96.53	664	6	0.01	56653	99.36
567	235	0.41	48591	85.22	616	85	0.15	55125	96.68	665	12	0.02	56665	99.38
568	232	0.41	48823	85.63	617	53	0.09	55178	96.77	666	12	0.02	56677	99.40
569	250	0.44	49073	86.06	618	89	0.16	55267	96.93	667	8	0.01	56685	99.41
570	190	0.33	49263	86.40	619	60	0.11	55327	97.03	668	8	0.01	56693	99.43
571	197	0.35	49460	86.74	620	75	0.13	55402	97.16	669	7	0.01	56700	99.44
572	215	0.38	49675	87.12	621	56	0.10	55458	97.26	670	7	0.01	56707	99.45
573	197	0.35	49872	87.47	622	70	0.12	55528	97.39	671	8	0.01	56715	99.47
574	205	0.36	50077	87.83	623	47	0.08	55575	97.47	672	9	0.02	56724	99.48
575	194	0.34	50271	88.17	624	39	0.07	55614	97.54	673	24	0.04	56748	99.52
576	176	0.31	50447	88.47	625	46	0.08	55660	97.62	674	7	0.01	56755	99.54
577	179	0.31	50626	88.79	626	31	0.05	55691	97.67	675	9	0.02	56764	99.55
578	186	0.33	50812	89.11	627	41	0.07	55732	97.74	676	8	0.01	56772	99.57
579	164	0.29	50976	89.40	628	31	0.05	55763	97.80	677	4	0.01	56776	99.57
580	198	0.35	51174	89.75	629	39	0.07	55802	97.87	678	10	0.02	56786	99.59
581	161	0.28	51335	90.03	630	50	0.09	55852	97.95	679	36	0.06	56822	99.65
582	149	0.26	51484	90.29	631	50	0.09	55902	98.04	680	1	0.00	56823	99.66
583	146	0.26	51630	90.55	632	36	0.06	55938	98.10	681	9	0.02	56832	99.67
584	150	0.26	51780	90.81	633	38	0.07	55976	98.17	682	2	0.00	56834	99.68
585	158	0.28	51938	91.09	634	57	0.10	56033	98.27	683	2	0.00	56836	99.68
586	149	0.26	52087	91.35	635	30	0.05	56063	98.32	685	5	0.01	56841	99.69
587	139	0.24	52226	91.59	636	37	0.06	56100	98.39	686	5	0.01	56846	99.70
588	150	0.26	52376	91.86	637	41	0.07	56141	98.46	687	3	0.01	56849	99.70
589	131	0.23	52507	92.09	638	31	0.05	56172	98.51	688	2	0.00	56851	99.71
590	116	0.20	52623	92.29	639	24	0.04	56196	98.56	689	3	0.01	56854	99.71
591	124	0.22	52747	92.51	640	20	0.04	56216	98.59	690	2	0.00	56856	99.71
592	132	0.23	52879	92.74	641	24	0.04	56240	98.63	691	5	0.01	56861	99.72
593	128	0.22	53007	92.96	642	19	0.03	56259	98.67	693	2	0.00	56863	99.73
594	125	0.22	53132	93.18	643	20	0.04	56279	98.70	694	1	0.00	56864	99.73
595	139	0.24	53271	93.43	644	9	0.02	56288	98.72	695	4	0.01	56868	99.74
596	131	0.23	53402	93.66	645	13	0.02	56301	98.74	696	1	0.00	56869	99.74
597	138	0.24	53540	93.90	646	18	0.03	56319	98.77	697	3	0.01	56872	99.74
598	106	0.19	53646	94.08	647	26	0.05	56345	98.82	698	2	0.00	56874	99.75
599	104	0.18	53750	94.27	648	20	0.04	56365	98.85	699	10	0.02	56884	99.76
600	107	0.19	53857	94.45	649	15	0.03	56380	98.88	700	7	0.01	56891	99.78
601	98	0.17	53955	94.63	650	18	0.03	56398	98.91	701	13	0.02	56904	99.80
602	80	0.14	54035	94.77	651	34	0.06	56432	98.97	703	2	0.00	56906	99.80
603	113	0.20	54148	94.96	652	20	0.04	56452	99.01	704	2	0.00	56908	99.81
604	97	0.17	54245	95.13	653	44	0.08	56496	99.08	705	3	0.01	56911	99.81
605	93	0.16	54338	95.30	654	13	0.02	56509	99.11	706	8	0.01	56919	99.82



**Table 168. Writing Grade 5 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
709	19	0.03	56938	99.86
710	2	0.00	56940	99.86
711	14	0.02	56954	99.89
712	2	0.00	56956	99.89
713	4	0.01	56960	99.90
714	1	0.00	56961	99.90
715	1	0.00	56962	99.90
716	2	0.00	56964	99.90
717	2	0.00	56966	99.91
718	1	0.00	56967	99.91
719	4	0.01	56971	99.92
720	5	0.01	56976	99.92
725	1	0.00	56977	99.93
734	1	0.00	56978	99.93
739	3	0.01	56981	99.93
740	2	0.00	56983	99.94
741	9	0.02	56992	99.95
746	1	0.00	56993	99.95
755	7	0.01	57000	99.97
759	8	0.01	57008	99.98
762	1	0.00	57009	99.98
768	2	0.00	57011	99.99
776	2	0.00	57013	99.99
780	6	0.01	57019	100.00



**Table 169. Mathematics Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
220	26	0.05	26	0.05	286	1	0.00	110	0.19	335	9	0.02	450	0.79
222	2	0.00	28	0.05	287	2	0.00	112	0.20	336	11	0.02	461	0.81
224	1	0.00	29	0.05	288	2	0.00	114	0.20	337	10	0.02	471	0.82
227	1	0.00	30	0.05	289	2	0.00	116	0.20	338	9	0.02	480	0.84
233	2	0.00	32	0.06	290	5	0.01	121	0.21	339	14	0.02	494	0.87
234	1	0.00	33	0.06	291	5	0.01	126	0.22	340	9	0.02	503	0.88
235	3	0.01	36	0.06	292	5	0.01	131	0.23	341	19	0.03	522	0.91
236	1	0.00	37	0.06	293	5	0.01	136	0.24	342	17	0.03	539	0.94
240	1	0.00	38	0.07	294	3	0.01	139	0.24	343	15	0.03	554	0.97
242	1	0.00	39	0.07	295	2	0.00	141	0.25	344	11	0.02	565	0.99
243	1	0.00	40	0.07	296	3	0.01	144	0.25	345	15	0.03	580	1.02
244	1	0.00	41	0.07	297	3	0.01	147	0.26	346	12	0.02	592	1.04
245	1	0.00	42	0.07	298	9	0.02	156	0.27	347	22	0.04	614	1.08
246	1	0.00	43	0.08	299	5	0.01	161	0.28	348	14	0.02	628	1.10
247	1	0.00	44	0.08	300	5	0.01	166	0.29	349	17	0.03	645	1.13
248	3	0.01	47	0.08	301	10	0.02	176	0.31	350	26	0.05	671	1.18
249	1	0.00	48	0.08	302	9	0.02	185	0.32	351	19	0.03	690	1.21
250	1	0.00	49	0.09	303	5	0.01	190	0.33	352	19	0.03	709	1.24
251	2	0.00	51	0.09	304	3	0.01	193	0.34	353	13	0.02	722	1.26
252	1	0.00	52	0.09	305	6	0.01	199	0.35	354	17	0.03	739	1.29
253	2	0.00	54	0.09	306	7	0.01	206	0.36	355	26	0.05	765	1.34
254	2	0.00	56	0.10	307	6	0.01	212	0.37	356	21	0.04	786	1.38
255	1	0.00	57	0.10	308	5	0.01	217	0.38	357	22	0.04	808	1.42
256	1	0.00	58	0.10	309	5	0.01	222	0.39	358	17	0.03	825	1.44
258	2	0.00	60	0.11	310	5	0.01	227	0.40	359	33	0.06	858	1.50
259	2	0.00	62	0.11	311	9	0.02	236	0.41	360	30	0.05	888	1.56
260	2	0.00	64	0.11	312	6	0.01	242	0.42	361	26	0.05	914	1.60
261	2	0.00	66	0.12	313	3	0.01	245	0.43	362	27	0.05	941	1.65
263	2	0.00	68	0.12	314	2	0.00	247	0.43	363	13	0.02	954	1.67
264	1	0.00	69	0.12	315	7	0.01	254	0.44	364	38	0.07	992	1.74
265	2	0.00	71	0.12	316	8	0.01	262	0.46	365	33	0.06	1025	1.80
266	3	0.01	74	0.13	317	13	0.02	275	0.48	366	29	0.05	1054	1.85
267	1	0.00	75	0.13	318	4	0.01	279	0.49	367	35	0.06	1089	1.91
268	2	0.00	77	0.13	319	7	0.01	286	0.50	368	36	0.06	1125	1.97
270	5	0.01	82	0.14	320	13	0.02	299	0.52	369	28	0.05	1153	2.02
271	2	0.00	84	0.15	321	10	0.02	309	0.54	370	32	0.06	1185	2.08
272	1	0.00	85	0.15	322	10	0.02	319	0.56	371	42	0.07	1227	2.15
273	4	0.01	89	0.16	323	11	0.02	330	0.58	372	40	0.07	1267	2.22
274	5	0.01	94	0.16	324	4	0.01	334	0.58	373	26	0.05	1293	2.26
275	2	0.00	96	0.17	325	13	0.02	347	0.61	374	33	0.06	1326	2.32
277	1	0.00	97	0.17	326	12	0.02	359	0.63	375	47	0.08	1373	2.40
278	1	0.00	98	0.17	327	10	0.02	369	0.65	376	37	0.06	1410	2.47
279	2	0.00	100	0.18	328	8	0.01	377	0.66	377	42	0.07	1452	2.54
280	2	0.00	102	0.18	329	9	0.02	386	0.68	378	39	0.07	1491	2.61
281	1	0.00	103	0.18	330	7	0.01	393	0.69	379	36	0.06	1527	2.67
282	1	0.00	104	0.18	331	8	0.01	401	0.70	380	43	0.08	1570	2.75
283	1	0.00	105	0.18	332	12	0.02	413	0.72	381	49	0.09	1619	2.84
284	2	0.00	107	0.19	333	12	0.02	425	0.74	382	55	0.10	1674	2.93
285	2	0.00	109	0.19	334	16	0.03	441	0.77	383	43	0.08	1717	3.01



**Table 169. Mathematics Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
384	57	0.10	1774	3.11	433	160	0.28	6369	11.15	482	267	0.47	16761	29.36
385	57	0.10	1831	3.21	434	148	0.26	6517	11.41	483	249	0.44	17010	29.79
386	49	0.09	1880	3.29	435	152	0.27	6669	11.68	484	282	0.49	17292	30.29
387	56	0.10	1936	3.39	436	152	0.27	6821	11.95	485	259	0.45	17551	30.74
388	51	0.09	1987	3.48	437	153	0.27	6974	12.21	486	269	0.47	17820	31.21
389	47	0.08	2034	3.56	438	160	0.28	7134	12.49	487	262	0.46	18082	31.67
390	62	0.11	2096	3.67	439	182	0.32	7316	12.81	488	302	0.53	18384	32.20
391	60	0.11	2156	3.78	440	157	0.27	7473	13.09	489	270	0.47	18654	32.67
392	65	0.11	2221	3.89	441	196	0.34	7669	13.43	490	278	0.49	18932	33.16
393	52	0.09	2273	3.98	442	162	0.28	7831	13.72	491	286	0.50	19218	33.66
394	55	0.10	2328	4.08	443	173	0.30	8004	14.02	492	289	0.51	19507	34.17
395	58	0.10	2386	4.18	444	173	0.30	8177	14.32	493	267	0.47	19774	34.63
396	69	0.12	2455	4.30	445	196	0.34	8373	14.66	494	289	0.51	20063	35.14
397	72	0.13	2527	4.43	446	176	0.31	8549	14.97	495	297	0.52	20360	35.66
398	79	0.14	2606	4.56	447	185	0.32	8734	15.30	496	301	0.53	20661	36.19
399	71	0.12	2677	4.69	448	217	0.38	8951	15.68	497	301	0.53	20962	36.71
400	85	0.15	2762	4.84	449	185	0.32	9136	16.00	498	296	0.52	21258	37.23
401	81	0.14	2843	4.98	450	179	0.31	9315	16.31	499	310	0.54	21568	37.77
402	62	0.11	2905	5.09	451	179	0.31	9494	16.63	500	287	0.50	21855	38.28
403	84	0.15	2989	5.24	452	217	0.38	9711	17.01	501	288	0.50	22143	38.78
404	92	0.16	3081	5.40	453	177	0.31	9888	17.32	502	294	0.51	22437	39.30
405	73	0.13	3154	5.52	454	200	0.35	10088	17.67	503	293	0.51	22730	39.81
406	94	0.16	3248	5.69	455	210	0.37	10298	18.04	504	291	0.51	23021	40.32
407	100	0.18	3348	5.86	456	213	0.37	10511	18.41	505	320	0.56	23341	40.88
408	79	0.14	3427	6.00	457	210	0.37	10721	18.78	506	341	0.60	23682	41.48
409	93	0.16	3520	6.17	458	195	0.34	10916	19.12	507	313	0.55	23995	42.03
410	74	0.13	3594	6.29	459	201	0.35	11117	19.47	508	298	0.52	24293	42.55
411	100	0.18	3694	6.47	460	232	0.41	11349	19.88	509	329	0.58	24622	43.12
412	110	0.19	3804	6.66	461	217	0.38	11566	20.26	510	310	0.54	24932	43.67
413	91	0.16	3895	6.82	462	250	0.44	11816	20.69	511	280	0.49	25212	44.16
414	115	0.20	4010	7.02	463	201	0.35	12017	21.05	512	298	0.52	25510	44.68
415	97	0.17	4107	7.19	464	231	0.40	12248	21.45	513	324	0.57	25834	45.25
416	111	0.19	4218	7.39	465	241	0.42	12489	21.87	514	347	0.61	26181	45.85
417	116	0.20	4334	7.59	466	250	0.44	12739	22.31	515	314	0.55	26495	46.40
418	126	0.22	4460	7.81	467	214	0.37	12953	22.69	516	304	0.53	26799	46.94
419	120	0.21	4580	8.02	468	192	0.34	13145	23.02	517	347	0.61	27146	47.54
420	99	0.17	4679	8.19	469	232	0.41	13377	23.43	518	337	0.59	27483	48.13
421	118	0.21	4797	8.40	470	245	0.43	13622	23.86	519	309	0.54	27792	48.68
422	129	0.23	4926	8.63	471	235	0.41	13857	24.27	520	304	0.53	28096	49.21
423	133	0.23	5059	8.86	472	258	0.45	14115	24.72	521	316	0.55	28412	49.76
424	112	0.20	5171	9.06	473	259	0.45	14374	25.18	522	315	0.55	28727	50.31
425	129	0.23	5300	9.28	474	252	0.44	14626	25.62	523	367	0.64	29094	50.96
426	106	0.19	5406	9.47	475	225	0.39	14851	26.01	524	334	0.58	29428	51.54
427	123	0.22	5529	9.68	476	242	0.42	15093	26.43	525	318	0.56	29746	52.10
428	131	0.23	5660	9.91	477	302	0.53	15395	26.96	526	345	0.60	30091	52.70
429	133	0.23	5793	10.15	478	280	0.49	15675	27.45	527	275	0.48	30366	53.18
430	132	0.23	5925	10.38	479	285	0.50	15960	27.95	528	351	0.61	30717	53.80
431	143	0.25	6068	10.63	480	261	0.46	16221	28.41	529	324	0.57	31041	54.37
432	141	0.25	6209	10.87	481	273	0.48	16494	28.89	530	354	0.62	31395	54.99



**Table 169. Mathematics Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
531	358	0.63	31753	55.61	580	240	0.42	45997	80.56	629	82	0.14	53820	94.26
532	316	0.55	32069	56.17	581	251	0.44	46248	81.00	630	84	0.15	53904	94.41
533	333	0.58	32402	56.75	582	216	0.38	46464	81.38	631	89	0.16	53993	94.57
534	350	0.61	32752	57.36	583	245	0.43	46709	81.81	632	88	0.15	54081	94.72
535	327	0.57	33079	57.94	584	220	0.39	46929	82.19	633	78	0.14	54159	94.86
536	331	0.58	33410	58.52	585	202	0.35	47131	82.55	634	83	0.15	54242	95.00
537	321	0.56	33731	59.08	586	213	0.37	47344	82.92	635	74	0.13	54316	95.13
538	332	0.58	34063	59.66	587	209	0.37	47553	83.29	636	92	0.16	54408	95.29
539	325	0.57	34388	60.23	588	194	0.34	47747	83.63	637	86	0.15	54494	95.44
540	290	0.51	34678	60.74	589	196	0.34	47943	83.97	638	84	0.15	54578	95.59
541	318	0.56	34996	61.29	590	215	0.38	48158	84.35	639	73	0.13	54651	95.72
542	353	0.62	35349	61.91	591	215	0.38	48373	84.72	640	87	0.15	54738	95.87
543	369	0.65	35718	62.56	592	186	0.33	48559	85.05	641	67	0.12	54805	95.99
544	319	0.56	36037	63.12	593	172	0.30	48731	85.35	642	75	0.13	54880	96.12
545	313	0.55	36350	63.66	594	168	0.29	48899	85.64	643	71	0.12	54951	96.24
546	318	0.56	36668	64.22	595	199	0.35	49098	85.99	644	63	0.11	55014	96.35
547	356	0.62	37024	64.85	596	206	0.36	49304	86.35	645	54	0.09	55068	96.45
548	310	0.54	37334	65.39	597	188	0.33	49492	86.68	646	62	0.11	55130	96.56
549	312	0.55	37646	65.93	598	190	0.33	49682	87.01	647	49	0.09	55179	96.64
550	288	0.50	37934	66.44	599	174	0.30	49856	87.32	648	61	0.11	55240	96.75
551	284	0.50	38218	66.94	600	159	0.28	50015	87.60	649	53	0.09	55293	96.84
552	298	0.52	38516	67.46	601	188	0.33	50203	87.93	650	53	0.09	55346	96.93
553	298	0.52	38814	67.98	602	161	0.28	50364	88.21	651	53	0.09	55399	97.03
554	299	0.52	39113	68.50	603	189	0.33	50553	88.54	652	42	0.07	55441	97.10
555	307	0.54	39420	69.04	604	138	0.24	50691	88.78	653	37	0.06	55478	97.17
556	277	0.49	39697	69.53	605	169	0.30	50860	89.08	654	36	0.06	55514	97.23
557	301	0.53	39998	70.05	606	145	0.25	51005	89.33	655	37	0.06	55551	97.29
558	262	0.46	40260	70.51	607	162	0.28	51167	89.62	656	46	0.08	55597	97.37
559	279	0.49	40539	71.00	608	153	0.27	51320	89.88	657	50	0.09	55647	97.46
560	281	0.49	40820	71.49	609	137	0.24	51457	90.12	658	33	0.06	55680	97.52
561	267	0.47	41087	71.96	610	161	0.28	51618	90.41	659	40	0.07	55720	97.59
562	292	0.51	41379	72.47	611	127	0.22	51745	90.63	660	41	0.07	55761	97.66
563	248	0.43	41627	72.91	612	130	0.23	51875	90.86	661	41	0.07	55802	97.73
564	268	0.47	41895	73.38	613	132	0.23	52007	91.09	662	37	0.06	55839	97.80
565	270	0.47	42165	73.85	614	122	0.21	52129	91.30	663	24	0.04	55863	97.84
566	241	0.42	42406	74.27	615	132	0.23	52261	91.53	664	39	0.07	55902	97.91
567	270	0.47	42676	74.74	616	125	0.22	52386	91.75	665	25	0.04	55927	97.95
568	268	0.47	42944	75.21	617	124	0.22	52510	91.97	666	25	0.04	55952	98.00
569	258	0.45	43202	75.67	618	113	0.20	52623	92.17	667	23	0.04	55975	98.04
570	278	0.49	43480	76.15	619	132	0.23	52755	92.40	668	22	0.04	55997	98.08
571	267	0.47	43747	76.62	620	113	0.20	52868	92.59	669	29	0.05	56026	98.13
572	259	0.45	44006	77.07	621	118	0.21	52986	92.80	670	27	0.05	56053	98.17
573	228	0.40	44234	77.47	622	122	0.21	53108	93.02	671	30	0.05	56083	98.23
574	258	0.45	44492	77.92	623	110	0.19	53218	93.21	672	48	0.08	56131	98.31
575	256	0.45	44748	78.37	624	109	0.19	53327	93.40	673	24	0.04	56155	98.35
576	271	0.47	45019	78.85	625	103	0.18	53430	93.58	674	17	0.03	56172	98.38
577	272	0.48	45291	79.32	626	94	0.16	53524	93.74	675	30	0.05	56202	98.43
578	222	0.39	45513	79.71	627	95	0.17	53619	93.91	676	19	0.03	56221	98.47
579	244	0.43	45757	80.14	628	119	0.21	53738	94.12	677	16	0.03	56237	98.50



**Table 169. Mathematics Grade 5 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
678	14	0.02	56251	98.52	730	10	0.02	56820	99.52
679	30	0.05	56281	98.57	731	3	0.01	56823	99.52
680	18	0.03	56299	98.60	733	11	0.02	56834	99.54
681	17	0.03	56316	98.63	734	30	0.05	56864	99.59
682	25	0.04	56341	98.68	735	3	0.01	56867	99.60
683	11	0.02	56352	98.70	736	8	0.01	56875	99.61
684	22	0.04	56374	98.74	737	3	0.01	56878	99.62
685	18	0.03	56392	98.77	738	1	0.00	56879	99.62
686	17	0.03	56409	98.80	739	2	0.00	56881	99.62
687	16	0.03	56425	98.82	740	1	0.00	56882	99.63
688	15	0.03	56440	98.85	741	1	0.00	56883	99.63
689	14	0.02	56454	98.88	744	5	0.01	56888	99.64
690	12	0.02	56466	98.90	747	3	0.01	56891	99.64
691	16	0.03	56482	98.92	748	15	0.03	56906	99.67
692	8	0.01	56490	98.94	750	5	0.01	56911	99.68
693	7	0.01	56497	98.95	751	7	0.01	56918	99.69
694	20	0.04	56517	98.99	752	2	0.00	56920	99.69
695	16	0.03	56533	99.01	753	1	0.00	56921	99.69
696	14	0.02	56547	99.04	754	10	0.02	56931	99.71
697	20	0.04	56567	99.07	755	4	0.01	56935	99.72
698	11	0.02	56578	99.09	756	9	0.02	56944	99.73
699	11	0.02	56589	99.11	758	1	0.00	56945	99.74
700	7	0.01	56596	99.12	759	2	0.00	56947	99.74
701	15	0.03	56611	99.15	762	5	0.01	56952	99.75
702	11	0.02	56622	99.17	763	3	0.01	56955	99.75
703	24	0.04	56646	99.21	767	2	0.00	56957	99.76
704	10	0.02	56656	99.23	768	13	0.02	56970	99.78
705	10	0.02	56666	99.25	774	26	0.05	56996	99.82
706	3	0.01	56669	99.25	775	5	0.01	57001	99.83
707	9	0.02	56678	99.27	800	95	0.17	57096	100.00
708	5	0.01	56683	99.28					
709	7	0.01	56690	99.29					
711	16	0.03	56706	99.32					
712	6	0.01	56712	99.33					
713	10	0.02	56722	99.34					
714	7	0.01	56729	99.36					
715	9	0.02	56738	99.37					
716	3	0.01	56741	99.38					
717	4	0.01	56745	99.39					
718	8	0.01	56753	99.40					
719	2	0.00	56755	99.40					
720	3	0.01	56758	99.41					
721	15	0.03	56773	99.43					
722	11	0.02	56784	99.45					
723	1	0.00	56785	99.46					
724	7	0.01	56792	99.47					
725	15	0.03	56807	99.49					
728	2	0.00	56809	99.50					
729	1	0.00	56810	99.50					



**Table 170. Science Grade 5 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	338	0.59	338	0.59	349	47	0.08	1264	2.22	398	93	0.16	4410	7.73
301	7	0.01	345	0.60	350	38	0.07	1302	2.28	399	112	0.20	4522	7.93
302	12	0.02	357	0.63	351	29	0.05	1331	2.33	400	107	0.19	4629	8.11
303	8	0.01	365	0.64	352	35	0.06	1366	2.39	401	117	0.21	4746	8.32
304	6	0.01	371	0.65	353	34	0.06	1400	2.45	402	130	0.23	4876	8.55
305	9	0.02	380	0.67	354	28	0.05	1428	2.50	403	117	0.21	4993	8.75
306	10	0.02	390	0.68	355	37	0.06	1465	2.57	404	114	0.20	5107	8.95
307	15	0.03	405	0.71	356	44	0.08	1509	2.64	405	139	0.24	5246	9.19
308	11	0.02	416	0.73	357	41	0.07	1550	2.72	406	110	0.19	5356	9.39
309	7	0.01	423	0.74	358	45	0.08	1595	2.80	407	121	0.21	5477	9.60
310	7	0.01	430	0.75	359	35	0.06	1630	2.86	408	129	0.23	5606	9.83
311	17	0.03	447	0.78	360	41	0.07	1671	2.93	409	126	0.22	5732	10.05
312	7	0.01	454	0.80	361	51	0.09	1722	3.02	410	133	0.23	5865	10.28
313	12	0.02	466	0.82	362	54	0.09	1776	3.11	411	143	0.25	6008	10.53
314	13	0.02	479	0.84	363	52	0.09	1828	3.20	412	148	0.26	6156	10.79
315	9	0.02	488	0.86	364	48	0.08	1876	3.29	413	162	0.28	6318	11.07
316	18	0.03	506	0.89	365	54	0.09	1930	3.38	414	152	0.27	6470	11.34
317	13	0.02	519	0.91	366	57	0.10	1987	3.48	415	149	0.26	6619	11.60
318	12	0.02	531	0.93	367	55	0.10	2042	3.58	416	148	0.26	6767	11.86
319	11	0.02	542	0.95	368	52	0.09	2094	3.67	417	162	0.28	6929	12.14
320	14	0.02	556	0.97	369	47	0.08	2141	3.75	418	154	0.27	7083	12.41
321	17	0.03	573	1.00	370	49	0.09	2190	3.84	419	159	0.28	7242	12.69
322	20	0.04	593	1.04	371	48	0.08	2238	3.92	420	128	0.22	7370	12.92
323	15	0.03	608	1.07	372	54	0.09	2292	4.02	421	174	0.30	7544	13.22
324	19	0.03	627	1.10	373	41	0.07	2333	4.09	422	185	0.32	7729	13.55
325	23	0.04	650	1.14	374	70	0.12	2403	4.21	423	163	0.29	7892	13.83
326	14	0.02	664	1.16	375	67	0.12	2470	4.33	424	197	0.35	8089	14.18
327	16	0.03	680	1.19	376	76	0.13	2546	4.46	425	187	0.33	8276	14.51
328	16	0.03	696	1.22	377	56	0.10	2602	4.56	426	180	0.32	8456	14.82
329	16	0.03	712	1.25	378	72	0.13	2674	4.69	427	189	0.33	8645	15.15
330	18	0.03	730	1.28	379	66	0.12	2740	4.80	428	188	0.33	8833	15.48
331	15	0.03	745	1.31	380	67	0.12	2807	4.92	429	192	0.34	9025	15.82
332	20	0.04	765	1.34	381	72	0.13	2879	5.05	430	181	0.32	9206	16.14
333	19	0.03	784	1.37	382	63	0.11	2942	5.16	431	199	0.35	9405	16.48
334	20	0.04	804	1.41	383	70	0.12	3012	5.28	432	194	0.34	9599	16.82
335	29	0.05	833	1.46	384	73	0.13	3085	5.41	433	192	0.34	9791	17.16
336	28	0.05	861	1.51	385	86	0.15	3171	5.56	434	188	0.33	9979	17.49
337	24	0.04	885	1.55	386	88	0.15	3259	5.71	435	216	0.38	10195	17.87
338	17	0.03	902	1.58	387	96	0.17	3355	5.88	436	201	0.35	10396	18.22
339	28	0.05	930	1.63	388	99	0.17	3454	6.05	437	183	0.32	10579	18.54
340	29	0.05	959	1.68	389	102	0.18	3556	6.23	438	209	0.37	10788	18.91
341	32	0.06	991	1.74	390	99	0.17	3655	6.41	439	193	0.34	10981	19.25
342	28	0.05	1019	1.79	391	89	0.16	3744	6.56	440	237	0.42	11218	19.66
343	27	0.05	1046	1.83	392	97	0.17	3841	6.73	441	230	0.40	11448	20.07
344	31	0.05	1077	1.89	393	90	0.16	3931	6.89	442	229	0.40	11677	20.47
345	39	0.07	1116	1.96	394	101	0.18	4032	7.07	443	227	0.40	11904	20.86
346	30	0.05	1146	2.01	395	85	0.15	4117	7.22	444	237	0.42	12141	21.28
347	45	0.08	1191	2.09	396	109	0.19	4226	7.41	445	230	0.40	12371	21.68
348	26	0.05	1217	2.13	397	91	0.16	4317	7.57	446	227	0.40	12598	22.08



**Table 170. Science Grade 5 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
447	259	0.45	12857	22.54	496	371	0.65	27911	48.92	545	298	0.52	45384	79.55
448	226	0.40	13083	22.93	497	367	0.64	28278	49.56	546	287	0.50	45671	80.05
449	207	0.36	13290	23.29	498	415	0.73	28693	50.29	547	283	0.50	45954	80.55
450	268	0.47	13558	23.76	499	368	0.65	29061	50.94	548	268	0.47	46222	81.02
451	253	0.44	13811	24.21	500	368	0.65	29429	51.58	549	241	0.42	46463	81.44
452	236	0.41	14047	24.62	501	394	0.69	29823	52.27	550	263	0.46	46726	81.90
453	246	0.43	14293	25.05	502	390	0.68	30213	52.96	551	265	0.46	46991	82.36
454	259	0.45	14552	25.51	503	394	0.69	30607	53.65	552	258	0.45	47249	82.82
455	264	0.46	14816	25.97	504	359	0.63	30966	54.28	553	289	0.51	47538	83.32
456	249	0.44	15065	26.41	505	399	0.70	31365	54.98	554	253	0.44	47791	83.77
457	280	0.49	15345	26.90	506	384	0.67	31749	55.65	555	270	0.47	48061	84.24
458	261	0.46	15606	27.35	507	358	0.63	32107	56.28	556	265	0.46	48326	84.70
459	250	0.44	15856	27.79	508	351	0.62	32458	56.89	557	271	0.47	48597	85.18
460	262	0.46	16118	28.25	509	383	0.67	32841	57.56	558	261	0.46	48858	85.64
461	309	0.54	16427	28.79	510	389	0.68	33230	58.24	559	212	0.37	49070	86.01
462	295	0.52	16722	29.31	511	415	0.73	33645	58.97	560	217	0.38	49287	86.39
463	281	0.49	17003	29.80	512	380	0.67	34025	59.64	561	230	0.40	49517	86.79
464	250	0.44	17253	30.24	513	378	0.66	34403	60.30	562	209	0.37	49726	87.16
465	320	0.56	17573	30.80	514	358	0.63	34761	60.93	563	218	0.38	49944	87.54
466	288	0.50	17861	31.31	515	362	0.63	35123	61.56	564	192	0.34	50136	87.88
467	302	0.53	18163	31.84	516	378	0.66	35501	62.22	565	205	0.36	50341	88.24
468	301	0.53	18464	32.36	517	363	0.64	35864	62.86	566	218	0.38	50559	88.62
469	277	0.49	18741	32.85	518	384	0.67	36248	63.53	567	218	0.38	50777	89.00
470	308	0.54	19049	33.39	519	362	0.63	36610	64.17	568	195	0.34	50972	89.34
471	328	0.57	19377	33.96	520	350	0.61	36960	64.78	569	184	0.32	51156	89.66
472	328	0.57	19705	34.54	521	378	0.66	37338	65.44	570	178	0.31	51334	89.98
473	308	0.54	20013	35.08	522	377	0.66	37715	66.11	571	185	0.32	51519	90.30
474	299	0.52	20312	35.60	523	375	0.66	38090	66.76	572	195	0.34	51714	90.64
475	296	0.52	20608	36.12	524	331	0.58	38421	67.34	573	182	0.32	51896	90.96
476	337	0.59	20945	36.71	525	352	0.62	38773	67.96	574	199	0.35	52095	91.31
477	339	0.59	21284	37.31	526	374	0.66	39147	68.62	575	182	0.32	52277	91.63
478	351	0.62	21635	37.92	527	383	0.67	39530	69.29	576	167	0.29	52444	91.92
479	333	0.58	21968	38.50	528	386	0.68	39916	69.96	577	160	0.28	52604	92.20
480	353	0.62	22321	39.12	529	372	0.65	40288	70.62	578	148	0.26	52752	92.46
481	326	0.57	22647	39.69	530	353	0.62	40641	71.23	579	153	0.27	52905	92.73
482	342	0.60	22989	40.29	531	310	0.54	40951	71.78	580	166	0.29	53071	93.02
483	322	0.56	23311	40.86	532	316	0.55	41267	72.33	581	167	0.29	53238	93.31
484	361	0.63	23672	41.49	533	335	0.59	41602	72.92	582	135	0.24	53373	93.55
485	318	0.56	23990	42.05	534	357	0.63	41959	73.54	583	149	0.26	53522	93.81
486	340	0.60	24330	42.64	535	311	0.55	42270	74.09	584	145	0.25	53667	94.07
487	346	0.61	24676	43.25	536	341	0.60	42611	74.69	585	108	0.19	53775	94.25
488	363	0.64	25039	43.89	537	378	0.66	42989	75.35	586	121	0.21	53896	94.47
489	353	0.62	25392	44.51	538	316	0.55	43305	75.90	587	100	0.18	53996	94.64
490	355	0.62	25747	45.13	539	288	0.50	43593	76.41	588	112	0.20	54108	94.84
491	346	0.61	26093	45.73	540	315	0.55	43908	76.96	589	89	0.16	54197	94.99
492	389	0.68	26482	46.42	541	306	0.54	44214	77.50	590	123	0.22	54320	95.21
493	338	0.59	26820	47.01	542	287	0.50	44501	78.00	591	107	0.19	54427	95.40
494	360	0.63	27180	47.64	543	306	0.54	44807	78.54	592	99	0.17	54526	95.57
495	360	0.63	27540	48.27	544	279	0.49	45086	79.02	593	94	0.16	54620	95.74



**Table 170. Science Grade 5 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
594	77	0.13	54697	95.87	643	13	0.02	56817	99.59	699	3	0.01	57040	99.98
595	106	0.19	54803	96.06	644	8	0.01	56825	99.60	701	1	0.00	57041	99.98
596	97	0.17	54900	96.23	645	11	0.02	56836	99.62	702	4	0.01	57045	99.99
597	84	0.15	54984	96.37	646	9	0.02	56845	99.64	704	1	0.00	57046	99.99
598	83	0.15	55067	96.52	647	13	0.02	56858	99.66	726	3	0.01	57049	99.99
599	74	0.13	55141	96.65	648	5	0.01	56863	99.67	744	1	0.00	57050	99.99
600	75	0.13	55216	96.78	649	13	0.02	56876	99.69	748	1	0.00	57051	100.00
601	73	0.13	55289	96.91	650	15	0.03	56891	99.72	758	1	0.00	57052	100.00
602	87	0.15	55376	97.06	651	12	0.02	56903	99.74	900	1	0.00	57053	100.00
603	61	0.11	55437	97.17	652	7	0.01	56910	99.75					
604	54	0.09	55491	97.26	653	14	0.02	56924	99.77					
605	61	0.11	55552	97.37	654	8	0.01	56932	99.79					
606	57	0.10	55609	97.47	655	6	0.01	56938	99.80					
607	58	0.10	55667	97.57	656	5	0.01	56943	99.81					
608	75	0.13	55742	97.70	657	8	0.01	56951	99.82					
609	55	0.10	55797	97.80	658	2	0.00	56953	99.82					
610	55	0.10	55852	97.89	659	2	0.00	56955	99.83					
611	59	0.10	55911	98.00	660	2	0.00	56957	99.83					
612	53	0.09	55964	98.09	661	5	0.01	56962	99.84					
613	42	0.07	56006	98.16	662	14	0.02	56976	99.87					
614	48	0.08	56054	98.25	663	4	0.01	56980	99.87					
615	45	0.08	56099	98.33	664	2	0.00	56982	99.88					
616	65	0.11	56164	98.44	665	1	0.00	56983	99.88					
617	45	0.08	56209	98.52	666	3	0.01	56986	99.88					
618	39	0.07	56248	98.59	667	3	0.01	56989	99.89					
619	32	0.06	56280	98.65	668	3	0.01	56992	99.89					
620	42	0.07	56322	98.72	669	1	0.00	56993	99.89					
621	28	0.05	56350	98.77	670	3	0.01	56996	99.90					
622	33	0.06	56383	98.83	671	2	0.00	56998	99.90					
623	40	0.07	56423	98.90	672	3	0.01	57001	99.91					
624	23	0.04	56446	98.94	673	4	0.01	57005	99.92					
625	34	0.06	56480	99.00	674	7	0.01	57012	99.93					
626	22	0.04	56502	99.03	675	4	0.01	57016	99.94					
627	33	0.06	56535	99.09	676	1	0.00	57017	99.94					
628	21	0.04	56556	99.13	677	2	0.00	57019	99.94					
629	31	0.05	56587	99.18	679	1	0.00	57020	99.94					
630	22	0.04	56609	99.22	681	2	0.00	57022	99.95					
631	17	0.03	56626	99.25	682	1	0.00	57023	99.95					
632	24	0.04	56650	99.29	683	1	0.00	57024	99.95					
633	13	0.02	56663	99.32	684	2	0.00	57026	99.95					
634	14	0.02	56677	99.34	687	1	0.00	57027	99.95					
635	24	0.04	56701	99.38	688	1	0.00	57028	99.96					
636	16	0.03	56717	99.41	689	1	0.00	57029	99.96					
637	20	0.04	56737	99.45	690	1	0.00	57030	99.96					
638	15	0.03	56752	99.47	691	2	0.00	57032	99.96					
639	18	0.03	56770	99.50	692	2	0.00	57034	99.97					
640	15	0.03	56785	99.53	693	1	0.00	57035	99.97					
641	10	0.02	56795	99.55	694	1	0.00	57036	99.97					
642	9	0.02	56804	99.56	696	1	0.00	57037	99.97					



**Table 171. Reading Grade 6 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
260	167	0.29	167	0.29	383	1	0.00	251	0.44	432	6	0.01	462	0.81
270	2	0.00	169	0.30	384	3	0.01	254	0.45	433	9	0.02	471	0.83
271	2	0.00	171	0.30	385	3	0.01	257	0.45	434	1	0.00	472	0.83
279	2	0.00	173	0.30	386	5	0.01	262	0.46	435	6	0.01	478	0.84
283	1	0.00	174	0.31	387	3	0.01	265	0.47	436	5	0.01	483	0.85
286	1	0.00	175	0.31	388	1	0.00	266	0.47	437	13	0.02	496	0.87
288	2	0.00	177	0.31	389	2	0.00	268	0.47	438	8	0.01	504	0.89
291	2	0.00	179	0.31	390	3	0.01	271	0.48	439	13	0.02	517	0.91
298	1	0.00	180	0.32	391	1	0.00	272	0.48	440	12	0.02	529	0.93
311	1	0.00	181	0.32	392	2	0.00	274	0.48	441	5	0.01	534	0.94
315	1	0.00	182	0.32	393	4	0.01	278	0.49	442	6	0.01	540	0.95
319	1	0.00	183	0.32	394	5	0.01	283	0.50	443	10	0.02	550	0.97
320	1	0.00	184	0.32	395	5	0.01	288	0.51	444	14	0.02	564	0.99
322	1	0.00	185	0.33	396	6	0.01	294	0.52	445	17	0.03	581	1.02
323	1	0.00	186	0.33	397	1	0.00	295	0.52	446	14	0.02	595	1.05
324	3	0.01	189	0.33	398	2	0.00	297	0.52	447	12	0.02	607	1.07
328	2	0.00	191	0.34	399	1	0.00	298	0.52	448	15	0.03	622	1.09
329	1	0.00	192	0.34	400	4	0.01	302	0.53	449	7	0.01	629	1.11
331	2	0.00	194	0.34	401	3	0.01	305	0.54	450	10	0.02	639	1.12
333	2	0.00	196	0.34	402	5	0.01	310	0.55	451	15	0.03	654	1.15
339	1	0.00	197	0.35	403	4	0.01	314	0.55	452	10	0.02	664	1.17
342	1	0.00	198	0.35	404	3	0.01	317	0.56	453	11	0.02	675	1.19
345	1	0.00	199	0.35	405	5	0.01	322	0.57	454	14	0.02	689	1.21
349	2	0.00	201	0.35	406	5	0.01	327	0.58	455	15	0.03	704	1.24
351	1	0.00	202	0.36	407	4	0.01	331	0.58	456	27	0.05	731	1.29
352	1	0.00	203	0.36	408	1	0.00	332	0.58	457	16	0.03	747	1.31
353	1	0.00	204	0.36	409	2	0.00	334	0.59	458	8	0.01	755	1.33
354	1	0.00	205	0.36	410	3	0.01	337	0.59	459	16	0.03	771	1.36
355	2	0.00	207	0.36	411	4	0.01	341	0.60	460	20	0.04	791	1.39
358	1	0.00	208	0.37	412	3	0.01	344	0.61	461	17	0.03	808	1.42
360	1	0.00	209	0.37	413	5	0.01	349	0.61	462	23	0.04	831	1.46
361	1	0.00	210	0.37	414	4	0.01	353	0.62	463	22	0.04	853	1.50
362	3	0.01	213	0.37	415	7	0.01	360	0.63	464	17	0.03	870	1.53
364	2	0.00	215	0.38	416	5	0.01	365	0.64	465	21	0.04	891	1.57
365	1	0.00	216	0.38	417	4	0.01	369	0.65	466	25	0.04	916	1.61
366	4	0.01	220	0.39	418	6	0.01	375	0.66	467	25	0.04	941	1.66
367	3	0.01	223	0.39	419	5	0.01	380	0.67	468	21	0.04	962	1.69
369	1	0.00	224	0.39	420	10	0.02	390	0.69	469	23	0.04	985	1.73
370	2	0.00	226	0.40	421	7	0.01	397	0.70	470	18	0.03	1003	1.76
371	3	0.01	229	0.40	422	7	0.01	404	0.71	471	25	0.04	1028	1.81
372	1	0.00	230	0.40	423	1	0.00	405	0.71	472	21	0.04	1049	1.85
373	1	0.00	231	0.41	424	4	0.01	409	0.72	473	39	0.07	1088	1.91
374	3	0.01	234	0.41	425	8	0.01	417	0.73	474	33	0.06	1121	1.97
375	3	0.01	237	0.42	426	5	0.01	422	0.74	475	25	0.04	1146	2.02
376	3	0.01	240	0.42	427	5	0.01	427	0.75	476	19	0.03	1165	2.05
377	2	0.00	242	0.43	428	9	0.02	436	0.77	477	23	0.04	1188	2.09
378	2	0.00	244	0.43	429	6	0.01	442	0.78	478	36	0.06	1224	2.15
379	3	0.01	247	0.43	430	11	0.02	453	0.80	479	29	0.05	1253	2.20
381	3	0.01	250	0.44	431	3	0.01	456	0.80	480	27	0.05	1280	2.25



**Table 171. Reading Grade 6 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
481	24	0.04	1304	2.29	530	83	0.15	3986	7.01	579	203	0.36	11143	19.60
482	27	0.05	1331	2.34	531	107	0.19	4093	7.20	580	196	0.34	11339	19.95
483	35	0.06	1366	2.40	532	86	0.15	4179	7.35	581	211	0.37	11550	20.32
484	39	0.07	1405	2.47	533	114	0.20	4293	7.55	582	233	0.41	11783	20.73
485	34	0.06	1439	2.53	534	103	0.18	4396	7.73	583	234	0.41	12017	21.14
486	34	0.06	1473	2.59	535	117	0.21	4513	7.94	584	278	0.49	12295	21.63
487	29	0.05	1502	2.64	536	93	0.16	4606	8.10	585	238	0.42	12533	22.05
488	43	0.08	1545	2.72	537	99	0.17	4705	8.28	586	264	0.46	12797	22.51
489	37	0.07	1582	2.78	538	94	0.17	4799	8.44	587	224	0.39	13021	22.90
490	33	0.06	1615	2.84	539	94	0.17	4893	8.61	588	217	0.38	13238	23.29
491	42	0.07	1657	2.91	540	97	0.17	4990	8.78	589	241	0.42	13479	23.71
492	39	0.07	1696	2.98	541	104	0.18	5094	8.96	590	249	0.44	13728	24.15
493	51	0.09	1747	3.07	542	110	0.19	5204	9.15	591	260	0.46	13988	24.61
494	42	0.07	1789	3.15	543	100	0.18	5304	9.33	592	249	0.44	14237	25.04
495	41	0.07	1830	3.22	544	125	0.22	5429	9.55	593	245	0.43	14482	25.47
496	33	0.06	1863	3.28	545	115	0.20	5544	9.75	594	265	0.47	14747	25.94
497	51	0.09	1914	3.37	546	121	0.21	5665	9.96	595	276	0.49	15023	26.43
498	57	0.10	1971	3.47	547	116	0.20	5781	10.17	596	260	0.46	15283	26.88
499	40	0.07	2011	3.54	548	110	0.19	5891	10.36	597	291	0.51	15574	27.39
500	51	0.09	2062	3.63	549	125	0.22	6016	10.58	598	326	0.57	15900	27.97
501	44	0.08	2106	3.70	550	130	0.23	6146	10.81	599	279	0.49	16179	28.46
502	46	0.08	2152	3.79	551	127	0.22	6273	11.03	600	281	0.49	16460	28.95
503	44	0.08	2196	3.86	552	119	0.21	6392	11.24	601	279	0.49	16739	29.44
504	40	0.07	2236	3.93	553	154	0.27	6546	11.51	602	315	0.55	17054	30.00
505	50	0.09	2286	4.02	554	136	0.24	6682	11.75	603	299	0.53	17353	30.52
506	52	0.09	2338	4.11	555	150	0.26	6832	12.02	604	297	0.52	17650	31.05
507	57	0.10	2395	4.21	556	141	0.25	6973	12.27	605	307	0.54	17957	31.59
508	54	0.09	2449	4.31	557	131	0.23	7104	12.50	606	315	0.55	18272	32.14
509	43	0.08	2492	4.38	558	166	0.29	7270	12.79	607	335	0.59	18607	32.73
510	56	0.10	2548	4.48	559	154	0.27	7424	13.06	608	334	0.59	18941	33.32
511	57	0.10	2605	4.58	560	153	0.27	7577	13.33	609	320	0.56	19261	33.88
512	57	0.10	2662	4.68	561	149	0.26	7726	13.59	610	365	0.64	19626	34.52
513	69	0.12	2731	4.80	562	169	0.30	7895	13.89	611	359	0.63	19985	35.15
514	55	0.10	2786	4.90	563	150	0.26	8045	14.15	612	314	0.55	20299	35.71
515	76	0.13	2862	5.03	564	168	0.30	8213	14.45	613	330	0.58	20629	36.29
516	72	0.13	2934	5.16	565	174	0.31	8387	14.75	614	348	0.61	20977	36.90
517	60	0.11	2994	5.27	566	163	0.29	8550	15.04	615	352	0.62	21329	37.52
518	77	0.14	3071	5.40	567	171	0.30	8721	15.34	616	343	0.60	21672	38.12
519	61	0.11	3132	5.51	568	186	0.33	8907	15.67	617	354	0.62	22026	38.74
520	62	0.11	3194	5.62	569	190	0.33	9097	16.00	618	347	0.61	22373	39.35
521	70	0.12	3264	5.74	570	197	0.35	9294	16.35	619	385	0.68	22758	40.03
522	70	0.12	3334	5.86	571	197	0.35	9491	16.69	620	399	0.70	23157	40.73
523	66	0.12	3400	5.98	572	200	0.35	9691	17.05	621	375	0.66	23532	41.39
524	68	0.12	3468	6.10	573	206	0.36	9897	17.41	622	368	0.65	23900	42.04
525	78	0.14	3546	6.24	574	194	0.34	10091	17.75	623	357	0.63	24257	42.67
526	78	0.14	3624	6.37	575	210	0.37	10301	18.12	624	379	0.67	24636	43.34
527	94	0.17	3718	6.54	576	210	0.37	10511	18.49	625	380	0.67	25016	44.00
528	97	0.17	3815	6.71	577	205	0.36	10716	18.85	626	380	0.67	25396	44.67
529	88	0.15	3903	6.87	578	224	0.39	10940	19.24	627	389	0.68	25785	45.36



**Table 171. Reading Grade 6 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
628	407	0.72	26192	46.07	677	349	0.61	45084	79.30	726	101	0.18	54646	96.12
629	389	0.68	26581	46.76	678	291	0.51	45375	79.82	727	110	0.19	54756	96.32
630	393	0.69	26974	47.45	679	302	0.53	45677	80.35	728	96	0.17	54852	96.49
631	395	0.69	27369	48.14	680	313	0.55	45990	80.90	729	88	0.15	54940	96.64
632	405	0.71	27774	48.85	681	313	0.55	46303	81.45	730	75	0.13	55015	96.77
633	418	0.74	28192	49.59	682	284	0.50	46587	81.95	731	92	0.16	55107	96.93
634	401	0.71	28593	50.30	683	300	0.53	46887	82.47	732	78	0.14	55185	97.07
635	401	0.71	28994	51.00	684	273	0.48	47160	82.96	733	74	0.13	55259	97.20
636	368	0.65	29362	51.65	685	304	0.53	47464	83.49	734	75	0.13	55334	97.33
637	377	0.66	29739	52.31	686	268	0.47	47732	83.96	735	71	0.12	55405	97.46
638	442	0.78	30181	53.09	687	264	0.46	47996	84.43	736	59	0.10	55464	97.56
639	389	0.68	30570	53.77	688	249	0.44	48245	84.86	737	73	0.13	55537	97.69
640	416	0.73	30986	54.50	689	233	0.41	48478	85.27	738	47	0.08	55584	97.77
641	412	0.72	31398	55.23	690	248	0.44	48726	85.71	739	61	0.11	55645	97.88
642	390	0.69	31788	55.92	691	244	0.43	48970	86.14	740	53	0.09	55698	97.97
643	415	0.73	32203	56.65	692	252	0.44	49222	86.58	741	50	0.09	55748	98.06
644	408	0.72	32611	57.36	693	251	0.44	49473	87.02	742	58	0.10	55806	98.16
645	413	0.73	33024	58.09	694	251	0.44	49724	87.47	743	46	0.08	55852	98.24
646	391	0.69	33415	58.78	695	220	0.39	49944	87.85	744	41	0.07	55893	98.32
647	400	0.70	33815	59.48	696	220	0.39	50164	88.24	745	39	0.07	55932	98.39
648	436	0.77	34251	60.25	697	213	0.37	50377	88.61	746	44	0.08	55976	98.46
649	434	0.76	34685	61.01	698	197	0.35	50574	88.96	747	34	0.06	56010	98.52
650	382	0.67	35067	61.68	699	239	0.42	50813	89.38	748	38	0.07	56048	98.59
651	447	0.79	35514	62.47	700	229	0.40	51042	89.78	749	40	0.07	56088	98.66
652	412	0.72	35926	63.19	701	199	0.35	51241	90.13	750	21	0.04	56109	98.70
653	389	0.68	36315	63.88	702	189	0.33	51430	90.47	751	34	0.06	56143	98.76
654	390	0.69	36705	64.56	703	182	0.32	51612	90.79	752	32	0.06	56175	98.81
655	401	0.71	37106	65.27	704	203	0.36	51815	91.14	753	35	0.06	56210	98.87
656	396	0.70	37502	65.97	705	162	0.28	51977	91.43	754	31	0.05	56241	98.93
657	376	0.66	37878	66.63	706	183	0.32	52160	91.75	755	31	0.05	56272	98.98
658	383	0.67	38261	67.30	707	145	0.26	52305	92.01	756	28	0.05	56300	99.03
659	378	0.66	38639	67.97	708	161	0.28	52466	92.29	757	19	0.03	56319	99.07
660	389	0.68	39028	68.65	709	150	0.26	52616	92.55	758	23	0.04	56342	99.11
661	352	0.62	39380	69.27	710	182	0.32	52798	92.87	759	22	0.04	56364	99.15
662	385	0.68	39765	69.95	711	131	0.23	52929	93.10	760	23	0.04	56387	99.19
663	379	0.67	40144	70.61	712	142	0.25	53071	93.35	761	25	0.04	56412	99.23
664	342	0.60	40486	71.22	713	141	0.25	53212	93.60	762	27	0.05	56439	99.28
665	362	0.64	40848	71.85	714	142	0.25	53354	93.85	763	30	0.05	56469	99.33
666	383	0.67	41231	72.53	715	120	0.21	53474	94.06	764	19	0.03	56488	99.36
667	378	0.66	41609	73.19	716	115	0.20	53589	94.26	765	18	0.03	56506	99.39
668	372	0.65	41981	73.85	717	139	0.24	53728	94.51	766	21	0.04	56527	99.43
669	356	0.63	42337	74.47	718	119	0.21	53847	94.72	767	21	0.04	56548	99.47
670	325	0.57	42662	75.04	719	111	0.20	53958	94.91	768	16	0.03	56564	99.50
671	341	0.60	43003	75.64	720	131	0.23	54089	95.14	769	18	0.03	56582	99.53
672	361	0.64	43364	76.28	721	92	0.16	54181	95.31	770	14	0.02	56596	99.55
673	365	0.64	43729	76.92	722	106	0.19	54287	95.49	771	12	0.02	56608	99.57
674	349	0.61	44078	77.53	723	97	0.17	54384	95.66	772	5	0.01	56613	99.58
675	333	0.59	44411	78.12	724	80	0.14	54464	95.80	773	14	0.02	56627	99.61
676	324	0.57	44735	78.69	725	81	0.14	54545	95.95	774	11	0.02	56638	99.63



**Table 171. Reading Grade 6 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
775	9	0.02	56647	99.64	837	2	0.00	56842	99.99
776	10	0.02	56657	99.66	840	1	0.00	56843	99.99
777	9	0.02	56666	99.68	843	1	0.00	56844	99.99
778	8	0.01	56674	99.69	844	2	0.00	56846	99.99
779	14	0.02	56688	99.72	848	1	0.00	56847	99.99
780	9	0.02	56697	99.73	869	1	0.00	56848	100.00
781	18	0.03	56715	99.76	872	2	0.00	56850	100.00
782	5	0.01	56720	99.77					
783	5	0.01	56725	99.78					
784	7	0.01	56732	99.79					
785	7	0.01	56739	99.80					
786	6	0.01	56745	99.82					
787	5	0.01	56750	99.82					
788	4	0.01	56754	99.83					
789	4	0.01	56758	99.84					
790	3	0.01	56761	99.84					
791	7	0.01	56768	99.86					
792	4	0.01	56772	99.86					
793	4	0.01	56776	99.87					
794	1	0.00	56777	99.87					
795	4	0.01	56781	99.88					
796	6	0.01	56787	99.89					
797	5	0.01	56792	99.90					
798	2	0.00	56794	99.90					
799	6	0.01	56800	99.91					
800	1	0.00	56801	99.91					
801	1	0.00	56802	99.92					
802	4	0.01	56806	99.92					
805	1	0.00	56807	99.92					
806	5	0.01	56812	99.93					
807	2	0.00	56814	99.94					
808	2	0.00	56816	99.94					
809	1	0.00	56817	99.94					
810	1	0.00	56818	99.94					
811	3	0.01	56821	99.95					
812	2	0.00	56823	99.95					
813	1	0.00	56824	99.95					
814	3	0.01	56827	99.96					
817	1	0.00	56828	99.96					
818	2	0.00	56830	99.96					
821	1	0.00	56831	99.97					
823	1	0.00	56832	99.97					
825	1	0.00	56833	99.97					
827	1	0.00	56834	99.97					
828	1	0.00	56835	99.97					
829	1	0.00	56836	99.98					
830	1	0.00	56837	99.98					
832	1	0.00	56838	99.98					
834	2	0.00	56840	99.98					



**Table 172. Writing Grade 6 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
230	31	0.05	31	0.05	324	2	0.00	139	0.24	373	20	0.04	675	1.19
234	1	0.00	32	0.06	325	5	0.01	144	0.25	374	9	0.02	684	1.20
241	1	0.00	33	0.06	326	3	0.01	147	0.26	375	28	0.05	712	1.25
243	2	0.00	35	0.06	327	5	0.01	152	0.27	376	20	0.04	732	1.29
245	1	0.00	36	0.06	328	6	0.01	158	0.28	377	24	0.04	756	1.33
249	1	0.00	37	0.07	329	4	0.01	162	0.28	378	20	0.04	776	1.36
253	1	0.00	38	0.07	330	6	0.01	168	0.30	379	24	0.04	800	1.41
255	1	0.00	39	0.07	331	4	0.01	172	0.30	380	19	0.03	819	1.44
264	1	0.00	40	0.07	332	2	0.00	174	0.31	381	18	0.03	837	1.47
265	2	0.00	42	0.07	333	6	0.01	180	0.32	382	37	0.07	874	1.54
269	2	0.00	44	0.08	334	3	0.01	183	0.32	383	23	0.04	897	1.58
270	1	0.00	45	0.08	335	5	0.01	188	0.33	384	27	0.05	924	1.62
272	1	0.00	46	0.08	336	7	0.01	195	0.34	385	33	0.06	957	1.68
275	4	0.01	50	0.09	337	6	0.01	201	0.35	386	31	0.05	988	1.74
276	1	0.00	51	0.09	338	10	0.02	211	0.37	387	26	0.05	1014	1.78
278	2	0.00	53	0.09	339	9	0.02	220	0.39	388	32	0.06	1046	1.84
280	1	0.00	54	0.09	340	6	0.01	226	0.40	389	37	0.07	1083	1.90
281	2	0.00	56	0.10	341	6	0.01	232	0.41	390	32	0.06	1115	1.96
282	1	0.00	57	0.10	342	8	0.01	240	0.42	391	32	0.06	1147	2.02
283	2	0.00	59	0.10	343	3	0.01	243	0.43	392	37	0.07	1184	2.08
284	2	0.00	61	0.11	344	10	0.02	253	0.44	393	31	0.05	1215	2.14
285	5	0.01	66	0.12	345	8	0.01	261	0.46	394	31	0.05	1246	2.19
288	3	0.01	69	0.12	346	12	0.02	273	0.48	395	33	0.06	1279	2.25
289	2	0.00	71	0.12	347	10	0.02	283	0.50	396	48	0.08	1327	2.33
292	2	0.00	73	0.13	348	5	0.01	288	0.51	397	35	0.06	1362	2.39
293	1	0.00	74	0.13	349	13	0.02	301	0.53	398	39	0.07	1401	2.46
296	2	0.00	76	0.13	350	14	0.02	315	0.55	399	46	0.08	1447	2.54
299	1	0.00	77	0.14	351	9	0.02	324	0.57	400	44	0.08	1491	2.62
300	2	0.00	79	0.14	352	12	0.02	336	0.59	401	53	0.09	1544	2.71
301	1	0.00	80	0.14	353	12	0.02	348	0.61	402	39	0.07	1583	2.78
302	2	0.00	82	0.14	354	6	0.01	354	0.62	403	40	0.07	1623	2.85
303	2	0.00	84	0.15	355	15	0.03	369	0.65	404	55	0.10	1678	2.95
304	2	0.00	86	0.15	356	12	0.02	381	0.67	405	45	0.08	1723	3.03
305	3	0.01	89	0.16	357	13	0.02	394	0.69	406	45	0.08	1768	3.11
307	3	0.01	92	0.16	358	16	0.03	410	0.72	407	52	0.09	1820	3.20
309	3	0.01	95	0.17	359	15	0.03	425	0.75	408	57	0.10	1877	3.30
310	1	0.00	96	0.17	360	24	0.04	449	0.79	409	60	0.11	1937	3.40
311	1	0.00	97	0.17	361	11	0.02	460	0.81	410	55	0.10	1992	3.50
312	6	0.01	103	0.18	362	16	0.03	476	0.84	411	62	0.11	2054	3.61
313	3	0.01	106	0.19	363	23	0.04	499	0.88	412	56	0.10	2110	3.71
315	2	0.00	108	0.19	364	10	0.02	509	0.89	413	65	0.11	2175	3.82
316	5	0.01	113	0.20	365	19	0.03	528	0.93	414	75	0.13	2250	3.95
317	2	0.00	115	0.20	366	16	0.03	544	0.96	415	81	0.14	2331	4.10
318	4	0.01	119	0.21	367	14	0.02	558	0.98	416	47	0.08	2378	4.18
319	1	0.00	120	0.21	368	14	0.02	572	1.01	417	82	0.14	2460	4.32
320	1	0.00	121	0.21	369	21	0.04	593	1.04	418	83	0.15	2543	4.47
321	7	0.01	128	0.22	370	16	0.03	609	1.07	419	80	0.14	2623	4.61
322	4	0.01	132	0.23	371	23	0.04	632	1.11	420	81	0.14	2704	4.75
323	5	0.01	137	0.24	372	23	0.04	655	1.15	421	62	0.11	2766	4.86



**Table 172. Writing Grade 6 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
422	102	0.18	2868	5.04	471	245	0.43	10069	17.70	520	412	0.72	26011	45.71
423	93	0.16	2961	5.20	472	234	0.41	10303	18.11	521	375	0.66	26386	46.37
424	86	0.15	3047	5.35	473	219	0.38	10522	18.49	522	395	0.69	26781	47.07
425	103	0.18	3150	5.54	474	257	0.45	10779	18.94	523	410	0.72	27191	47.79
426	104	0.18	3254	5.72	475	238	0.42	11017	19.36	524	415	0.73	27606	48.52
427	92	0.16	3346	5.88	476	236	0.41	11253	19.78	525	394	0.69	28000	49.21
428	93	0.16	3439	6.04	477	246	0.43	11499	20.21	526	461	0.81	28461	50.02
429	97	0.17	3536	6.21	478	278	0.49	11777	20.70	527	411	0.72	28872	50.74
430	106	0.19	3642	6.40	479	273	0.48	12050	21.18	528	386	0.68	29258	51.42
431	97	0.17	3739	6.57	480	265	0.47	12315	21.64	529	414	0.73	29672	52.15
432	102	0.18	3841	6.75	481	273	0.48	12588	22.12	530	373	0.66	30045	52.80
433	106	0.19	3947	6.94	482	270	0.47	12858	22.60	531	428	0.75	30473	53.55
434	112	0.20	4059	7.13	483	262	0.46	13120	23.06	532	385	0.68	30858	54.23
435	117	0.21	4176	7.34	484	310	0.54	13430	23.60	533	391	0.69	31249	54.92
436	96	0.17	4272	7.51	485	295	0.52	13725	24.12	534	402	0.71	31651	55.62
437	111	0.20	4383	7.70	486	299	0.53	14024	24.65	535	408	0.72	32059	56.34
438	126	0.22	4509	7.92	487	351	0.62	14375	25.26	536	391	0.69	32450	57.03
439	129	0.23	4638	8.15	488	330	0.58	14705	25.84	537	396	0.70	32846	57.72
440	117	0.21	4755	8.36	489	318	0.56	15023	26.40	538	384	0.67	33230	58.40
441	137	0.24	4892	8.60	490	302	0.53	15325	26.93	539	392	0.69	33622	59.09
442	121	0.21	5013	8.81	491	292	0.51	15617	27.45	540	391	0.69	34013	59.78
443	136	0.24	5149	9.05	492	313	0.55	15930	28.00	541	396	0.70	34409	60.47
444	120	0.21	5269	9.26	493	304	0.53	16234	28.53	542	386	0.68	34795	61.15
445	141	0.25	5410	9.51	494	294	0.52	16528	29.05	543	346	0.61	35141	61.76
446	133	0.23	5543	9.74	495	341	0.60	16869	29.65	544	428	0.75	35569	62.51
447	143	0.25	5686	9.99	496	330	0.58	17199	30.23	545	346	0.61	35915	63.12
448	144	0.25	5830	10.25	497	323	0.57	17522	30.79	546	361	0.63	36276	63.75
449	149	0.26	5979	10.51	498	325	0.57	17847	31.37	547	390	0.69	36666	64.44
450	145	0.25	6124	10.76	499	333	0.59	18180	31.95	548	355	0.62	37021	65.06
451	172	0.30	6296	11.06	500	349	0.61	18529	32.56	549	393	0.69	37414	65.75
452	156	0.27	6452	11.34	501	336	0.59	18865	33.15	550	394	0.69	37808	66.45
453	165	0.29	6617	11.63	502	295	0.52	19160	33.67	551	362	0.64	38170	67.08
454	156	0.27	6773	11.90	503	335	0.59	19495	34.26	552	349	0.61	38519	67.69
455	164	0.29	6937	12.19	504	366	0.64	19861	34.90	553	360	0.63	38879	68.33
456	168	0.30	7105	12.49	505	354	0.62	20215	35.53	554	383	0.67	39262	69.00
457	183	0.32	7288	12.81	506	356	0.63	20571	36.15	555	367	0.64	39629	69.65
458	164	0.29	7452	13.10	507	375	0.66	20946	36.81	556	352	0.62	39981	70.26
459	184	0.32	7636	13.42	508	373	0.66	21319	37.47	557	306	0.54	40287	70.80
460	195	0.34	7831	13.76	509	345	0.61	21664	38.07	558	349	0.61	40636	71.42
461	203	0.36	8034	14.12	510	424	0.75	22088	38.82	559	347	0.61	40983	72.03
462	176	0.31	8210	14.43	511	354	0.62	22442	39.44	560	365	0.64	41348	72.67
463	185	0.33	8395	14.75	512	386	0.68	22828	40.12	561	285	0.50	41633	73.17
464	195	0.34	8590	15.10	513	367	0.64	23195	40.76	562	309	0.54	41942	73.71
465	198	0.35	8788	15.44	514	401	0.70	23596	41.47	563	293	0.51	42235	74.23
466	212	0.37	9000	15.82	515	395	0.69	23991	42.16	564	315	0.55	42550	74.78
467	204	0.36	9204	16.18	516	386	0.68	24377	42.84	565	298	0.52	42848	75.30
468	197	0.35	9401	16.52	517	424	0.75	24801	43.59	566	298	0.52	43146	75.83
469	213	0.37	9614	16.90	518	400	0.70	25201	44.29	567	316	0.56	43462	76.38
470	210	0.37	9824	17.27	519	398	0.70	25599	44.99	568	358	0.63	43820	77.01



**Table 172. Writing Grade 6 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
569	287	0.50	44107	77.52	618	101	0.18	53378	93.81	667	21	0.04	55960	98.35
570	285	0.50	44392	78.02	619	103	0.18	53481	93.99	668	17	0.03	55977	98.38
571	300	0.53	44692	78.54	620	103	0.18	53584	94.17	669	29	0.05	56006	98.43
572	277	0.49	44969	79.03	621	70	0.12	53654	94.29	670	34	0.06	56040	98.49
573	249	0.44	45218	79.47	622	89	0.16	53743	94.45	671	31	0.05	56071	98.54
574	260	0.46	45478	79.92	623	71	0.12	53814	94.57	672	38	0.07	56109	98.61
575	283	0.50	45761	80.42	624	77	0.14	53891	94.71	673	26	0.05	56135	98.65
576	228	0.40	45989	80.82	625	80	0.14	53971	94.85	674	16	0.03	56151	98.68
577	255	0.45	46244	81.27	626	81	0.14	54052	94.99	675	22	0.04	56173	98.72
578	253	0.44	46497	81.72	627	98	0.17	54150	95.17	676	52	0.09	56225	98.81
579	247	0.43	46744	82.15	628	83	0.15	54233	95.31	677	19	0.03	56244	98.85
580	274	0.48	47018	82.63	629	95	0.17	54328	95.48	678	26	0.05	56270	98.89
581	246	0.43	47264	83.06	630	90	0.16	54418	95.64	679	1	0.00	56271	98.89
582	221	0.39	47485	83.45	631	63	0.11	54481	95.75	680	11	0.02	56282	98.91
583	256	0.45	47741	83.90	632	56	0.10	54537	95.85	681	10	0.02	56292	98.93
584	237	0.42	47978	84.32	633	57	0.10	54594	95.95	682	4	0.01	56296	98.94
585	205	0.36	48183	84.68	634	46	0.08	54640	96.03	683	10	0.02	56306	98.95
586	251	0.44	48434	85.12	635	55	0.10	54695	96.12	684	14	0.02	56320	98.98
587	210	0.37	48644	85.49	636	47	0.08	54742	96.21	685	8	0.01	56328	98.99
588	200	0.35	48844	85.84	637	55	0.10	54797	96.30	686	7	0.01	56335	99.01
589	203	0.36	49047	86.20	638	38	0.07	54835	96.37	687	9	0.02	56344	99.02
590	234	0.41	49281	86.61	639	73	0.13	54908	96.50	688	17	0.03	56361	99.05
591	214	0.38	49495	86.98	640	99	0.17	55007	96.67	689	7	0.01	56368	99.06
592	200	0.35	49695	87.34	641	54	0.09	55061	96.77	690	15	0.03	56383	99.09
593	188	0.33	49883	87.67	642	58	0.10	55119	96.87	691	5	0.01	56388	99.10
594	172	0.30	50055	87.97	643	39	0.07	55158	96.94	692	5	0.01	56393	99.11
595	181	0.32	50236	88.29	644	48	0.08	55206	97.02	693	12	0.02	56405	99.13
596	167	0.29	50403	88.58	645	29	0.05	55235	97.07	694	51	0.09	56456	99.22
597	172	0.30	50575	88.88	646	42	0.07	55277	97.15	695	8	0.01	56464	99.23
598	182	0.32	50757	89.20	647	45	0.08	55322	97.23	696	23	0.04	56487	99.27
599	200	0.35	50957	89.55	648	34	0.06	55356	97.28	697	7	0.01	56494	99.28
600	158	0.28	51115	89.83	649	43	0.08	55399	97.36	698	4	0.01	56498	99.29
601	147	0.26	51262	90.09	650	39	0.07	55438	97.43	699	11	0.02	56509	99.31
602	151	0.27	51413	90.36	651	46	0.08	55484	97.51	700	7	0.01	56516	99.32
603	131	0.23	51544	90.59	652	61	0.11	55545	97.62	701	13	0.02	56529	99.35
604	138	0.24	51682	90.83	653	34	0.06	55579	97.68	702	14	0.02	56543	99.37
605	134	0.24	51816	91.06	654	38	0.07	55617	97.74	703	4	0.01	56547	99.38
606	153	0.27	51969	91.33	655	42	0.07	55659	97.82	704	7	0.01	56554	99.39
607	133	0.23	52102	91.57	656	43	0.08	55702	97.89	705	7	0.01	56561	99.40
608	126	0.22	52228	91.79	657	42	0.07	55744	97.97	706	3	0.01	56564	99.41
609	120	0.21	52348	92.00	658	19	0.03	55763	98.00	707	4	0.01	56568	99.41
610	121	0.21	52469	92.21	659	29	0.05	55792	98.05	708	8	0.01	56576	99.43
611	114	0.20	52583	92.41	660	22	0.04	55814	98.09	709	3	0.01	56579	99.43
612	126	0.22	52709	92.63	661	26	0.05	55840	98.14	710	5	0.01	56584	99.44
613	103	0.18	52812	92.81	662	15	0.03	55855	98.16	711	2	0.00	56586	99.45
614	105	0.18	52917	93.00	663	27	0.05	55882	98.21	712	5	0.01	56591	99.46
615	129	0.23	53046	93.23	664	27	0.05	55909	98.26	713	3	0.01	56594	99.46
616	114	0.20	53160	93.43	665	12	0.02	55921	98.28	714	3	0.01	56597	99.47
617	117	0.21	53277	93.63	666	18	0.03	55939	98.31	715	9	0.02	56606	99.48



**Table 172. Writing Grade 6 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %
716	3	0.01	56609	99.49
717	5	0.01	56614	99.50
719	5	0.01	56619	99.50
720	26	0.05	56645	99.55
721	3	0.01	56648	99.56
722	7	0.01	56655	99.57
723	6	0.01	56661	99.58
724	10	0.02	56671	99.60
725	9	0.02	56680	99.61
727	12	0.02	56692	99.63
728	15	0.03	56707	99.66
729	1	0.00	56708	99.66
730	12	0.02	56720	99.68
731	1	0.00	56721	99.68
732	18	0.03	56739	99.72
733	1	0.00	56740	99.72
734	5	0.01	56745	99.73
735	5	0.01	56750	99.73
736	11	0.02	56761	99.75
738	3	0.01	56764	99.76
739	3	0.01	56767	99.76
740	15	0.03	56782	99.79
745	3	0.01	56785	99.80
746	1	0.00	56786	99.80
749	1	0.00	56787	99.80
753	5	0.01	56792	99.81
760	1	0.00	56793	99.81
762	1	0.00	56794	99.81
764	1	0.00	56795	99.81
770	1	0.00	56796	99.82
771	10	0.02	56806	99.83
773	18	0.03	56824	99.86
777	3	0.01	56827	99.87
778	4	0.01	56831	99.88
781	2	0.00	56833	99.88
788	12	0.02	56845	99.90
796	24	0.04	56869	99.94
805	5	0.01	56874	99.95
840	27	0.05	56901	100.00



**Table 173. Mathematics Grade 6 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
240	103	0.18	103	0.18	292	4	0.01	235	0.41	341	15	0.03	652	1.14
241	5	0.01	108	0.19	293	3	0.01	238	0.42	342	14	0.02	666	1.17
242	1	0.00	109	0.19	294	5	0.01	243	0.43	343	13	0.02	679	1.19
245	3	0.01	112	0.20	295	7	0.01	250	0.44	344	8	0.01	687	1.21
246	3	0.01	115	0.20	296	2	0.00	252	0.44	345	12	0.02	699	1.23
247	1	0.00	116	0.20	297	7	0.01	259	0.45	346	16	0.03	715	1.25
248	2	0.00	118	0.21	298	8	0.01	267	0.47	347	10	0.02	725	1.27
249	3	0.01	121	0.21	299	3	0.01	270	0.47	348	12	0.02	737	1.29
251	2	0.00	123	0.22	300	3	0.01	273	0.48	349	17	0.03	754	1.32
252	2	0.00	125	0.22	301	7	0.01	280	0.49	350	20	0.04	774	1.36
253	3	0.01	128	0.22	302	7	0.01	287	0.50	351	17	0.03	791	1.39
254	1	0.00	129	0.23	303	9	0.02	296	0.52	352	10	0.02	801	1.41
255	2	0.00	131	0.23	304	8	0.01	304	0.53	353	14	0.02	815	1.43
256	3	0.01	134	0.24	305	7	0.01	311	0.55	354	11	0.02	826	1.45
257	1	0.00	135	0.24	306	7	0.01	318	0.56	355	19	0.03	845	1.48
258	1	0.00	136	0.24	307	8	0.01	326	0.57	356	15	0.03	860	1.51
259	2	0.00	138	0.24	308	3	0.01	329	0.58	357	16	0.03	876	1.54
260	1	0.00	139	0.24	309	3	0.01	332	0.58	358	23	0.04	899	1.58
261	3	0.01	142	0.25	310	7	0.01	339	0.59	359	19	0.03	918	1.61
262	6	0.01	148	0.26	311	8	0.01	347	0.61	360	17	0.03	935	1.64
263	2	0.00	150	0.26	312	3	0.01	350	0.61	361	18	0.03	953	1.67
264	4	0.01	154	0.27	313	7	0.01	357	0.63	362	20	0.04	973	1.71
265	2	0.00	156	0.27	314	12	0.02	369	0.65	363	18	0.03	991	1.74
266	5	0.01	161	0.28	315	10	0.02	379	0.67	364	19	0.03	1010	1.77
267	1	0.00	162	0.28	316	4	0.01	383	0.67	365	21	0.04	1031	1.81
268	2	0.00	164	0.29	317	7	0.01	390	0.68	366	27	0.05	1058	1.86
269	2	0.00	166	0.29	318	10	0.02	400	0.70	367	11	0.02	1069	1.88
270	3	0.01	169	0.30	319	13	0.02	413	0.72	368	30	0.05	1099	1.93
271	2	0.00	171	0.30	320	9	0.02	422	0.74	369	17	0.03	1116	1.96
272	3	0.01	174	0.31	321	8	0.01	430	0.75	370	15	0.03	1131	1.99
273	3	0.01	177	0.31	322	12	0.02	442	0.78	371	32	0.06	1163	2.04
274	4	0.01	181	0.32	323	9	0.02	451	0.79	372	28	0.05	1191	2.09
275	1	0.00	182	0.32	324	7	0.01	458	0.80	373	25	0.04	1216	2.13
276	3	0.01	185	0.32	325	13	0.02	471	0.83	374	29	0.05	1245	2.19
277	3	0.01	188	0.33	326	6	0.01	477	0.84	375	30	0.05	1275	2.24
278	2	0.00	190	0.33	327	10	0.02	487	0.85	376	33	0.06	1308	2.30
279	3	0.01	193	0.34	328	9	0.02	496	0.87	377	30	0.05	1338	2.35
280	4	0.01	197	0.35	329	16	0.03	512	0.90	378	26	0.05	1364	2.39
281	4	0.01	201	0.35	330	8	0.01	520	0.91	379	27	0.05	1391	2.44
282	2	0.00	203	0.36	331	15	0.03	535	0.94	380	33	0.06	1424	2.50
283	2	0.00	205	0.36	332	12	0.02	547	0.96	381	33	0.06	1457	2.56
284	4	0.01	209	0.37	333	11	0.02	558	0.98	382	43	0.08	1500	2.63
285	3	0.01	212	0.37	334	13	0.02	571	1.00	383	30	0.05	1530	2.69
286	1	0.00	213	0.37	335	6	0.01	577	1.01	384	35	0.06	1565	2.75
287	3	0.01	216	0.38	336	10	0.02	587	1.03	385	39	0.07	1604	2.82
288	2	0.00	218	0.38	337	11	0.02	598	1.05	386	37	0.06	1641	2.88
289	6	0.01	224	0.39	338	14	0.02	612	1.07	387	32	0.06	1673	2.94
290	5	0.01	229	0.40	339	12	0.02	624	1.10	388	46	0.08	1719	3.02
291	2	0.00	231	0.41	340	13	0.02	637	1.12	389	37	0.06	1756	3.08



**Table 173. Mathematics Grade 6 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
390	50	0.09	1806	3.17	439	115	0.20	5467	9.60	488	222	0.39	13771	24.17
391	40	0.07	1846	3.24	440	132	0.23	5599	9.83	489	207	0.36	13978	24.53
392	50	0.09	1896	3.33	441	134	0.24	5733	10.06	490	272	0.48	14250	25.01
393	52	0.09	1948	3.42	442	105	0.18	5838	10.25	491	242	0.42	14492	25.44
394	56	0.10	2004	3.52	443	143	0.25	5981	10.50	492	233	0.41	14725	25.84
395	54	0.09	2058	3.61	444	109	0.19	6090	10.69	493	259	0.45	14984	26.30
396	49	0.09	2107	3.70	445	119	0.21	6209	10.90	494	232	0.41	15216	26.71
397	41	0.07	2148	3.77	446	140	0.25	6349	11.14	495	271	0.48	15487	27.18
398	52	0.09	2200	3.86	447	142	0.25	6491	11.39	496	232	0.41	15719	27.59
399	61	0.11	2261	3.97	448	137	0.24	6628	11.63	497	272	0.48	15991	28.07
400	46	0.08	2307	4.05	449	127	0.22	6755	11.86	498	273	0.48	16264	28.55
401	60	0.11	2367	4.15	450	139	0.24	6894	12.10	499	251	0.44	16515	28.99
402	66	0.12	2433	4.27	451	126	0.22	7020	12.32	500	259	0.45	16774	29.44
403	58	0.10	2491	4.37	452	131	0.23	7151	12.55	501	239	0.42	17013	29.86
404	59	0.10	2550	4.48	453	157	0.28	7308	12.83	502	260	0.46	17273	30.32
405	63	0.11	2613	4.59	454	147	0.26	7455	13.08	503	256	0.45	17529	30.77
406	46	0.08	2659	4.67	455	152	0.27	7607	13.35	504	256	0.45	17785	31.22
407	66	0.12	2725	4.78	456	136	0.24	7743	13.59	505	259	0.45	18044	31.67
408	72	0.13	2797	4.91	457	137	0.24	7880	13.83	506	256	0.45	18300	32.12
409	59	0.10	2856	5.01	458	164	0.29	8044	14.12	507	279	0.49	18579	32.61
410	73	0.13	2929	5.14	459	162	0.28	8206	14.40	508	266	0.47	18845	33.08
411	56	0.10	2985	5.24	460	154	0.27	8360	14.67	509	259	0.45	19104	33.53
412	67	0.12	3052	5.36	461	172	0.30	8532	14.97	510	295	0.52	19399	34.05
413	72	0.13	3124	5.48	462	164	0.29	8696	15.26	511	298	0.52	19697	34.57
414	53	0.09	3177	5.58	463	179	0.31	8875	15.58	512	301	0.53	19998	35.10
415	60	0.11	3237	5.68	464	143	0.25	9018	15.83	513	312	0.55	20310	35.65
416	83	0.15	3320	5.83	465	175	0.31	9193	16.14	514	303	0.53	20613	36.18
417	67	0.12	3387	5.94	466	179	0.31	9372	16.45	515	297	0.52	20910	36.70
418	67	0.12	3454	6.06	467	186	0.33	9558	16.78	516	274	0.48	21184	37.18
419	78	0.14	3532	6.20	468	161	0.28	9719	17.06	517	261	0.46	21445	37.64
420	82	0.14	3614	6.34	469	175	0.31	9894	17.37	518	297	0.52	21742	38.16
421	84	0.15	3698	6.49	470	174	0.31	10068	17.67	519	328	0.58	22070	38.74
422	76	0.13	3774	6.62	471	198	0.35	10266	18.02	520	296	0.52	22366	39.26
423	91	0.16	3865	6.78	472	168	0.29	10434	18.31	521	288	0.51	22654	39.76
424	89	0.16	3954	6.94	473	223	0.39	10657	18.70	522	306	0.54	22960	40.30
425	100	0.18	4054	7.12	474	164	0.29	10821	18.99	523	312	0.55	23272	40.85
426	98	0.17	4152	7.29	475	165	0.29	10986	19.28	524	324	0.57	23596	41.41
427	86	0.15	4238	7.44	476	201	0.35	11187	19.63	525	300	0.53	23896	41.94
428	73	0.13	4311	7.57	477	222	0.39	11409	20.02	526	296	0.52	24192	42.46
429	107	0.19	4418	7.75	478	189	0.33	11598	20.36	527	295	0.52	24487	42.98
430	112	0.20	4530	7.95	479	194	0.34	11792	20.70	528	306	0.54	24793	43.52
431	112	0.20	4642	8.15	480	214	0.38	12006	21.07	529	292	0.51	25085	44.03
432	111	0.19	4753	8.34	481	211	0.37	12217	21.44	530	293	0.51	25378	44.54
433	85	0.15	4838	8.49	482	214	0.38	12431	21.82	531	325	0.57	25703	45.11
434	106	0.19	4944	8.68	483	226	0.40	12657	22.22	532	301	0.53	26004	45.64
435	86	0.15	5030	8.83	484	224	0.39	12881	22.61	533	311	0.55	26315	46.19
436	102	0.18	5132	9.01	485	226	0.40	13107	23.00	534	288	0.51	26603	46.69
437	104	0.18	5236	9.19	486	224	0.39	13331	23.40	535	283	0.50	26886	47.19
438	116	0.20	5352	9.39	487	218	0.38	13549	23.78	536	331	0.58	27217	47.77



**Table 173. Mathematics Grade 6 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
537	321	0.56	27538	48.33	586	293	0.51	42440	74.49	635	136	0.24	52257	91.72
538	328	0.58	27866	48.91	587	283	0.50	42723	74.99	636	132	0.23	52389	91.95
539	326	0.57	28192	49.48	588	283	0.50	43006	75.48	637	132	0.23	52521	92.18
540	306	0.54	28498	50.02	589	235	0.41	43241	75.89	638	120	0.21	52641	92.39
541	318	0.56	28816	50.58	590	254	0.45	43495	76.34	639	131	0.23	52772	92.62
542	317	0.56	29133	51.13	591	282	0.49	43777	76.84	640	130	0.23	52902	92.85
543	334	0.59	29467	51.72	592	256	0.45	44033	77.28	641	114	0.20	53016	93.05
544	323	0.57	29790	52.29	593	278	0.49	44311	77.77	642	123	0.22	53139	93.27
545	305	0.54	30095	52.82	594	227	0.40	44538	78.17	643	107	0.19	53246	93.46
546	336	0.59	30431	53.41	595	228	0.40	44766	78.57	644	117	0.21	53363	93.66
547	296	0.52	30727	53.93	596	221	0.39	44987	78.96	645	95	0.17	53458	93.83
548	285	0.50	31012	54.43	597	255	0.45	45242	79.41	646	108	0.19	53566	94.02
549	325	0.57	31337	55.00	598	221	0.39	45463	79.79	647	110	0.19	53676	94.21
550	279	0.49	31616	55.49	599	219	0.38	45682	80.18	648	104	0.18	53780	94.39
551	332	0.58	31948	56.07	600	245	0.43	45927	80.61	649	87	0.15	53867	94.54
552	333	0.58	32281	56.66	601	225	0.39	46152	81.00	650	89	0.16	53956	94.70
553	279	0.49	32560	57.15	602	247	0.43	46399	81.44	651	97	0.17	54053	94.87
554	337	0.59	32897	57.74	603	230	0.40	46629	81.84	652	85	0.15	54138	95.02
555	341	0.60	33238	58.34	604	204	0.36	46833	82.20	653	95	0.17	54233	95.19
556	293	0.51	33531	58.85	605	195	0.34	47028	82.54	654	90	0.16	54323	95.35
557	327	0.57	33858	59.43	606	229	0.40	47257	82.94	655	88	0.15	54411	95.50
558	316	0.55	34174	59.98	607	206	0.36	47463	83.30	656	81	0.14	54492	95.64
559	308	0.54	34482	60.52	608	208	0.37	47671	83.67	657	74	0.13	54566	95.77
560	289	0.51	34771	61.03	609	213	0.37	47884	84.04	658	71	0.12	54637	95.90
561	296	0.52	35067	61.55	610	185	0.32	48069	84.37	659	71	0.12	54708	96.02
562	313	0.55	35380	62.10	611	215	0.38	48284	84.75	660	70	0.12	54778	96.14
563	324	0.57	35704	62.67	612	197	0.35	48481	85.09	661	73	0.13	54851	96.27
564	312	0.55	36016	63.21	613	209	0.37	48690	85.46	662	53	0.09	54904	96.37
565	333	0.58	36349	63.80	614	205	0.36	48895	85.82	663	71	0.12	54975	96.49
566	300	0.53	36649	64.32	615	178	0.31	49073	86.13	664	57	0.10	55032	96.59
567	310	0.54	36959	64.87	616	183	0.32	49256	86.45	665	59	0.10	55091	96.69
568	293	0.51	37252	65.38	617	185	0.32	49441	86.78	666	64	0.11	55155	96.81
569	296	0.52	37548	65.90	618	180	0.32	49621	87.09	667	50	0.09	55205	96.89
570	320	0.56	37868	66.46	619	173	0.30	49794	87.40	668	55	0.10	55260	96.99
571	312	0.55	38180	67.01	620	164	0.29	49958	87.68	669	50	0.09	55310	97.08
572	312	0.55	38492	67.56	621	178	0.31	50136	88.00	670	64	0.11	55374	97.19
573	305	0.54	38797	68.09	622	168	0.29	50304	88.29	671	59	0.10	55433	97.29
574	289	0.51	39086	68.60	623	153	0.27	50457	88.56	672	56	0.10	55489	97.39
575	280	0.49	39366	69.09	624	146	0.26	50603	88.82	673	47	0.08	55536	97.47
576	280	0.49	39646	69.58	625	164	0.29	50767	89.10	674	39	0.07	55575	97.54
577	297	0.52	39943	70.11	626	143	0.25	50910	89.35	675	41	0.07	55616	97.61
578	298	0.52	40241	70.63	627	183	0.32	51093	89.68	676	38	0.07	55654	97.68
579	287	0.50	40528	71.13	628	156	0.27	51249	89.95	677	45	0.08	55699	97.76
580	270	0.47	40798	71.61	629	154	0.27	51403	90.22	678	58	0.10	55757	97.86
581	269	0.47	41067	72.08	630	157	0.28	51560	90.50	679	24	0.04	55781	97.90
582	294	0.52	41361	72.59	631	136	0.24	51696	90.73	680	42	0.07	55823	97.98
583	250	0.44	41611	73.03	632	138	0.24	51834	90.98	681	36	0.06	55859	98.04
584	265	0.47	41876	73.50	633	148	0.26	51982	91.24	682	49	0.09	55908	98.13
585	271	0.48	42147	73.97	634	139	0.24	52121	91.48	683	29	0.05	55937	98.18



**Table 173. Mathematics Grade 6 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
684	28	0.05	55965	98.23	734	2	0.00	56743	99.59
685	32	0.06	55997	98.28	735	11	0.02	56754	99.61
686	34	0.06	56031	98.34	736	5	0.01	56759	99.62
687	25	0.04	56056	98.39	738	1	0.00	56760	99.62
688	25	0.04	56081	98.43	741	14	0.02	56774	99.65
689	19	0.03	56100	98.46	743	1	0.00	56775	99.65
690	26	0.05	56126	98.51	744	4	0.01	56779	99.66
691	15	0.03	56141	98.54	745	3	0.01	56782	99.66
692	28	0.05	56169	98.59	746	9	0.02	56791	99.68
693	25	0.04	56194	98.63	747	34	0.06	56825	99.74
694	22	0.04	56216	98.67	748	12	0.02	56837	99.76
695	42	0.07	56258	98.74	750	8	0.01	56845	99.77
696	24	0.04	56282	98.78	753	17	0.03	56862	99.80
697	12	0.02	56294	98.80	755	1	0.00	56863	99.80
698	17	0.03	56311	98.83	756	1	0.00	56864	99.81
699	25	0.04	56336	98.88	758	1	0.00	56865	99.81
700	20	0.04	56356	98.91	761	1	0.00	56866	99.81
701	19	0.03	56375	98.95	762	10	0.02	56876	99.83
702	13	0.02	56388	98.97	763	1	0.00	56877	99.83
703	20	0.04	56408	99.00	766	1	0.00	56878	99.83
704	15	0.03	56423	99.03	767	2	0.00	56880	99.83
705	11	0.02	56434	99.05	772	3	0.01	56883	99.84
706	8	0.01	56442	99.06	784	1	0.00	56884	99.84
707	14	0.02	56456	99.09	785	2	0.00	56886	99.84
708	15	0.03	56471	99.12	790	2	0.00	56888	99.85
709	22	0.04	56493	99.15	792	2	0.00	56890	99.85
710	9	0.02	56502	99.17	793	1	0.00	56891	99.85
711	19	0.03	56521	99.20	794	3	0.01	56894	99.86
712	33	0.06	56554	99.26	797	58	0.10	56952	99.96
713	5	0.01	56559	99.27	800	1	0.00	56953	99.96
714	7	0.01	56566	99.28	803	4	0.01	56957	99.97
715	8	0.01	56574	99.30	809	2	0.00	56959	99.97
716	9	0.02	56583	99.31	830	16	0.03	56975	100.00
717	10	0.02	56593	99.33					
718	7	0.01	56600	99.34					
719	11	0.02	56611	99.36					
720	29	0.05	56640	99.41					
721	6	0.01	56646	99.42					
722	12	0.02	56658	99.44					
723	11	0.02	56669	99.46					
725	4	0.01	56673	99.47					
726	8	0.01	56681	99.48					
727	10	0.02	56691	99.50					
728	6	0.01	56697	99.51					
729	17	0.03	56714	99.54					
730	6	0.01	56720	99.55					
731	13	0.02	56733	99.58					
732	3	0.01	56736	99.58					
733	5	0.01	56741	99.59					



**Table 174. Reading Grade 7 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	118	0.21	118	0.21	391	2	0.00	193	0.34	443	12	0.02	401	0.71
310	1	0.00	119	0.21	392	4	0.01	197	0.35	444	9	0.02	410	0.72
312	1	0.00	120	0.21	394	1	0.00	198	0.35	445	8	0.01	418	0.74
316	1	0.00	121	0.21	395	1	0.00	199	0.35	446	11	0.02	429	0.76
319	1	0.00	122	0.21	396	3	0.01	202	0.36	447	10	0.02	439	0.77
320	1	0.00	123	0.22	397	1	0.00	203	0.36	448	8	0.01	447	0.79
321	1	0.00	124	0.22	399	4	0.01	207	0.36	449	8	0.01	455	0.80
322	1	0.00	125	0.22	400	3	0.01	210	0.37	450	7	0.01	462	0.81
327	2	0.00	127	0.22	401	1	0.00	211	0.37	451	9	0.02	471	0.83
328	1	0.00	128	0.23	402	2	0.00	213	0.38	452	7	0.01	478	0.84
334	2	0.00	130	0.23	404	1	0.00	214	0.38	453	15	0.03	493	0.87
338	1	0.00	131	0.23	405	5	0.01	219	0.39	454	18	0.03	511	0.90
339	3	0.01	134	0.24	406	2	0.00	221	0.39	455	13	0.02	524	0.92
342	1	0.00	135	0.24	407	3	0.01	224	0.39	456	12	0.02	536	0.94
343	1	0.00	136	0.24	408	3	0.01	227	0.40	457	8	0.01	544	0.96
345	1	0.00	137	0.24	409	5	0.01	232	0.41	458	15	0.03	559	0.98
346	1	0.00	138	0.24	410	2	0.00	234	0.41	459	11	0.02	570	1.00
349	1	0.00	139	0.24	411	4	0.01	238	0.42	460	14	0.02	584	1.03
350	1	0.00	140	0.25	412	5	0.01	243	0.43	461	18	0.03	602	1.06
351	1	0.00	141	0.25	413	1	0.00	244	0.43	462	21	0.04	623	1.10
352	1	0.00	142	0.25	414	5	0.01	249	0.44	463	12	0.02	635	1.12
355	1	0.00	143	0.25	415	9	0.02	258	0.45	464	20	0.04	655	1.15
358	2	0.00	145	0.26	416	2	0.00	260	0.46	465	17	0.03	672	1.18
360	1	0.00	146	0.26	417	3	0.01	263	0.46	466	13	0.02	685	1.21
361	4	0.01	150	0.26	418	3	0.01	266	0.47	467	17	0.03	702	1.24
362	1	0.00	151	0.27	419	2	0.00	268	0.47	468	14	0.02	716	1.26
364	2	0.00	153	0.27	420	3	0.01	271	0.48	469	17	0.03	733	1.29
365	2	0.00	155	0.27	421	4	0.01	275	0.48	470	18	0.03	751	1.32
367	1	0.00	156	0.27	422	3	0.01	278	0.49	471	26	0.05	777	1.37
368	1	0.00	157	0.28	423	9	0.02	287	0.51	472	24	0.04	801	1.41
369	1	0.00	158	0.28	424	1	0.00	288	0.51	473	14	0.02	815	1.44
370	1	0.00	159	0.28	425	4	0.01	292	0.51	474	26	0.05	841	1.48
371	1	0.00	160	0.28	426	7	0.01	299	0.53	475	20	0.04	861	1.52
372	2	0.00	162	0.29	427	1	0.00	300	0.53	476	28	0.05	889	1.57
374	1	0.00	163	0.29	428	6	0.01	306	0.54	477	23	0.04	912	1.61
375	1	0.00	164	0.29	429	4	0.01	310	0.55	478	27	0.05	939	1.65
377	1	0.00	165	0.29	430	6	0.01	316	0.56	479	35	0.06	974	1.72
379	2	0.00	167	0.29	431	5	0.01	321	0.57	480	32	0.06	1006	1.77
380	3	0.01	170	0.30	432	2	0.00	323	0.57	481	24	0.04	1030	1.81
381	2	0.00	172	0.30	433	5	0.01	328	0.58	482	20	0.04	1050	1.85
382	3	0.01	175	0.31	434	4	0.01	332	0.58	483	26	0.05	1076	1.90
383	2	0.00	177	0.31	435	4	0.01	336	0.59	484	20	0.04	1096	1.93
384	1	0.00	178	0.31	436	9	0.02	345	0.61	485	33	0.06	1129	1.99
385	1	0.00	179	0.32	437	5	0.01	350	0.62	486	40	0.07	1169	2.06
386	4	0.01	183	0.32	438	3	0.01	353	0.62	487	31	0.05	1200	2.11
387	2	0.00	185	0.33	439	12	0.02	365	0.64	488	32	0.06	1232	2.17
388	2	0.00	187	0.33	440	5	0.01	370	0.65	489	26	0.05	1258	2.22
389	2	0.00	189	0.33	441	8	0.01	378	0.67	490	31	0.05	1289	2.27
390	2	0.00	191	0.34	442	11	0.02	389	0.69	491	31	0.05	1320	2.32



**Table 174. Reading Grade 7 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
492	35	0.06	1355	2.39	541	91	0.16	4033	7.10	590	228	0.40	11106	19.56
493	27	0.05	1382	2.43	542	82	0.14	4115	7.25	591	222	0.39	11328	19.95
494	28	0.05	1410	2.48	543	96	0.17	4211	7.42	592	228	0.40	11556	20.35
495	33	0.06	1443	2.54	544	94	0.17	4305	7.58	593	218	0.38	11774	20.74
496	36	0.06	1479	2.60	545	100	0.18	4405	7.76	594	224	0.39	11998	21.13
497	41	0.07	1520	2.68	546	83	0.15	4488	7.90	595	253	0.45	12251	21.58
498	41	0.07	1561	2.75	547	90	0.16	4578	8.06	596	251	0.44	12502	22.02
499	40	0.07	1601	2.82	548	98	0.17	4676	8.24	597	253	0.45	12755	22.46
500	40	0.07	1641	2.89	549	98	0.17	4774	8.41	598	264	0.46	13019	22.93
501	46	0.08	1687	2.97	550	104	0.18	4878	8.59	599	280	0.49	13299	23.42
502	53	0.09	1740	3.06	551	103	0.18	4981	8.77	600	268	0.47	13567	23.89
503	45	0.08	1785	3.14	552	116	0.20	5097	8.98	601	280	0.49	13847	24.39
504	42	0.07	1827	3.22	553	99	0.17	5196	9.15	602	258	0.45	14105	24.84
505	40	0.07	1867	3.29	554	105	0.18	5301	9.34	603	305	0.54	14410	25.38
506	49	0.09	1916	3.37	555	122	0.21	5423	9.55	604	285	0.50	14695	25.88
507	30	0.05	1946	3.43	556	90	0.16	5513	9.71	605	271	0.48	14966	26.36
508	35	0.06	1981	3.49	557	109	0.19	5622	9.90	606	309	0.54	15275	26.90
509	52	0.09	2033	3.58	558	122	0.21	5744	10.12	607	290	0.51	15565	27.41
510	42	0.07	2075	3.65	559	108	0.19	5852	10.31	608	259	0.46	15824	27.87
511	46	0.08	2121	3.74	560	115	0.20	5967	10.51	609	257	0.45	16081	28.32
512	47	0.08	2168	3.82	561	143	0.25	6110	10.76	610	313	0.55	16394	28.87
513	37	0.07	2205	3.88	562	145	0.26	6255	11.02	611	345	0.61	16739	29.48
514	44	0.08	2249	3.96	563	130	0.23	6385	11.25	612	332	0.58	17071	30.07
515	46	0.08	2295	4.04	564	128	0.23	6513	11.47	613	308	0.54	17379	30.61
516	41	0.07	2336	4.11	565	126	0.22	6639	11.69	614	310	0.55	17689	31.15
517	52	0.09	2388	4.21	566	140	0.25	6779	11.94	615	301	0.53	17990	31.68
518	41	0.07	2429	4.28	567	140	0.25	6919	12.19	616	346	0.61	18336	32.29
519	50	0.09	2479	4.37	568	157	0.28	7076	12.46	617	329	0.58	18665	32.87
520	54	0.10	2533	4.46	569	131	0.23	7207	12.69	618	333	0.59	18998	33.46
521	54	0.10	2587	4.56	570	164	0.29	7371	12.98	619	357	0.63	19355	34.09
522	58	0.10	2645	4.66	571	158	0.28	7529	13.26	620	337	0.59	19692	34.68
523	66	0.12	2711	4.77	572	163	0.29	7692	13.55	621	392	0.69	20084	35.37
524	57	0.10	2768	4.87	573	165	0.29	7857	13.84	622	333	0.59	20417	35.96
525	68	0.12	2836	4.99	574	159	0.28	8016	14.12	623	350	0.62	20767	36.57
526	64	0.11	2900	5.11	575	148	0.26	8164	14.38	624	331	0.58	21098	37.16
527	73	0.13	2973	5.24	576	179	0.32	8343	14.69	625	379	0.67	21477	37.82
528	58	0.10	3031	5.34	577	169	0.30	8512	14.99	626	331	0.58	21808	38.41
529	74	0.13	3105	5.47	578	167	0.29	8679	15.29	627	381	0.67	22189	39.08
530	78	0.14	3183	5.61	579	173	0.30	8852	15.59	628	366	0.64	22555	39.72
531	68	0.12	3251	5.73	580	178	0.31	9030	15.90	629	374	0.66	22929	40.38
532	70	0.12	3321	5.85	581	206	0.36	9236	16.27	630	410	0.72	23339	41.10
533	74	0.13	3395	5.98	582	201	0.35	9437	16.62	631	394	0.69	23733	41.80
534	78	0.14	3473	6.12	583	216	0.38	9653	17.00	632	400	0.70	24133	42.50
535	74	0.13	3547	6.25	584	205	0.36	9858	17.36	633	372	0.66	24505	43.16
536	68	0.12	3615	6.37	585	193	0.34	10051	17.70	634	337	0.59	24842	43.75
537	87	0.15	3702	6.52	586	188	0.33	10239	18.03	635	379	0.67	25221	44.42
538	64	0.11	3766	6.63	587	210	0.37	10449	18.40	636	406	0.72	25627	45.13
539	82	0.14	3848	6.78	588	199	0.35	10648	18.75	637	401	0.71	26028	45.84
540	94	0.17	3942	6.94	589	230	0.41	10878	19.16	638	390	0.69	26418	46.53



**Table 174. Reading Grade 7 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
639	408	0.72	26826	47.25	688	285	0.50	45092	79.42	737	83	0.15	54426	95.85
640	401	0.71	27227	47.95	689	287	0.51	45379	79.92	738	99	0.17	54525	96.03
641	397	0.70	27624	48.65	690	275	0.48	45654	80.41	739	91	0.16	54616	96.19
642	439	0.77	28063	49.42	691	272	0.48	45926	80.88	740	103	0.18	54719	96.37
643	394	0.69	28457	50.12	692	295	0.52	46221	81.40	741	80	0.14	54799	96.51
644	450	0.79	28907	50.91	693	287	0.51	46508	81.91	742	84	0.15	54883	96.66
645	384	0.68	29291	51.59	694	281	0.49	46789	82.40	743	86	0.15	54969	96.81
646	397	0.70	29688	52.29	695	312	0.55	47101	82.95	744	70	0.12	55039	96.93
647	398	0.70	30086	52.99	696	252	0.44	47353	83.40	745	82	0.14	55121	97.08
648	407	0.72	30493	53.70	697	231	0.41	47584	83.80	746	80	0.14	55201	97.22
649	369	0.65	30862	54.35	698	266	0.47	47850	84.27	747	62	0.11	55263	97.33
650	433	0.76	31295	55.12	699	237	0.42	48087	84.69	748	61	0.11	55324	97.44
651	381	0.67	31676	55.79	700	238	0.42	48325	85.11	749	72	0.13	55396	97.56
652	434	0.76	32110	56.55	701	213	0.38	48538	85.48	750	60	0.11	55456	97.67
653	412	0.73	32522	57.28	702	238	0.42	48776	85.90	751	49	0.09	55505	97.75
654	423	0.74	32945	58.02	703	227	0.40	49003	86.30	752	61	0.11	55566	97.86
655	414	0.73	33359	58.75	704	234	0.41	49237	86.72	753	58	0.10	55624	97.96
656	401	0.71	33760	59.46	705	242	0.43	49479	87.14	754	45	0.08	55669	98.04
657	395	0.70	34155	60.15	706	202	0.36	49681	87.50	755	50	0.09	55719	98.13
658	425	0.75	34580	60.90	707	206	0.36	49887	87.86	756	47	0.08	55766	98.21
659	395	0.70	34975	61.60	708	189	0.33	50076	88.19	757	51	0.09	55817	98.30
660	403	0.71	35378	62.31	709	192	0.34	50268	88.53	758	43	0.08	55860	98.38
661	376	0.66	35754	62.97	710	206	0.36	50474	88.89	759	37	0.07	55897	98.44
662	419	0.74	36173	63.71	711	223	0.39	50697	89.29	760	41	0.07	55938	98.52
663	391	0.69	36564	64.40	712	190	0.33	50887	89.62	761	41	0.07	55979	98.59
664	366	0.64	36930	65.04	713	201	0.35	51088	89.98	762	41	0.07	56020	98.66
665	375	0.66	37305	65.70	714	198	0.35	51286	90.32	763	37	0.07	56057	98.73
666	402	0.71	37707	66.41	715	180	0.32	51466	90.64	764	32	0.06	56089	98.78
667	360	0.63	38067	67.04	716	165	0.29	51631	90.93	765	32	0.06	56121	98.84
668	371	0.65	38438	67.70	717	173	0.30	51804	91.24	766	28	0.05	56149	98.89
669	361	0.64	38799	68.33	718	137	0.24	51941	91.48	767	25	0.04	56174	98.93
670	362	0.64	39161	68.97	719	173	0.30	52114	91.78	768	31	0.05	56205	98.99
671	349	0.61	39510	69.58	720	136	0.24	52250	92.02	769	22	0.04	56227	99.03
672	376	0.66	39886	70.25	721	160	0.28	52410	92.30	770	26	0.05	56253	99.07
673	358	0.63	40244	70.88	722	168	0.30	52578	92.60	771	21	0.04	56274	99.11
674	361	0.64	40605	71.51	723	125	0.22	52703	92.82	772	31	0.05	56305	99.16
675	344	0.61	40949	72.12	724	141	0.25	52844	93.07	773	26	0.05	56331	99.21
676	330	0.58	41279	72.70	725	124	0.22	52968	93.29	774	24	0.04	56355	99.25
677	332	0.58	41611	73.28	726	133	0.23	53101	93.52	775	22	0.04	56377	99.29
678	312	0.55	41923	73.83	727	145	0.26	53246	93.78	776	19	0.03	56396	99.32
679	338	0.60	42261	74.43	728	145	0.26	53391	94.03	777	16	0.03	56412	99.35
680	367	0.65	42628	75.08	729	126	0.22	53517	94.25	778	14	0.02	56426	99.38
681	328	0.58	42956	75.65	730	140	0.25	53657	94.50	779	14	0.02	56440	99.40
682	311	0.55	43267	76.20	731	132	0.23	53789	94.73	780	21	0.04	56461	99.44
683	325	0.57	43592	76.77	732	110	0.19	53899	94.93	781	15	0.03	56476	99.46
684	304	0.54	43896	77.31	733	112	0.20	54011	95.12	782	14	0.02	56490	99.49
685	285	0.50	44181	77.81	734	115	0.20	54126	95.33	783	15	0.03	56505	99.52
686	325	0.57	44506	78.38	735	120	0.21	54246	95.54	784	14	0.02	56519	99.54
687	301	0.53	44807	78.91	736	97	0.17	54343	95.71	785	8	0.01	56527	99.55



**Table 174. Reading Grade 7 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
786	9	0.02	56536	99.57	844	1	0.00	56770	99.98
787	5	0.01	56541	99.58	845	1	0.00	56771	99.98
788	12	0.02	56553	99.60	847	1	0.00	56772	99.99
789	11	0.02	56564	99.62	852	1	0.00	56773	99.99
790	16	0.03	56580	99.65	854	1	0.00	56774	99.99
791	10	0.02	56590	99.67	858	1	0.00	56775	99.99
792	7	0.01	56597	99.68	863	1	0.00	56776	99.99
793	5	0.01	56602	99.69	869	1	0.00	56777	99.99
794	7	0.01	56609	99.70	880	1	0.00	56778	100.00
795	11	0.02	56620	99.72	887	1	0.00	56779	100.00
796	10	0.02	56630	99.74	891	1	0.00	56780	100.00
797	6	0.01	56636	99.75					
798	6	0.01	56642	99.76					
799	6	0.01	56648	99.77					
800	5	0.01	56653	99.78					
801	9	0.02	56662	99.79					
802	7	0.01	56669	99.80					
803	6	0.01	56675	99.82					
804	6	0.01	56681	99.83					
805	3	0.01	56684	99.83					
806	6	0.01	56690	99.84					
807	7	0.01	56697	99.85					
808	7	0.01	56704	99.87					
809	9	0.02	56713	99.88					
810	4	0.01	56717	99.89					
811	4	0.01	56721	99.90					
812	7	0.01	56728	99.91					
813	4	0.01	56732	99.92					
814	1	0.00	56733	99.92					
815	1	0.00	56734	99.92					
816	2	0.00	56736	99.92					
817	3	0.01	56739	99.93					
818	3	0.01	56742	99.93					
819	1	0.00	56743	99.93					
820	2	0.00	56745	99.94					
821	4	0.01	56749	99.95					
822	1	0.00	56750	99.95					
823	3	0.01	56753	99.95					
824	3	0.01	56756	99.96					
825	1	0.00	56757	99.96					
829	2	0.00	56759	99.96					
830	1	0.00	56760	99.96					
831	1	0.00	56761	99.97					
833	1	0.00	56762	99.97					
835	2	0.00	56764	99.97					
838	2	0.00	56766	99.98					
839	1	0.00	56767	99.98					
841	1	0.00	56768	99.98					
843	1	0.00	56769	99.98					



**Table 175. Writing Grade 7 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
240	56	0.10	56	0.10	332	2	0.00	170	0.30	381	27	0.05	767	1.35
241	1	0.00	57	0.10	333	4	0.01	174	0.31	382	28	0.05	795	1.40
243	2	0.00	59	0.10	334	10	0.02	184	0.32	383	26	0.05	821	1.45
250	1	0.00	60	0.11	335	9	0.02	193	0.34	384	23	0.04	844	1.49
259	1	0.00	61	0.11	336	5	0.01	198	0.35	385	15	0.03	859	1.51
261	1	0.00	62	0.11	337	4	0.01	202	0.36	386	21	0.04	880	1.55
264	1	0.00	63	0.11	338	3	0.01	205	0.36	387	24	0.04	904	1.59
266	1	0.00	64	0.11	339	9	0.02	214	0.38	388	28	0.05	932	1.64
268	1	0.00	65	0.11	340	6	0.01	220	0.39	389	26	0.05	958	1.69
272	2	0.00	67	0.12	341	8	0.01	228	0.40	390	26	0.05	984	1.73
273	1	0.00	68	0.12	342	12	0.02	240	0.42	391	26	0.05	1010	1.78
278	1	0.00	69	0.12	343	5	0.01	245	0.43	392	30	0.05	1040	1.83
279	3	0.01	72	0.13	344	4	0.01	249	0.44	393	25	0.04	1065	1.87
281	1	0.00	73	0.13	345	5	0.01	254	0.45	394	25	0.04	1090	1.92
287	1	0.00	74	0.13	346	8	0.01	262	0.46	395	31	0.05	1121	1.97
291	1	0.00	75	0.13	347	11	0.02	273	0.48	396	30	0.05	1151	2.03
292	1	0.00	76	0.13	348	12	0.02	285	0.50	397	20	0.04	1171	2.06
293	2	0.00	78	0.14	349	9	0.02	294	0.52	398	30	0.05	1201	2.11
294	1	0.00	79	0.14	350	11	0.02	305	0.54	399	29	0.05	1230	2.16
298	1	0.00	80	0.14	351	16	0.03	321	0.57	400	33	0.06	1263	2.22
300	2	0.00	82	0.14	352	11	0.02	332	0.58	401	34	0.06	1297	2.28
301	2	0.00	84	0.15	353	12	0.02	344	0.61	402	19	0.03	1316	2.32
302	4	0.01	88	0.15	354	14	0.02	358	0.63	403	39	0.07	1355	2.39
303	1	0.00	89	0.16	355	12	0.02	370	0.65	404	30	0.05	1385	2.44
304	2	0.00	91	0.16	356	15	0.03	385	0.68	405	43	0.08	1428	2.51
305	1	0.00	92	0.16	357	11	0.02	396	0.70	406	36	0.06	1464	2.58
306	2	0.00	94	0.17	358	7	0.01	403	0.71	407	44	0.08	1508	2.65
307	1	0.00	95	0.17	359	18	0.03	421	0.74	408	42	0.07	1550	2.73
308	2	0.00	97	0.17	360	10	0.02	431	0.76	409	39	0.07	1589	2.80
309	2	0.00	99	0.17	361	13	0.02	444	0.78	410	45	0.08	1634	2.88
310	1	0.00	100	0.18	362	10	0.02	454	0.80	411	39	0.07	1673	2.94
311	3	0.01	103	0.18	363	7	0.01	461	0.81	412	41	0.07	1714	3.02
312	5	0.01	108	0.19	364	18	0.03	479	0.84	413	46	0.08	1760	3.10
313	4	0.01	112	0.20	365	18	0.03	497	0.87	414	59	0.10	1819	3.20
314	3	0.01	115	0.20	366	12	0.02	509	0.90	415	51	0.09	1870	3.29
315	1	0.00	116	0.20	367	16	0.03	525	0.92	416	57	0.10	1927	3.39
316	2	0.00	118	0.21	368	17	0.03	542	0.95	417	54	0.10	1981	3.49
317	2	0.00	120	0.21	369	17	0.03	559	0.98	418	42	0.07	2023	3.56
320	4	0.01	124	0.22	370	13	0.02	572	1.01	419	46	0.08	2069	3.64
321	3	0.01	127	0.22	371	15	0.03	587	1.03	420	54	0.10	2123	3.74
322	2	0.00	129	0.23	372	18	0.03	605	1.06	421	78	0.14	2201	3.87
323	2	0.00	131	0.23	373	13	0.02	618	1.09	422	56	0.10	2257	3.97
325	4	0.01	135	0.24	374	16	0.03	634	1.12	423	55	0.10	2312	4.07
326	5	0.01	140	0.25	375	17	0.03	651	1.15	424	62	0.11	2374	4.18
327	3	0.01	143	0.25	376	10	0.02	661	1.16	425	61	0.11	2435	4.29
328	8	0.01	151	0.27	377	23	0.04	684	1.20	426	62	0.11	2497	4.40
329	2	0.00	153	0.27	378	19	0.03	703	1.24	427	50	0.09	2547	4.48
330	6	0.01	159	0.28	379	13	0.02	716	1.26	428	56	0.10	2603	4.58
331	9	0.02	168	0.30	380	24	0.04	740	1.30	429	55	0.10	2658	4.68



**Table 175. Writing Grade 7 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
430	70	0.12	2728	4.80	479	185	0.33	8176	14.39	528	360	0.63	20486	36.06
431	82	0.14	2810	4.95	480	161	0.28	8337	14.67	529	326	0.57	20812	36.63
432	65	0.11	2875	5.06	481	181	0.32	8518	14.99	530	309	0.54	21121	37.18
433	70	0.12	2945	5.18	482	185	0.33	8703	15.32	531	310	0.55	21431	37.72
434	72	0.13	3017	5.31	483	180	0.32	8883	15.64	532	361	0.64	21792	38.36
435	82	0.14	3099	5.45	484	177	0.31	9060	15.95	533	322	0.57	22114	38.92
436	76	0.13	3175	5.59	485	187	0.33	9247	16.28	534	316	0.56	22430	39.48
437	69	0.12	3244	5.71	486	175	0.31	9422	16.58	535	338	0.59	22768	40.08
438	64	0.11	3308	5.82	487	183	0.32	9605	16.91	536	310	0.55	23078	40.62
439	66	0.12	3374	5.94	488	175	0.31	9780	17.21	537	333	0.59	23411	41.21
440	69	0.12	3443	6.06	489	206	0.36	9986	17.58	538	332	0.58	23743	41.79
441	85	0.15	3528	6.21	490	184	0.32	10170	17.90	539	329	0.58	24072	42.37
442	70	0.12	3598	6.33	491	215	0.38	10385	18.28	540	354	0.62	24426	42.99
443	78	0.14	3676	6.47	492	213	0.37	10598	18.65	541	327	0.58	24753	43.57
444	82	0.14	3758	6.61	493	225	0.40	10823	19.05	542	352	0.62	25105	44.19
445	83	0.15	3841	6.76	494	202	0.36	11025	19.41	543	332	0.58	25437	44.77
446	89	0.16	3930	6.92	495	234	0.41	11259	19.82	544	323	0.57	25760	45.34
447	106	0.19	4036	7.10	496	214	0.38	11473	20.19	545	360	0.63	26120	45.98
448	85	0.15	4121	7.25	497	230	0.40	11703	20.60	546	341	0.60	26461	46.58
449	104	0.18	4225	7.44	498	219	0.39	11922	20.98	547	370	0.65	26831	47.23
450	108	0.19	4333	7.63	499	230	0.40	12152	21.39	548	351	0.62	27182	47.84
451	110	0.19	4443	7.82	500	243	0.43	12395	21.82	549	323	0.57	27505	48.41
452	111	0.20	4554	8.02	501	243	0.43	12638	22.24	550	337	0.59	27842	49.01
453	110	0.19	4664	8.21	502	253	0.45	12891	22.69	551	355	0.62	28197	49.63
454	106	0.19	4770	8.40	503	269	0.47	13160	23.16	552	388	0.68	28585	50.31
455	114	0.20	4884	8.60	504	277	0.49	13437	23.65	553	346	0.61	28931	50.92
456	118	0.21	5002	8.80	505	233	0.41	13670	24.06	554	354	0.62	29285	51.55
457	115	0.20	5117	9.01	506	278	0.49	13948	24.55	555	367	0.65	29652	52.19
458	91	0.16	5208	9.17	507	283	0.50	14231	25.05	556	333	0.59	29985	52.78
459	90	0.16	5298	9.33	508	250	0.44	14481	25.49	557	364	0.64	30349	53.42
460	116	0.20	5414	9.53	509	296	0.52	14777	26.01	558	359	0.63	30708	54.05
461	139	0.24	5553	9.77	510	309	0.54	15086	26.55	559	381	0.67	31089	54.72
462	116	0.20	5669	9.98	511	273	0.48	15359	27.03	560	362	0.64	31451	55.36
463	148	0.26	5817	10.24	512	290	0.51	15649	27.54	561	352	0.62	31803	55.98
464	111	0.20	5928	10.43	513	248	0.44	15897	27.98	562	339	0.60	32142	56.58
465	146	0.26	6074	10.69	514	272	0.48	16169	28.46	563	341	0.60	32483	57.18
466	145	0.26	6219	10.95	515	274	0.48	16443	28.94	564	312	0.55	32795	57.72
467	130	0.23	6349	11.18	516	307	0.54	16750	29.48	565	332	0.58	33127	58.31
468	134	0.24	6483	11.41	517	276	0.49	17026	29.97	566	318	0.56	33445	58.87
469	136	0.24	6619	11.65	518	313	0.55	17339	30.52	567	360	0.63	33805	59.50
470	134	0.24	6753	11.89	519	293	0.52	17632	31.04	568	318	0.56	34123	60.06
471	135	0.24	6888	12.12	520	316	0.56	17948	31.59	569	334	0.59	34457	60.65
472	135	0.24	7023	12.36	521	287	0.51	18235	32.10	570	322	0.57	34779	61.22
473	148	0.26	7171	12.62	522	314	0.55	18549	32.65	571	339	0.60	35118	61.81
474	177	0.31	7348	12.93	523	278	0.49	18827	33.14	572	349	0.61	35467	62.43
475	140	0.25	7488	13.18	524	352	0.62	19179	33.76	573	333	0.59	35800	63.01
476	149	0.26	7637	13.44	525	295	0.52	19474	34.28	574	339	0.60	36139	63.61
477	161	0.28	7798	13.73	526	324	0.57	19798	34.85	575	334	0.59	36473	64.20
478	193	0.34	7991	14.07	527	328	0.58	20126	35.42	576	350	0.62	36823	64.81



**Table 175. Writing Grade 7 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
577	344	0.61	37167	65.42	626	190	0.33	49500	87.13	675	61	0.11	54827	96.50
578	311	0.55	37478	65.97	627	197	0.35	49697	87.47	676	70	0.12	54897	96.63
579	305	0.54	37783	66.50	628	148	0.26	49845	87.74	677	71	0.12	54968	96.75
580	272	0.48	38055	66.98	629	161	0.28	50006	88.02	678	52	0.09	55020	96.84
581	304	0.54	38359	67.52	630	171	0.30	50177	88.32	679	60	0.11	55080	96.95
582	291	0.51	38650	68.03	631	161	0.28	50338	88.60	680	61	0.11	55141	97.06
583	305	0.54	38955	68.57	632	158	0.28	50496	88.88	681	54	0.10	55195	97.15
584	317	0.56	39272	69.13	633	160	0.28	50656	89.16	682	65	0.11	55260	97.27
585	315	0.55	39587	69.68	634	153	0.27	50809	89.43	683	55	0.10	55315	97.36
586	323	0.57	39910	70.25	635	156	0.27	50965	89.71	684	43	0.08	55358	97.44
587	286	0.50	40196	70.75	636	127	0.22	51092	89.93	685	43	0.08	55401	97.51
588	323	0.57	40519	71.32	637	157	0.28	51249	90.21	686	43	0.08	55444	97.59
589	326	0.57	40845	71.89	638	114	0.20	51363	90.41	687	44	0.08	55488	97.67
590	281	0.49	41126	72.39	639	145	0.26	51508	90.66	688	34	0.06	55522	97.73
591	262	0.46	41388	72.85	640	146	0.26	51654	90.92	689	47	0.08	55569	97.81
592	270	0.48	41658	73.32	641	132	0.23	51786	91.15	690	33	0.06	55602	97.87
593	288	0.51	41946	73.83	642	126	0.22	51912	91.37	691	24	0.04	55626	97.91
594	272	0.48	42218	74.31	643	104	0.18	52016	91.56	692	29	0.05	55655	97.96
595	285	0.50	42503	74.81	644	136	0.24	52152	91.80	693	36	0.06	55691	98.03
596	296	0.52	42799	75.33	645	136	0.24	52288	92.04	694	27	0.05	55718	98.07
597	281	0.49	43080	75.83	646	131	0.23	52419	92.27	695	35	0.06	55753	98.13
598	271	0.48	43351	76.30	647	108	0.19	52527	92.46	696	33	0.06	55786	98.19
599	262	0.46	43613	76.77	648	123	0.22	52650	92.67	697	27	0.05	55813	98.24
600	217	0.38	43830	77.15	649	109	0.19	52759	92.86	698	29	0.05	55842	98.29
601	262	0.46	44092	77.61	650	94	0.17	52853	93.03	699	37	0.07	55879	98.36
602	260	0.46	44352	78.07	651	87	0.15	52940	93.18	700	34	0.06	55913	98.42
603	229	0.40	44581	78.47	652	84	0.15	53024	93.33	701	28	0.05	55941	98.47
604	244	0.43	44825	78.90	653	111	0.20	53135	93.53	702	18	0.03	55959	98.50
605	254	0.45	45079	79.35	654	91	0.16	53226	93.69	703	23	0.04	55982	98.54
606	260	0.46	45339	79.80	655	98	0.17	53324	93.86	704	34	0.06	56016	98.60
607	217	0.38	45556	80.19	656	100	0.18	53424	94.03	705	35	0.06	56051	98.66
608	233	0.41	45789	80.60	657	93	0.16	53517	94.20	706	17	0.03	56068	98.69
609	223	0.39	46012	80.99	658	90	0.16	53607	94.36	707	29	0.05	56097	98.74
610	246	0.43	46258	81.42	659	75	0.13	53682	94.49	708	21	0.04	56118	98.78
611	218	0.38	46476	81.81	660	79	0.14	53761	94.63	709	35	0.06	56153	98.84
612	223	0.39	46699	82.20	661	95	0.17	53856	94.80	710	22	0.04	56175	98.88
613	197	0.35	46896	82.54	662	73	0.13	53929	94.92	711	15	0.03	56190	98.90
614	244	0.43	47140	82.97	663	97	0.17	54026	95.09	712	16	0.03	56206	98.93
615	209	0.37	47349	83.34	664	80	0.14	54106	95.24	713	14	0.02	56220	98.96
616	203	0.36	47552	83.70	665	78	0.14	54184	95.37	714	22	0.04	56242	98.99
617	219	0.39	47771	84.08	666	71	0.12	54255	95.50	715	21	0.04	56263	99.03
618	188	0.33	47959	84.42	667	57	0.10	54312	95.60	716	18	0.03	56281	99.06
619	191	0.34	48150	84.75	668	77	0.14	54389	95.73	717	16	0.03	56297	99.09
620	205	0.36	48355	85.11	669	62	0.11	54451	95.84	718	17	0.03	56314	99.12
621	222	0.39	48577	85.50	670	62	0.11	54513	95.95	719	19	0.03	56333	99.16
622	194	0.34	48771	85.84	671	63	0.11	54576	96.06	720	22	0.04	56355	99.19
623	176	0.31	48947	86.15	672	71	0.12	54647	96.19	721	14	0.02	56369	99.22
624	174	0.31	49121	86.46	673	68	0.12	54715	96.31	722	19	0.03	56388	99.25
625	189	0.33	49310	86.79	674	51	0.09	54766	96.40	723	12	0.02	56400	99.27



**Table 175. Writing Grade 7 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
724	25	0.04	56425	99.32	781	1	0.00	56739	99.87
725	8	0.01	56433	99.33	782	2	0.00	56741	99.87
726	12	0.02	56445	99.35	786	7	0.01	56748	99.89
727	8	0.01	56453	99.37	787	5	0.01	56753	99.89
728	11	0.02	56464	99.39	792	5	0.01	56758	99.90
729	6	0.01	56470	99.40	793	1	0.00	56759	99.90
730	11	0.02	56481	99.42	795	1	0.00	56760	99.91
731	7	0.01	56488	99.43	796	5	0.01	56765	99.92
732	12	0.02	56500	99.45	801	1	0.00	56766	99.92
733	8	0.01	56508	99.46	802	3	0.01	56769	99.92
734	17	0.03	56525	99.49	803	4	0.01	56773	99.93
735	10	0.02	56535	99.51	804	1	0.00	56774	99.93
736	12	0.02	56547	99.53	807	1	0.00	56775	99.93
737	15	0.03	56562	99.56	808	1	0.00	56776	99.93
738	9	0.02	56571	99.57	812	3	0.01	56779	99.94
739	12	0.02	56583	99.60	821	2	0.00	56781	99.94
740	7	0.01	56590	99.61	825	1	0.00	56782	99.95
741	5	0.01	56595	99.62	830	6	0.01	56788	99.96
742	15	0.03	56610	99.64	837	5	0.01	56793	99.96
743	6	0.01	56616	99.65	843	2	0.00	56795	99.97
744	6	0.01	56622	99.66	848	4	0.01	56799	99.98
745	5	0.01	56627	99.67	849	4	0.01	56803	99.98
746	4	0.01	56631	99.68	850	1	0.00	56804	99.98
747	3	0.01	56634	99.68	867	1	0.00	56805	99.99
748	3	0.01	56637	99.69	873	1	0.00	56806	99.99
749	14	0.02	56651	99.71	875	1	0.00	56807	99.99
750	2	0.00	56653	99.72	890	6	0.01	56813	100.00
752	6	0.01	56659	99.73					
753	7	0.01	56666	99.74					
754	3	0.01	56669	99.75					
755	6	0.01	56675	99.76					
756	3	0.01	56678	99.76					
757	7	0.01	56685	99.77					
758	1	0.00	56686	99.78					
759	7	0.01	56693	99.79					
761	3	0.01	56696	99.79					
762	1	0.00	56697	99.80					
763	7	0.01	56704	99.81					
764	1	0.00	56705	99.81					
765	3	0.01	56708	99.82					
767	1	0.00	56709	99.82					
768	1	0.00	56710	99.82					
769	2	0.00	56712	99.82					
770	5	0.01	56717	99.83					
772	3	0.01	56720	99.84					
774	8	0.01	56728	99.85					
775	2	0.00	56730	99.85					
778	4	0.01	56734	99.86					
780	4	0.01	56738	99.87					



**Table 176. Mathematics Grade 7 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
280	223	0.39	223	0.39	330	9	0.02	450	0.79	379	26	0.05	1167	2.05
281	2	0.00	225	0.40	331	5	0.01	455	0.80	380	22	0.04	1189	2.09
282	2	0.00	227	0.40	332	6	0.01	461	0.81	381	32	0.06	1221	2.15
283	4	0.01	231	0.41	333	3	0.01	464	0.82	382	20	0.04	1241	2.18
284	2	0.00	233	0.41	334	10	0.02	474	0.83	383	28	0.05	1269	2.23
285	1	0.00	234	0.41	335	8	0.01	482	0.85	384	36	0.06	1305	2.29
286	2	0.00	236	0.41	336	15	0.03	497	0.87	385	18	0.03	1323	2.33
287	4	0.01	240	0.42	337	9	0.02	506	0.89	386	30	0.05	1353	2.38
288	4	0.01	244	0.43	338	8	0.01	514	0.90	387	19	0.03	1372	2.41
289	3	0.01	247	0.43	339	9	0.02	523	0.92	388	36	0.06	1408	2.48
290	1	0.00	248	0.44	340	10	0.02	533	0.94	389	24	0.04	1432	2.52
291	7	0.01	255	0.45	341	9	0.02	542	0.95	390	41	0.07	1473	2.59
292	2	0.00	257	0.45	342	6	0.01	548	0.96	391	26	0.05	1499	2.64
293	2	0.00	259	0.46	343	18	0.03	566	1.00	392	25	0.04	1524	2.68
295	4	0.01	263	0.46	344	12	0.02	578	1.02	393	37	0.07	1561	2.74
296	5	0.01	268	0.47	345	10	0.02	588	1.03	394	31	0.05	1592	2.80
297	1	0.00	269	0.47	346	14	0.02	602	1.06	395	38	0.07	1630	2.87
298	6	0.01	275	0.48	347	6	0.01	608	1.07	396	44	0.08	1674	2.94
299	4	0.01	279	0.49	348	10	0.02	618	1.09	397	34	0.06	1708	3.00
300	4	0.01	283	0.50	349	10	0.02	628	1.10	398	41	0.07	1749	3.07
301	6	0.01	289	0.51	350	12	0.02	640	1.13	399	45	0.08	1794	3.15
302	5	0.01	294	0.52	351	15	0.03	655	1.15	400	40	0.07	1834	3.22
303	3	0.01	297	0.52	352	21	0.04	676	1.19	401	37	0.07	1871	3.29
304	1	0.00	298	0.52	353	12	0.02	688	1.21	402	41	0.07	1912	3.36
305	2	0.00	300	0.53	354	23	0.04	711	1.25	403	47	0.08	1959	3.44
306	5	0.01	305	0.54	355	16	0.03	727	1.28	404	42	0.07	2001	3.52
307	6	0.01	311	0.55	356	17	0.03	744	1.31	405	45	0.08	2046	3.60
308	5	0.01	316	0.56	357	11	0.02	755	1.33	406	44	0.08	2090	3.67
309	3	0.01	319	0.56	358	13	0.02	768	1.35	407	53	0.09	2143	3.77
310	5	0.01	324	0.57	359	9	0.02	777	1.37	408	43	0.08	2186	3.84
311	9	0.02	333	0.59	360	10	0.02	787	1.38	409	42	0.07	2228	3.92
312	3	0.01	336	0.59	361	20	0.04	807	1.42	410	47	0.08	2275	4.00
313	2	0.00	338	0.59	362	21	0.04	828	1.46	411	45	0.08	2320	4.08
314	4	0.01	342	0.60	363	22	0.04	850	1.49	412	42	0.07	2362	4.15
315	5	0.01	347	0.61	364	14	0.02	864	1.52	413	35	0.06	2397	4.21
316	6	0.01	353	0.62	365	13	0.02	877	1.54	414	38	0.07	2435	4.28
317	3	0.01	356	0.63	366	10	0.02	887	1.56	415	54	0.09	2489	4.38
318	5	0.01	361	0.63	367	16	0.03	903	1.59	416	45	0.08	2534	4.45
319	7	0.01	368	0.65	368	15	0.03	918	1.61	417	59	0.10	2593	4.56
320	8	0.01	376	0.66	369	22	0.04	940	1.65	418	49	0.09	2642	4.64
321	10	0.02	386	0.68	370	17	0.03	957	1.68	419	50	0.09	2692	4.73
322	2	0.00	388	0.68	371	19	0.03	976	1.72	420	70	0.12	2762	4.86
323	8	0.01	396	0.70	372	24	0.04	1000	1.76	421	54	0.09	2816	4.95
324	7	0.01	403	0.71	373	23	0.04	1023	1.80	422	52	0.09	2868	5.04
325	8	0.01	411	0.72	374	22	0.04	1045	1.84	423	65	0.11	2933	5.16
326	7	0.01	418	0.73	375	23	0.04	1068	1.88	424	58	0.10	2991	5.26
327	5	0.01	423	0.74	376	29	0.05	1097	1.93	425	69	0.12	3060	5.38
328	10	0.02	433	0.76	377	21	0.04	1118	1.97	426	52	0.09	3112	5.47
329	8	0.01	441	0.78	378	23	0.04	1141	2.01	427	73	0.13	3185	5.60



**Table 176. Mathematics Grade 7 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
428	59	0.10	3244	5.70	477	195	0.34	8910	15.66	526	271	0.48	20373	35.82
429	70	0.12	3314	5.83	478	168	0.30	9078	15.96	527	280	0.49	20653	36.31
430	78	0.14	3392	5.96	479	164	0.29	9242	16.25	528	305	0.54	20958	36.85
431	69	0.12	3461	6.08	480	153	0.27	9395	16.52	529	310	0.55	21268	37.39
432	74	0.13	3535	6.21	481	164	0.29	9559	16.81	530	308	0.54	21576	37.93
433	69	0.12	3604	6.34	482	170	0.30	9729	17.10	531	287	0.50	21863	38.44
434	78	0.14	3682	6.47	483	187	0.33	9916	17.43	532	308	0.54	22171	38.98
435	75	0.13	3757	6.61	484	187	0.33	10103	17.76	533	272	0.48	22443	39.46
436	77	0.14	3834	6.74	485	172	0.30	10275	18.06	534	273	0.48	22716	39.94
437	73	0.13	3907	6.87	486	182	0.32	10457	18.38	535	321	0.56	23037	40.50
438	93	0.16	4000	7.03	487	175	0.31	10632	18.69	536	330	0.58	23367	41.08
439	95	0.17	4095	7.20	488	233	0.41	10865	19.10	537	315	0.55	23682	41.64
440	86	0.15	4181	7.35	489	205	0.36	11070	19.46	538	288	0.51	23970	42.14
441	104	0.18	4285	7.53	490	198	0.35	11268	19.81	539	330	0.58	24300	42.72
442	96	0.17	4381	7.70	491	219	0.39	11487	20.20	540	314	0.55	24614	43.27
443	87	0.15	4468	7.86	492	224	0.39	11711	20.59	541	297	0.52	24911	43.80
444	82	0.14	4550	8.00	493	222	0.39	11933	20.98	542	334	0.59	25245	44.38
445	85	0.15	4635	8.15	494	226	0.40	12159	21.38	543	326	0.57	25571	44.96
446	96	0.17	4731	8.32	495	220	0.39	12379	21.76	544	313	0.55	25884	45.51
447	108	0.19	4839	8.51	496	189	0.33	12568	22.10	545	363	0.64	26247	46.14
448	91	0.16	4930	8.67	497	222	0.39	12790	22.49	546	297	0.52	26544	46.67
449	97	0.17	5027	8.84	498	215	0.38	13005	22.86	547	345	0.61	26889	47.27
450	111	0.20	5138	9.03	499	235	0.41	13240	23.28	548	301	0.53	27190	47.80
451	109	0.19	5247	9.22	500	221	0.39	13461	23.67	549	364	0.64	27554	48.44
452	127	0.22	5374	9.45	501	231	0.41	13692	24.07	550	288	0.51	27842	48.95
453	116	0.20	5490	9.65	502	265	0.47	13957	24.54	551	319	0.56	28161	49.51
454	113	0.20	5603	9.85	503	233	0.41	14190	24.95	552	366	0.64	28527	50.15
455	127	0.22	5730	10.07	504	238	0.42	14428	25.37	553	299	0.53	28826	50.68
456	119	0.21	5849	10.28	505	236	0.41	14664	25.78	554	328	0.58	29154	51.26
457	97	0.17	5946	10.45	506	260	0.46	14924	26.24	555	337	0.59	29491	51.85
458	117	0.21	6063	10.66	507	274	0.48	15198	26.72	556	359	0.63	29850	52.48
459	134	0.24	6197	10.89	508	261	0.46	15459	27.18	557	323	0.57	30173	53.05
460	142	0.25	6339	11.14	509	248	0.44	15707	27.61	558	298	0.52	30471	53.57
461	112	0.20	6451	11.34	510	219	0.39	15926	28.00	559	335	0.59	30806	54.16
462	142	0.25	6593	11.59	511	262	0.46	16188	28.46	560	320	0.56	31126	54.72
463	125	0.22	6718	11.81	512	271	0.48	16459	28.94	561	323	0.57	31449	55.29
464	134	0.24	6852	12.05	513	264	0.46	16723	29.40	562	329	0.58	31778	55.87
465	159	0.28	7011	12.33	514	283	0.50	17006	29.90	563	354	0.62	32132	56.49
466	158	0.28	7169	12.60	515	280	0.49	17286	30.39	564	346	0.61	32478	57.10
467	142	0.25	7311	12.85	516	292	0.51	17578	30.90	565	321	0.56	32799	57.66
468	146	0.26	7457	13.11	517	291	0.51	17869	31.42	566	312	0.55	33111	58.21
469	174	0.31	7631	13.42	518	290	0.51	18159	31.93	567	326	0.57	33437	58.79
470	149	0.26	7780	13.68	519	256	0.45	18415	32.38	568	312	0.55	33749	59.33
471	138	0.24	7918	13.92	520	257	0.45	18672	32.83	569	317	0.56	34066	59.89
472	143	0.25	8061	14.17	521	293	0.52	18965	33.34	570	323	0.57	34389	60.46
473	150	0.26	8211	14.44	522	278	0.49	19243	33.83	571	332	0.58	34721	61.04
474	168	0.30	8379	14.73	523	293	0.52	19536	34.35	572	319	0.56	35040	61.60
475	172	0.30	8551	15.03	524	283	0.50	19819	34.84	573	300	0.53	35340	62.13
476	164	0.29	8715	15.32	525	283	0.50	20102	35.34	574	327	0.57	35667	62.71



**Table 176. Mathematics Grade 7 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
575	304	0.53	35971	63.24	624	200	0.35	48815	85.82	673	70	0.12	55127	96.92
576	331	0.58	36302	63.82	625	195	0.34	49010	86.16	674	62	0.11	55189	97.03
577	302	0.53	36604	64.35	626	208	0.37	49218	86.53	675	67	0.12	55256	97.14
578	332	0.58	36936	64.94	627	186	0.33	49404	86.86	676	65	0.11	55321	97.26
579	315	0.55	37251	65.49	628	169	0.30	49573	87.15	677	79	0.14	55400	97.40
580	297	0.52	37548	66.01	629	185	0.33	49758	87.48	678	59	0.10	55459	97.50
581	262	0.46	37810	66.47	630	184	0.32	49942	87.80	679	63	0.11	55522	97.61
582	319	0.56	38129	67.03	631	179	0.31	50121	88.12	680	50	0.09	55572	97.70
583	292	0.51	38421	67.55	632	161	0.28	50282	88.40	681	52	0.09	55624	97.79
584	297	0.52	38718	68.07	633	173	0.30	50455	88.70	682	36	0.06	55660	97.86
585	265	0.47	38983	68.54	634	174	0.31	50629	89.01	683	50	0.09	55710	97.94
586	275	0.48	39258	69.02	635	156	0.27	50785	89.28	684	46	0.08	55756	98.02
587	261	0.46	39519	69.48	636	151	0.27	50936	89.55	685	47	0.08	55803	98.11
588	277	0.49	39796	69.96	637	151	0.27	51087	89.82	686	43	0.08	55846	98.18
589	317	0.56	40113	70.52	638	164	0.29	51251	90.10	687	54	0.09	55900	98.28
590	307	0.54	40420	71.06	639	163	0.29	51414	90.39	688	38	0.07	55938	98.34
591	295	0.52	40715	71.58	640	148	0.26	51562	90.65	689	45	0.08	55983	98.42
592	265	0.47	40980	72.05	641	151	0.27	51713	90.92	690	27	0.05	56010	98.47
593	286	0.50	41266	72.55	642	169	0.30	51882	91.21	691	42	0.07	56052	98.54
594	271	0.48	41537	73.03	643	145	0.25	52027	91.47	692	42	0.07	56094	98.62
595	278	0.49	41815	73.51	644	149	0.26	52176	91.73	693	39	0.07	56133	98.69
596	281	0.49	42096	74.01	645	139	0.24	52315	91.97	694	36	0.06	56169	98.75
597	291	0.51	42387	74.52	646	141	0.25	52456	92.22	695	34	0.06	56203	98.81
598	258	0.45	42645	74.97	647	133	0.23	52589	92.46	696	19	0.03	56222	98.84
599	293	0.52	42938	75.49	648	150	0.26	52739	92.72	697	28	0.05	56250	98.89
600	256	0.45	43194	75.94	649	120	0.21	52859	92.93	698	25	0.04	56275	98.94
601	263	0.46	43457	76.40	650	135	0.24	52994	93.17	699	29	0.05	56304	98.99
602	256	0.45	43713	76.85	651	119	0.21	53113	93.38	700	21	0.04	56325	99.02
603	246	0.43	43959	77.28	652	121	0.21	53234	93.59	701	27	0.05	56352	99.07
604	241	0.42	44200	77.71	653	113	0.20	53347	93.79	702	28	0.05	56380	99.12
605	250	0.44	44450	78.15	654	126	0.22	53473	94.01	703	18	0.03	56398	99.15
606	241	0.42	44691	78.57	655	104	0.18	53577	94.19	704	21	0.04	56419	99.19
607	249	0.44	44940	79.01	656	102	0.18	53679	94.37	705	16	0.03	56435	99.22
608	260	0.46	45200	79.47	657	114	0.20	53793	94.57	706	24	0.04	56459	99.26
609	229	0.40	45429	79.87	658	99	0.17	53892	94.75	707	18	0.03	56477	99.29
610	239	0.42	45668	80.29	659	98	0.17	53990	94.92	708	16	0.03	56493	99.32
611	235	0.41	45903	80.70	660	99	0.17	54089	95.09	709	11	0.02	56504	99.34
612	221	0.39	46124	81.09	661	96	0.17	54185	95.26	710	15	0.03	56519	99.37
613	253	0.44	46377	81.53	662	68	0.12	54253	95.38	711	18	0.03	56537	99.40
614	264	0.46	46641	82.00	663	115	0.20	54368	95.58	712	11	0.02	56548	99.42
615	237	0.42	46878	82.42	664	80	0.14	54448	95.72	713	16	0.03	56564	99.44
616	223	0.39	47101	82.81	665	78	0.14	54526	95.86	714	8	0.01	56572	99.46
617	252	0.44	47353	83.25	666	75	0.13	54601	95.99	715	10	0.02	56582	99.48
618	210	0.37	47563	83.62	667	80	0.14	54681	96.13	716	13	0.02	56595	99.50
619	224	0.39	47787	84.01	668	74	0.13	54755	96.26	717	10	0.02	56605	99.52
620	207	0.36	47994	84.38	669	82	0.14	54837	96.41	718	7	0.01	56612	99.53
621	212	0.37	48206	84.75	670	78	0.14	54915	96.55	719	17	0.03	56629	99.56
622	201	0.35	48407	85.10	671	69	0.12	54984	96.67	720	16	0.03	56645	99.59
623	208	0.37	48615	85.47	672	73	0.13	55057	96.80	721	12	0.02	56657	99.61



**Table 176. Mathematics Grade 7 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
722	7	0.01	56664	99.62	775	2	0.00	56855	99.96
723	9	0.02	56673	99.64	778	1	0.00	56856	99.96
724	8	0.01	56681	99.65	779	1	0.00	56857	99.96
725	5	0.01	56686	99.66	781	1	0.00	56858	99.96
726	8	0.01	56694	99.67	782	1	0.00	56859	99.96
727	7	0.01	56701	99.69	784	1	0.00	56860	99.96
728	8	0.01	56709	99.70	786	1	0.00	56861	99.97
729	3	0.01	56712	99.70	787	1	0.00	56862	99.97
730	13	0.02	56725	99.73	788	1	0.00	56863	99.97
731	5	0.01	56730	99.74	790	1	0.00	56864	99.97
732	6	0.01	56736	99.75	795	1	0.00	56865	99.97
733	10	0.02	56746	99.76	797	1	0.00	56866	99.98
734	5	0.01	56751	99.77	798	1	0.00	56867	99.98
735	5	0.01	56756	99.78	802	1	0.00	56868	99.98
736	4	0.01	56760	99.79	807	1	0.00	56869	99.98
737	4	0.01	56764	99.80	816	1	0.00	56870	99.98
738	3	0.01	56767	99.80	817	1	0.00	56871	99.98
739	2	0.00	56769	99.80	818	2	0.00	56873	99.99
740	6	0.01	56775	99.82	825	1	0.00	56874	99.99
741	6	0.01	56781	99.83	828	1	0.00	56875	99.99
742	6	0.01	56787	99.84	830	1	0.00	56876	99.99
743	6	0.01	56793	99.85	855	2	0.00	56878	100.00
744	3	0.01	56796	99.85	857	1	0.00	56879	100.00
745	2	0.00	56798	99.86	860	1	0.00	56880	100.00
746	3	0.01	56801	99.86					
747	12	0.02	56813	99.88					
749	2	0.00	56815	99.89					
750	3	0.01	56818	99.89					
751	1	0.00	56819	99.89					
752	2	0.00	56821	99.90					
753	1	0.00	56822	99.90					
754	1	0.00	56823	99.90					
755	2	0.00	56825	99.90					
756	3	0.01	56828	99.91					
757	1	0.00	56829	99.91					
758	1	0.00	56830	99.91					
759	2	0.00	56832	99.92					
760	2	0.00	56834	99.92					
761	2	0.00	56836	99.92					
762	3	0.01	56839	99.93					
763	1	0.00	56840	99.93					
764	1	0.00	56841	99.93					
766	1	0.00	56842	99.93					
767	3	0.01	56845	99.94					
768	1	0.00	56846	99.94					
769	2	0.00	56848	99.94					
770	1	0.00	56849	99.95					
772	1	0.00	56850	99.95					
773	3	0.01	56853	99.95					



**Table 177. Reading Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
330	201	0.36	201	0.36	412	2	0.00	293	0.52	463	9	0.02	519	0.92
333	1	0.00	202	0.36	414	3	0.01	296	0.52	464	9	0.02	528	0.93
340	1	0.00	203	0.36	415	1	0.00	297	0.52	465	3	0.01	531	0.94
343	2	0.00	205	0.36	416	4	0.01	301	0.53	466	13	0.02	544	0.96
345	1	0.00	206	0.36	417	1	0.00	302	0.53	467	8	0.01	552	0.98
346	2	0.00	208	0.37	418	1	0.00	303	0.54	468	5	0.01	557	0.98
348	2	0.00	210	0.37	419	1	0.00	304	0.54	469	14	0.02	571	1.01
349	1	0.00	211	0.37	420	1	0.00	305	0.54	470	11	0.02	582	1.03
351	1	0.00	212	0.37	421	2	0.00	307	0.54	471	10	0.02	592	1.05
352	1	0.00	213	0.38	422	5	0.01	312	0.55	472	11	0.02	603	1.07
355	1	0.00	214	0.38	423	7	0.01	319	0.56	473	13	0.02	616	1.09
356	1	0.00	215	0.38	424	4	0.01	323	0.57	474	14	0.02	630	1.11
360	1	0.00	216	0.38	425	7	0.01	330	0.58	475	13	0.02	643	1.14
361	1	0.00	217	0.38	426	7	0.01	337	0.60	476	9	0.02	652	1.15
363	1	0.00	218	0.39	427	6	0.01	343	0.61	477	12	0.02	664	1.17
365	1	0.00	219	0.39	428	3	0.01	346	0.61	478	16	0.03	680	1.20
367	1	0.00	220	0.39	429	4	0.01	350	0.62	479	17	0.03	697	1.23
369	1	0.00	221	0.39	430	2	0.00	352	0.62	480	8	0.01	705	1.25
372	1	0.00	222	0.39	432	2	0.00	354	0.63	481	10	0.02	715	1.26
373	1	0.00	223	0.39	433	1	0.00	355	0.63	482	10	0.02	725	1.28
374	1	0.00	224	0.40	434	1	0.00	356	0.63	483	21	0.04	746	1.32
377	3	0.01	227	0.40	435	3	0.01	359	0.63	484	13	0.02	759	1.34
380	2	0.00	229	0.40	436	6	0.01	365	0.64	485	7	0.01	766	1.35
382	1	0.00	230	0.41	437	8	0.01	373	0.66	486	21	0.04	787	1.39
383	4	0.01	234	0.41	438	5	0.01	378	0.67	487	11	0.02	798	1.41
384	1	0.00	235	0.42	439	4	0.01	382	0.67	488	17	0.03	815	1.44
386	1	0.00	236	0.42	440	4	0.01	386	0.68	489	22	0.04	837	1.48
387	3	0.01	239	0.42	441	4	0.01	390	0.69	490	11	0.02	848	1.50
388	2	0.00	241	0.43	442	3	0.01	393	0.69	491	11	0.02	859	1.52
390	2	0.00	243	0.43	443	5	0.01	398	0.70	492	20	0.04	879	1.55
391	4	0.01	247	0.44	444	5	0.01	403	0.71	493	27	0.05	906	1.60
392	1	0.00	248	0.44	445	9	0.02	412	0.73	494	21	0.04	927	1.64
393	1	0.00	249	0.44	446	4	0.01	416	0.74	495	23	0.04	950	1.68
394	3	0.01	252	0.45	447	5	0.01	421	0.74	496	37	0.07	987	1.74
395	1	0.00	253	0.45	448	4	0.01	425	0.75	497	26	0.05	1013	1.79
396	1	0.00	254	0.45	449	7	0.01	432	0.76	498	25	0.04	1038	1.83
397	1	0.00	255	0.45	450	5	0.01	437	0.77	499	26	0.05	1064	1.88
399	1	0.00	256	0.45	451	3	0.01	440	0.78	500	23	0.04	1087	1.92
400	1	0.00	257	0.45	452	7	0.01	447	0.79	501	27	0.05	1114	1.97
401	4	0.01	261	0.46	453	5	0.01	452	0.80	502	28	0.05	1142	2.02
402	1	0.00	262	0.46	454	4	0.01	456	0.81	503	25	0.04	1167	2.06
403	4	0.01	266	0.47	455	7	0.01	463	0.82	504	30	0.05	1197	2.12
404	5	0.01	271	0.48	456	10	0.02	473	0.84	505	26	0.05	1223	2.16
405	3	0.01	274	0.48	457	7	0.01	480	0.85	506	24	0.04	1247	2.20
407	4	0.01	278	0.49	458	5	0.01	485	0.86	507	24	0.04	1271	2.25
408	1	0.00	279	0.49	459	8	0.01	493	0.87	508	25	0.04	1296	2.29
409	3	0.01	282	0.50	460	4	0.01	497	0.88	509	38	0.07	1334	2.36
410	4	0.01	286	0.51	461	8	0.01	505	0.89	510	27	0.05	1361	2.40
411	5	0.01	291	0.51	462	5	0.01	510	0.90	511	33	0.06	1394	2.46



**Table 177. Reading Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
512	33	0.06	1427	2.52	561	95	0.17	4417	7.80	610	245	0.43	12314	21.76
513	36	0.06	1463	2.59	562	90	0.16	4507	7.96	611	238	0.42	12552	22.18
514	44	0.08	1507	2.66	563	90	0.16	4597	8.12	612	259	0.46	12811	22.64
515	33	0.06	1540	2.72	564	107	0.19	4704	8.31	613	265	0.47	13076	23.10
516	35	0.06	1575	2.78	565	110	0.19	4814	8.51	614	232	0.41	13308	23.51
517	33	0.06	1608	2.84	566	100	0.18	4914	8.68	615	294	0.52	13602	24.03
518	36	0.06	1644	2.90	567	124	0.22	5038	8.90	616	258	0.46	13860	24.49
519	41	0.07	1685	2.98	568	100	0.18	5138	9.08	617	263	0.46	14123	24.95
520	42	0.07	1727	3.05	569	101	0.18	5239	9.26	618	272	0.48	14395	25.44
521	36	0.06	1763	3.12	570	119	0.21	5358	9.47	619	284	0.50	14679	25.94
522	50	0.09	1813	3.20	571	125	0.22	5483	9.69	620	288	0.51	14967	26.45
523	35	0.06	1848	3.27	572	91	0.16	5574	9.85	621	294	0.52	15261	26.97
524	46	0.08	1894	3.35	573	111	0.20	5685	10.05	622	275	0.49	15536	27.45
525	56	0.10	1950	3.45	574	133	0.24	5818	10.28	623	293	0.52	15829	27.97
526	46	0.08	1996	3.53	575	127	0.22	5945	10.50	624	265	0.47	16094	28.44
527	64	0.11	2060	3.64	576	142	0.25	6087	10.76	625	315	0.56	16409	28.99
528	52	0.09	2112	3.73	577	141	0.25	6228	11.00	626	308	0.54	16717	29.54
529	45	0.08	2157	3.81	578	118	0.21	6346	11.21	627	294	0.52	17011	30.06
530	61	0.11	2218	3.92	579	137	0.24	6483	11.46	628	269	0.48	17280	30.53
531	53	0.09	2271	4.01	580	140	0.25	6623	11.70	629	307	0.54	17587	31.08
532	48	0.08	2319	4.10	581	123	0.22	6746	11.92	630	309	0.55	17896	31.62
533	57	0.10	2376	4.20	582	156	0.28	6902	12.20	631	351	0.62	18247	32.24
534	49	0.09	2425	4.28	583	149	0.26	7051	12.46	632	339	0.60	18586	32.84
535	57	0.10	2482	4.39	584	144	0.25	7195	12.71	633	337	0.60	18923	33.44
536	54	0.10	2536	4.48	585	150	0.27	7345	12.98	634	339	0.60	19262	34.03
537	46	0.08	2582	4.56	586	180	0.32	7525	13.30	635	355	0.63	19617	34.66
538	60	0.11	2642	4.67	587	171	0.30	7696	13.60	636	350	0.62	19967	35.28
539	72	0.13	2714	4.80	588	143	0.25	7839	13.85	637	368	0.65	20335	35.93
540	41	0.07	2755	4.87	589	177	0.31	8016	14.16	638	341	0.60	20676	36.53
541	78	0.14	2833	5.01	590	176	0.31	8192	14.47	639	337	0.60	21013	37.13
542	59	0.10	2892	5.11	591	184	0.33	8376	14.80	640	353	0.62	21366	37.75
543	63	0.11	2955	5.22	592	181	0.32	8557	15.12	641	339	0.60	21705	38.35
544	65	0.11	3020	5.34	593	178	0.31	8735	15.43	642	378	0.67	22083	39.02
545	67	0.12	3087	5.45	594	171	0.30	8906	15.74	643	347	0.61	22430	39.63
546	57	0.10	3144	5.56	595	213	0.38	9119	16.11	644	412	0.73	22842	40.36
547	97	0.17	3241	5.73	596	193	0.34	9312	16.45	645	365	0.64	23207	41.01
548	69	0.12	3310	5.85	597	186	0.33	9498	16.78	646	407	0.72	23614	41.72
549	71	0.13	3381	5.97	598	194	0.34	9692	17.13	647	357	0.63	23971	42.36
550	70	0.12	3451	6.10	599	220	0.39	9912	17.51	648	395	0.70	24366	43.05
551	86	0.15	3537	6.25	600	191	0.34	10103	17.85	649	420	0.74	24786	43.80
552	80	0.14	3617	6.39	601	193	0.34	10296	18.19	650	399	0.71	25185	44.50
553	84	0.15	3701	6.54	602	229	0.40	10525	18.60	651	372	0.66	25557	45.16
554	72	0.13	3773	6.67	603	198	0.35	10723	18.95	652	414	0.73	25971	45.89
555	105	0.19	3878	6.85	604	213	0.38	10936	19.32	653	405	0.72	26376	46.60
556	94	0.17	3972	7.02	605	204	0.36	11140	19.68	654	413	0.73	26789	47.33
557	85	0.15	4057	7.17	606	232	0.41	11372	20.09	655	370	0.65	27159	47.99
558	97	0.17	4154	7.34	607	226	0.40	11598	20.49	656	398	0.70	27557	48.69
559	102	0.18	4256	7.52	608	245	0.43	11843	20.93	657	376	0.66	27933	49.36
560	66	0.12	4322	7.64	609	226	0.40	12069	21.33	658	396	0.70	28329	50.06



**Table 177. Reading Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
659	388	0.69	28717	50.74	708	308	0.54	47261	83.51	757	64	0.11	55445	97.97
660	435	0.77	29152	51.51	709	295	0.52	47556	84.03	758	52	0.09	55497	98.06
661	352	0.62	29504	52.13	710	303	0.54	47859	84.56	759	54	0.10	55551	98.16
662	417	0.74	29921	52.87	711	269	0.48	48128	85.04	760	60	0.11	55611	98.26
663	429	0.76	30350	53.63	712	270	0.48	48398	85.52	761	69	0.12	55680	98.38
664	432	0.76	30782	54.39	713	324	0.57	48722	86.09	762	36	0.06	55716	98.45
665	420	0.74	31202	55.13	714	240	0.42	48962	86.51	763	56	0.10	55772	98.55
666	414	0.73	31616	55.86	715	251	0.44	49213	86.96	764	50	0.09	55822	98.63
667	380	0.67	31996	56.54	716	231	0.41	49444	87.36	765	38	0.07	55860	98.70
668	394	0.70	32390	57.23	717	259	0.46	49703	87.82	766	40	0.07	55900	98.77
669	412	0.73	32802	57.96	718	231	0.41	49934	88.23	767	37	0.07	55937	98.84
670	396	0.70	33198	58.66	719	220	0.39	50154	88.62	768	35	0.06	55972	98.90
671	421	0.74	33619	59.40	720	259	0.46	50413	89.08	769	30	0.05	56002	98.95
672	395	0.70	34014	60.10	721	249	0.44	50662	89.52	770	40	0.07	56042	99.02
673	417	0.74	34431	60.84	722	211	0.37	50873	89.89	771	35	0.06	56077	99.08
674	443	0.78	34874	61.62	723	208	0.37	51081	90.26	772	27	0.05	56104	99.13
675	414	0.73	35288	62.35	724	213	0.38	51294	90.63	773	33	0.06	56137	99.19
676	407	0.72	35695	63.07	725	188	0.33	51482	90.97	774	28	0.05	56165	99.24
677	418	0.74	36113	63.81	726	212	0.37	51694	91.34	775	33	0.06	56198	99.30
678	407	0.72	36520	64.53	727	169	0.30	51863	91.64	776	20	0.04	56218	99.33
679	407	0.72	36927	65.25	728	189	0.33	52052	91.97	777	29	0.05	56247	99.39
680	386	0.68	37313	65.93	729	194	0.34	52246	92.32	778	21	0.04	56268	99.42
681	385	0.68	37698	66.61	730	184	0.33	52430	92.64	779	16	0.03	56284	99.45
682	390	0.69	38088	67.30	731	167	0.30	52597	92.94	780	19	0.03	56303	99.48
683	376	0.66	38464	67.96	732	145	0.26	52742	93.19	781	23	0.04	56326	99.52
684	405	0.72	38869	68.68	733	162	0.29	52904	93.48	782	13	0.02	56339	99.55
685	397	0.70	39266	69.38	734	130	0.23	53034	93.71	783	15	0.03	56354	99.57
686	365	0.64	39631	70.03	735	168	0.30	53202	94.00	784	13	0.02	56367	99.60
687	426	0.75	40057	70.78	736	144	0.25	53346	94.26	785	11	0.02	56378	99.62
688	344	0.61	40401	71.39	737	151	0.27	53497	94.53	786	19	0.03	56397	99.65
689	388	0.69	40789	72.07	738	137	0.24	53634	94.77	787	16	0.03	56413	99.68
690	370	0.65	41159	72.73	739	145	0.26	53779	95.02	788	7	0.01	56420	99.69
691	353	0.62	41512	73.35	740	116	0.20	53895	95.23	789	12	0.02	56432	99.71
692	383	0.68	41895	74.03	741	122	0.22	54017	95.44	790	12	0.02	56444	99.73
693	361	0.64	42256	74.66	742	109	0.19	54126	95.64	791	3	0.01	56447	99.74
694	339	0.60	42595	75.26	743	125	0.22	54251	95.86	792	7	0.01	56454	99.75
695	342	0.60	42937	75.87	744	111	0.20	54362	96.05	793	8	0.01	56462	99.76
696	388	0.69	43325	76.55	745	95	0.17	54457	96.22	794	5	0.01	56467	99.77
697	341	0.60	43666	77.16	746	87	0.15	54544	96.38	795	12	0.02	56479	99.80
698	341	0.60	44007	77.76	747	89	0.16	54633	96.53	796	3	0.01	56482	99.80
699	340	0.60	44347	78.36	748	95	0.17	54728	96.70	797	11	0.02	56493	99.82
700	335	0.59	44682	78.95	749	97	0.17	54825	96.87	798	6	0.01	56499	99.83
701	372	0.66	45054	79.61	750	95	0.17	54920	97.04	799	5	0.01	56504	99.84
702	323	0.57	45377	80.18	751	87	0.15	55007	97.19	800	3	0.01	56507	99.84
703	341	0.60	45718	80.78	752	94	0.17	55101	97.36	801	3	0.01	56510	99.85
704	319	0.56	46037	81.34	753	76	0.13	55177	97.49	802	5	0.01	56515	99.86
705	299	0.53	46336	81.87	754	72	0.13	55249	97.62	803	6	0.01	56521	99.87
706	327	0.58	46663	82.45	755	70	0.12	55319	97.75	804	5	0.01	56526	99.88
707	290	0.51	46953	82.96	756	62	0.11	55381	97.85	805	3	0.01	56529	99.88



**Table 177. Reading Grade 8 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %
806	1	0.00	56530	99.89
807	4	0.01	56534	99.89
808	3	0.01	56537	99.90
809	3	0.01	56540	99.90
810	1	0.00	56541	99.90
811	2	0.00	56543	99.91
812	2	0.00	56545	99.91
813	2	0.00	56547	99.92
814	4	0.01	56551	99.92
815	2	0.00	56553	99.93
816	2	0.00	56555	99.93
817	6	0.01	56561	99.94
819	3	0.01	56564	99.95
820	3	0.01	56567	99.95
821	4	0.01	56571	99.96
822	1	0.00	56572	99.96
825	2	0.00	56574	99.96
827	3	0.01	56577	99.97
828	2	0.00	56579	99.97
829	2	0.00	56581	99.98
830	1	0.00	56582	99.98
832	1	0.00	56583	99.98
835	1	0.00	56584	99.98
837	1	0.00	56585	99.98
839	2	0.00	56587	99.99
840	2	0.00	56589	99.99
848	1	0.00	56590	99.99
872	1	0.00	56591	99.99
879	1	0.00	56592	99.99
883	1	0.00	56593	100.00
904	1	0.00	56594	100.00
990	1	0.00	56595	100.00



**Table 178. Writing Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
250	55	0.10	55	0.10	315	3	0.01	167	0.29	364	12	0.02	544	0.96
251	2	0.00	57	0.10	316	2	0.00	169	0.30	365	11	0.02	555	0.98
252	2	0.00	59	0.10	317	1	0.00	170	0.30	366	18	0.03	573	1.01
254	1	0.00	60	0.11	318	3	0.01	173	0.31	367	15	0.03	588	1.04
255	1	0.00	61	0.11	319	2	0.00	175	0.31	368	11	0.02	599	1.06
256	3	0.01	64	0.11	320	4	0.01	179	0.32	369	16	0.03	615	1.09
258	1	0.00	65	0.11	321	4	0.01	183	0.32	370	13	0.02	628	1.11
259	2	0.00	67	0.12	322	4	0.01	187	0.33	371	9	0.02	637	1.12
263	1	0.00	68	0.12	323	2	0.00	189	0.33	372	16	0.03	653	1.15
268	1	0.00	69	0.12	324	3	0.01	192	0.34	373	11	0.02	664	1.17
271	1	0.00	70	0.12	325	5	0.01	197	0.35	374	24	0.04	688	1.21
272	1	0.00	71	0.13	326	5	0.01	202	0.36	375	18	0.03	706	1.25
273	2	0.00	73	0.13	327	6	0.01	208	0.37	376	11	0.02	717	1.27
274	1	0.00	74	0.13	328	5	0.01	213	0.38	377	15	0.03	732	1.29
276	1	0.00	75	0.13	329	4	0.01	217	0.38	378	15	0.03	747	1.32
278	1	0.00	76	0.13	330	8	0.01	225	0.40	379	23	0.04	770	1.36
280	1	0.00	77	0.14	331	5	0.01	230	0.41	380	20	0.04	790	1.39
281	2	0.00	79	0.14	332	7	0.01	237	0.42	381	25	0.04	815	1.44
283	2	0.00	81	0.14	333	2	0.00	239	0.42	382	22	0.04	837	1.48
284	2	0.00	83	0.15	334	9	0.02	248	0.44	383	22	0.04	859	1.52
285	1	0.00	84	0.15	335	6	0.01	254	0.45	384	19	0.03	878	1.55
286	2	0.00	86	0.15	336	9	0.02	263	0.46	385	24	0.04	902	1.59
287	1	0.00	87	0.15	337	8	0.01	271	0.48	386	21	0.04	923	1.63
289	2	0.00	89	0.16	338	8	0.01	279	0.49	387	28	0.05	951	1.68
290	4	0.01	93	0.16	339	5	0.01	284	0.50	388	16	0.03	967	1.71
291	1	0.00	94	0.17	340	14	0.02	298	0.53	389	23	0.04	990	1.75
292	1	0.00	95	0.17	341	15	0.03	313	0.55	390	20	0.04	1010	1.78
293	2	0.00	97	0.17	342	9	0.02	322	0.57	391	26	0.05	1036	1.83
294	5	0.01	102	0.18	343	8	0.01	330	0.58	392	24	0.04	1060	1.87
295	2	0.00	104	0.18	344	8	0.01	338	0.60	393	27	0.05	1087	1.92
296	1	0.00	105	0.19	345	10	0.02	348	0.61	394	27	0.05	1114	1.97
297	2	0.00	107	0.19	346	11	0.02	359	0.63	395	26	0.05	1140	2.01
298	3	0.01	110	0.19	347	12	0.02	371	0.65	396	15	0.03	1155	2.04
299	3	0.01	113	0.20	348	10	0.02	381	0.67	397	30	0.05	1185	2.09
300	2	0.00	115	0.20	349	9	0.02	390	0.69	398	27	0.05	1212	2.14
301	3	0.01	118	0.21	350	5	0.01	395	0.70	399	27	0.05	1239	2.19
302	1	0.00	119	0.21	351	10	0.02	405	0.71	400	29	0.05	1268	2.24
303	6	0.01	125	0.22	352	8	0.01	413	0.73	401	26	0.05	1294	2.28
304	8	0.01	133	0.23	353	12	0.02	425	0.75	402	34	0.06	1328	2.34
305	4	0.01	137	0.24	354	5	0.01	430	0.76	403	32	0.06	1360	2.40
306	1	0.00	138	0.24	355	14	0.02	444	0.78	404	39	0.07	1399	2.47
307	6	0.01	144	0.25	356	8	0.01	452	0.80	405	33	0.06	1432	2.53
308	2	0.00	146	0.26	357	12	0.02	464	0.82	406	35	0.06	1467	2.59
309	3	0.01	149	0.26	358	7	0.01	471	0.83	407	48	0.08	1515	2.67
310	1	0.00	150	0.26	359	7	0.01	478	0.84	408	38	0.07	1553	2.74
311	1	0.00	151	0.27	360	15	0.03	493	0.87	409	32	0.06	1585	2.80
312	5	0.01	156	0.28	361	12	0.02	505	0.89	410	45	0.08	1630	2.88
313	4	0.01	160	0.28	362	12	0.02	517	0.91	411	30	0.05	1660	2.93
314	4	0.01	164	0.29	363	15	0.03	532	0.94	412	44	0.08	1704	3.01



**Table 178. Writing Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
413	40	0.07	1744	3.08	462	117	0.21	5479	9.67	511	215	0.38	13861	24.46
414	38	0.07	1782	3.15	463	131	0.23	5610	9.90	512	242	0.43	14103	24.89
415	40	0.07	1822	3.22	464	121	0.21	5731	10.12	513	278	0.49	14381	25.38
416	47	0.08	1869	3.30	465	113	0.20	5844	10.31	514	244	0.43	14625	25.81
417	52	0.09	1921	3.39	466	130	0.23	5974	10.54	515	243	0.43	14868	26.24
418	40	0.07	1961	3.46	467	116	0.20	6090	10.75	516	245	0.43	15113	26.67
419	48	0.08	2009	3.55	468	124	0.22	6214	10.97	517	246	0.43	15359	27.11
420	52	0.09	2061	3.64	469	124	0.22	6338	11.19	518	243	0.43	15602	27.54
421	52	0.09	2113	3.73	470	131	0.23	6469	11.42	519	244	0.43	15846	27.97
422	52	0.09	2165	3.82	471	135	0.24	6604	11.66	520	274	0.48	16120	28.45
423	52	0.09	2217	3.91	472	135	0.24	6739	11.89	521	252	0.44	16372	28.90
424	46	0.08	2263	3.99	473	136	0.24	6875	12.13	522	257	0.45	16629	29.35
425	54	0.10	2317	4.09	474	137	0.24	7012	12.38	523	251	0.44	16880	29.79
426	49	0.09	2366	4.18	475	145	0.26	7157	12.63	524	250	0.44	17130	30.23
427	68	0.12	2434	4.30	476	158	0.28	7315	12.91	525	266	0.47	17396	30.70
428	72	0.13	2506	4.42	477	134	0.24	7449	13.15	526	270	0.48	17666	31.18
429	52	0.09	2558	4.51	478	140	0.25	7589	13.39	527	259	0.46	17925	31.64
430	69	0.12	2627	4.64	479	184	0.32	7773	13.72	528	260	0.46	18185	32.10
431	56	0.10	2683	4.74	480	155	0.27	7928	13.99	529	298	0.53	18483	32.62
432	78	0.14	2761	4.87	481	151	0.27	8079	14.26	530	291	0.51	18774	33.14
433	73	0.13	2834	5.00	482	149	0.26	8228	14.52	531	268	0.47	19042	33.61
434	80	0.14	2914	5.14	483	156	0.28	8384	14.80	532	291	0.51	19333	34.12
435	60	0.11	2974	5.25	484	176	0.31	8560	15.11	533	291	0.51	19624	34.64
436	67	0.12	3041	5.37	485	172	0.30	8732	15.41	534	325	0.57	19949	35.21
437	77	0.14	3118	5.50	486	181	0.32	8913	15.73	535	305	0.54	20254	35.75
438	72	0.13	3190	5.63	487	155	0.27	9068	16.00	536	323	0.57	20577	36.32
439	76	0.13	3266	5.76	488	187	0.33	9255	16.33	537	259	0.46	20836	36.78
440	73	0.13	3339	5.89	489	225	0.40	9480	16.73	538	264	0.47	21100	37.24
441	76	0.13	3415	6.03	490	171	0.30	9651	17.03	539	294	0.52	21394	37.76
442	81	0.14	3496	6.17	491	194	0.34	9845	17.38	540	290	0.51	21684	38.27
443	90	0.16	3586	6.33	492	192	0.34	10037	17.72	541	286	0.50	21970	38.78
444	96	0.17	3682	6.50	493	189	0.33	10226	18.05	542	281	0.50	22251	39.27
445	70	0.12	3752	6.62	494	187	0.33	10413	18.38	543	316	0.56	22567	39.83
446	81	0.14	3833	6.77	495	197	0.35	10610	18.73	544	317	0.56	22884	40.39
447	87	0.15	3920	6.92	496	186	0.33	10796	19.05	545	293	0.52	23177	40.91
448	90	0.16	4010	7.08	497	187	0.33	10983	19.38	546	335	0.59	23512	41.50
449	91	0.16	4101	7.24	498	213	0.38	11196	19.76	547	333	0.59	23845	42.09
450	110	0.19	4211	7.43	499	218	0.38	11414	20.15	548	338	0.60	24183	42.68
451	79	0.14	4290	7.57	500	192	0.34	11606	20.48	549	332	0.59	24515	43.27
452	104	0.18	4394	7.76	501	214	0.38	11820	20.86	550	344	0.61	24859	43.88
453	89	0.16	4483	7.91	502	185	0.33	12005	21.19	551	326	0.58	25185	44.45
454	128	0.23	4611	8.14	503	209	0.37	12214	21.56	552	317	0.56	25502	45.01
455	89	0.16	4700	8.30	504	185	0.33	12399	21.88	553	279	0.49	25781	45.50
456	99	0.17	4799	8.47	505	197	0.35	12596	22.23	554	312	0.55	26093	46.05
457	118	0.21	4917	8.68	506	200	0.35	12796	22.58	555	307	0.54	26400	46.60
458	108	0.19	5025	8.87	507	191	0.34	12987	22.92	556	301	0.53	26701	47.13
459	119	0.21	5144	9.08	508	218	0.38	13205	23.31	557	318	0.56	27019	47.69
460	114	0.20	5258	9.28	509	221	0.39	13426	23.70	558	320	0.56	27339	48.25
461	104	0.18	5362	9.46	510	220	0.39	13646	24.08	559	329	0.58	27668	48.83



**Table 178. Writing Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
560	295	0.52	27963	49.35	609	241	0.43	42448	74.92	658	128	0.23	51770	91.37
561	306	0.54	28269	49.89	610	250	0.44	42698	75.36	659	116	0.20	51886	91.58
562	316	0.56	28585	50.45	611	248	0.44	42946	75.80	660	103	0.18	51989	91.76
563	311	0.55	28896	51.00	612	248	0.44	43194	76.24	661	115	0.20	52104	91.96
564	318	0.56	29214	51.56	613	227	0.40	43421	76.64	662	110	0.19	52214	92.16
565	327	0.58	29541	52.14	614	267	0.47	43688	77.11	663	117	0.21	52331	92.36
566	305	0.54	29846	52.68	615	251	0.44	43939	77.55	664	117	0.21	52448	92.57
567	332	0.59	30178	53.26	616	231	0.41	44170	77.96	665	112	0.20	52560	92.77
568	334	0.59	30512	53.85	617	216	0.38	44386	78.34	666	118	0.21	52678	92.98
569	335	0.59	30847	54.44	618	232	0.41	44618	78.75	667	98	0.17	52776	93.15
570	281	0.50	31128	54.94	619	221	0.39	44839	79.14	668	125	0.22	52901	93.37
571	321	0.57	31449	55.51	620	238	0.42	45077	79.56	669	91	0.16	52992	93.53
572	291	0.51	31740	56.02	621	237	0.42	45314	79.98	670	90	0.16	53082	93.69
573	317	0.56	32057	56.58	622	259	0.46	45573	80.44	671	88	0.16	53170	93.84
574	308	0.54	32365	57.12	623	217	0.38	45790	80.82	672	98	0.17	53268	94.02
575	308	0.54	32673	57.67	624	227	0.40	46017	81.22	673	108	0.19	53376	94.21
576	302	0.53	32975	58.20	625	203	0.36	46220	81.58	674	92	0.16	53468	94.37
577	317	0.56	33292	58.76	626	224	0.40	46444	81.97	675	78	0.14	53546	94.51
578	297	0.52	33589	59.28	627	240	0.42	46684	82.40	676	83	0.15	53629	94.65
579	306	0.54	33895	59.82	628	201	0.35	46885	82.75	677	72	0.13	53701	94.78
580	316	0.56	34211	60.38	629	233	0.41	47118	83.16	678	88	0.16	53789	94.94
581	298	0.53	34509	60.91	630	186	0.33	47304	83.49	679	81	0.14	53870	95.08
582	323	0.57	34832	61.48	631	186	0.33	47490	83.82	680	90	0.16	53960	95.24
583	335	0.59	35167	62.07	632	208	0.37	47698	84.19	681	78	0.14	54038	95.38
584	326	0.58	35493	62.64	633	190	0.34	47888	84.52	682	95	0.17	54133	95.54
585	316	0.56	35809	63.20	634	180	0.32	48068	84.84	683	63	0.11	54196	95.65
586	289	0.51	36098	63.71	635	168	0.30	48236	85.14	684	62	0.11	54258	95.76
587	289	0.51	36387	64.22	636	187	0.33	48423	85.47	685	52	0.09	54310	95.86
588	309	0.55	36696	64.77	637	167	0.29	48590	85.76	686	64	0.11	54374	95.97
589	292	0.52	36988	65.28	638	174	0.31	48764	86.07	687	54	0.10	54428	96.06
590	273	0.48	37261	65.76	639	173	0.31	48937	86.37	688	55	0.10	54483	96.16
591	297	0.52	37558	66.29	640	160	0.28	49097	86.66	689	73	0.13	54556	96.29
592	290	0.51	37848	66.80	641	177	0.31	49274	86.97	690	49	0.09	54605	96.38
593	261	0.46	38109	67.26	642	171	0.30	49445	87.27	691	73	0.13	54678	96.51
594	277	0.49	38386	67.75	643	166	0.29	49611	87.56	692	46	0.08	54724	96.59
595	297	0.52	38683	68.27	644	162	0.29	49773	87.85	693	51	0.09	54775	96.68
596	316	0.56	38999	68.83	645	142	0.25	49915	88.10	694	48	0.08	54823	96.76
597	260	0.46	39259	69.29	646	150	0.26	50065	88.36	695	51	0.09	54874	96.85
598	270	0.48	39529	69.77	647	140	0.25	50205	88.61	696	38	0.07	54912	96.92
599	249	0.44	39778	70.21	648	161	0.28	50366	88.89	697	53	0.09	54965	97.01
600	317	0.56	40095	70.77	649	135	0.24	50501	89.13	698	48	0.08	55013	97.10
601	271	0.48	40366	71.25	650	164	0.29	50665	89.42	699	65	0.11	55078	97.21
602	266	0.47	40632	71.71	651	151	0.27	50816	89.69	700	42	0.07	55120	97.29
603	276	0.49	40908	72.20	652	148	0.26	50964	89.95	701	42	0.07	55162	97.36
604	246	0.43	41154	72.64	653	129	0.23	51093	90.18	702	42	0.07	55204	97.43
605	285	0.50	41439	73.14	654	143	0.25	51236	90.43	703	52	0.09	55256	97.53
606	264	0.47	41703	73.60	655	120	0.21	51356	90.64	704	38	0.07	55294	97.59
607	259	0.46	41962	74.06	656	124	0.22	51480	90.86	705	38	0.07	55332	97.66
608	245	0.43	42207	74.49	657	162	0.29	51642	91.15	706	41	0.07	55373	97.73



**Table 178. Writing Grade 8 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
707	25	0.04	55398	97.78	756	11	0.02	56355	99.47	809	9	0.02	56584	99.87
708	35	0.06	55433	97.84	757	6	0.01	56361	99.48	810	1	0.00	56585	99.87
709	42	0.07	55475	97.91	758	3	0.01	56364	99.48	812	2	0.00	56587	99.87
710	29	0.05	55504	97.96	759	8	0.01	56372	99.50	813	1	0.00	56588	99.88
711	46	0.08	55550	98.04	760	8	0.01	56380	99.51	814	4	0.01	56592	99.88
712	35	0.06	55585	98.11	761	5	0.01	56385	99.52	815	1	0.00	56593	99.89
713	28	0.05	55613	98.16	762	4	0.01	56389	99.53	816	3	0.01	56596	99.89
714	38	0.07	55651	98.22	763	5	0.01	56394	99.53	817	1	0.00	56597	99.89
715	40	0.07	55691	98.29	764	10	0.02	56404	99.55	818	4	0.01	56601	99.90
716	31	0.05	55722	98.35	765	7	0.01	56411	99.56	821	2	0.00	56603	99.90
717	23	0.04	55745	98.39	766	1	0.00	56412	99.57	822	3	0.01	56606	99.91
718	27	0.05	55772	98.44	767	10	0.02	56422	99.58	824	3	0.01	56609	99.91
719	17	0.03	55789	98.47	768	5	0.01	56427	99.59	825	1	0.00	56610	99.92
720	25	0.04	55814	98.51	769	5	0.01	56432	99.60	827	5	0.01	56615	99.92
721	22	0.04	55836	98.55	770	7	0.01	56439	99.61	829	2	0.00	56617	99.93
722	21	0.04	55857	98.59	771	4	0.01	56443	99.62	832	1	0.00	56618	99.93
723	20	0.04	55877	98.62	772	5	0.01	56448	99.63	834	1	0.00	56619	99.93
724	16	0.03	55893	98.65	773	9	0.02	56457	99.65	837	1	0.00	56620	99.93
725	17	0.03	55910	98.68	774	5	0.01	56462	99.65	844	2	0.00	56622	99.94
726	46	0.08	55956	98.76	775	4	0.01	56466	99.66	853	1	0.00	56623	99.94
727	22	0.04	55978	98.80	776	5	0.01	56471	99.67	854	1	0.00	56624	99.94
728	17	0.03	55995	98.83	777	3	0.01	56474	99.68	858	3	0.01	56627	99.95
729	14	0.02	56009	98.85	778	12	0.02	56486	99.70	866	4	0.01	56631	99.95
730	21	0.04	56030	98.89	779	6	0.01	56492	99.71	867	2	0.00	56633	99.96
731	17	0.03	56047	98.92	780	3	0.01	56495	99.71	869	2	0.00	56635	99.96
732	21	0.04	56068	98.96	781	4	0.01	56499	99.72	874	5	0.01	56640	99.97
733	13	0.02	56081	98.98	782	2	0.00	56501	99.72	876	1	0.00	56641	99.97
734	13	0.02	56094	99.00	783	4	0.01	56505	99.73	877	4	0.01	56645	99.98
735	18	0.03	56112	99.04	784	9	0.02	56514	99.75	891	1	0.00	56646	99.98
736	14	0.02	56126	99.06	785	2	0.00	56516	99.75	895	5	0.01	56651	99.99
737	17	0.03	56143	99.09	786	3	0.01	56519	99.75	898	1	0.00	56652	99.99
738	12	0.02	56155	99.11	787	8	0.01	56527	99.77	910	6	0.01	56658	100.00
739	8	0.01	56163	99.13	788	5	0.01	56532	99.78					
740	10	0.02	56173	99.14	789	3	0.01	56535	99.78					
741	14	0.02	56187	99.17	790	3	0.01	56538	99.79					
742	24	0.04	56211	99.21	791	1	0.00	56539	99.79					
743	9	0.02	56220	99.23	793	1	0.00	56540	99.79					
744	17	0.03	56237	99.26	794	8	0.01	56548	99.81					
745	15	0.03	56252	99.28	795	3	0.01	56551	99.81					
746	12	0.02	56264	99.30	796	1	0.00	56552	99.81					
747	6	0.01	56270	99.32	797	2	0.00	56554	99.82					
748	10	0.02	56280	99.33	798	6	0.01	56560	99.83					
749	12	0.02	56292	99.35	799	1	0.00	56561	99.83					
750	11	0.02	56303	99.37	800	2	0.00	56563	99.83					
751	15	0.03	56318	99.40	801	1	0.00	56564	99.83					
752	3	0.01	56321	99.41	802	2	0.00	56566	99.84					
753	8	0.01	56329	99.42	806	2	0.00	56568	99.84					
754	6	0.01	56335	99.43	807	2	0.00	56570	99.84					
755	9	0.02	56344	99.45	808	5	0.01	56575	99.85					



**Table 179. Mathematics Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
310	378	0.67	378	0.67	359	14	0.02	708	1.25	408	33	0.06	1638	2.89
311	5	0.01	383	0.68	360	16	0.03	724	1.28	409	32	0.06	1670	2.94
312	3	0.01	386	0.68	361	14	0.02	738	1.30	410	31	0.05	1701	3.00
313	5	0.01	391	0.69	362	11	0.02	749	1.32	411	40	0.07	1741	3.07
314	4	0.01	395	0.70	363	15	0.03	764	1.35	412	32	0.06	1773	3.13
315	2	0.00	397	0.70	364	13	0.02	777	1.37	413	30	0.05	1803	3.18
316	6	0.01	403	0.71	365	12	0.02	789	1.39	414	37	0.07	1840	3.24
317	6	0.01	409	0.72	366	11	0.02	800	1.41	415	30	0.05	1870	3.30
318	5	0.01	414	0.73	367	10	0.02	810	1.43	416	39	0.07	1909	3.37
319	2	0.00	416	0.73	368	11	0.02	821	1.45	417	33	0.06	1942	3.42
320	4	0.01	420	0.74	369	11	0.02	832	1.47	418	32	0.06	1974	3.48
321	3	0.01	423	0.75	370	15	0.03	847	1.49	419	41	0.07	2015	3.55
322	7	0.01	430	0.76	371	17	0.03	864	1.52	420	27	0.05	2042	3.60
323	3	0.01	433	0.76	372	16	0.03	880	1.55	421	37	0.07	2079	3.67
324	6	0.01	439	0.77	373	13	0.02	893	1.57	422	33	0.06	2112	3.72
325	4	0.01	443	0.78	374	10	0.02	903	1.59	423	36	0.06	2148	3.79
326	4	0.01	447	0.79	375	17	0.03	920	1.62	424	40	0.07	2188	3.86
327	8	0.01	455	0.80	376	17	0.03	937	1.65	425	35	0.06	2223	3.92
328	4	0.01	459	0.81	377	19	0.03	956	1.69	426	48	0.08	2271	4.00
329	3	0.01	462	0.81	378	11	0.02	967	1.70	427	49	0.09	2320	4.09
330	8	0.01	470	0.83	379	14	0.02	981	1.73	428	40	0.07	2360	4.16
331	4	0.01	474	0.84	380	30	0.05	1011	1.78	429	41	0.07	2401	4.23
332	6	0.01	480	0.85	381	23	0.04	1034	1.82	430	51	0.09	2452	4.32
333	4	0.01	484	0.85	382	27	0.05	1061	1.87	431	40	0.07	2492	4.39
334	7	0.01	491	0.87	383	14	0.02	1075	1.90	432	44	0.08	2536	4.47
335	6	0.01	497	0.88	384	16	0.03	1091	1.92	433	50	0.09	2586	4.56
336	6	0.01	503	0.89	385	13	0.02	1104	1.95	434	42	0.07	2628	4.63
337	6	0.01	509	0.90	386	14	0.02	1118	1.97	435	44	0.08	2672	4.71
338	10	0.02	519	0.92	387	15	0.03	1133	2.00	436	56	0.10	2728	4.81
339	7	0.01	526	0.93	388	12	0.02	1145	2.02	437	50	0.09	2778	4.90
340	7	0.01	533	0.94	389	31	0.05	1176	2.07	438	50	0.09	2828	4.99
341	5	0.01	538	0.95	390	28	0.05	1204	2.12	439	49	0.09	2877	5.07
342	11	0.02	549	0.97	391	24	0.04	1228	2.17	440	53	0.09	2930	5.17
343	4	0.01	553	0.97	392	12	0.02	1240	2.19	441	64	0.11	2994	5.28
344	9	0.02	562	0.99	393	14	0.02	1254	2.21	442	56	0.10	3050	5.38
345	9	0.02	571	1.01	394	22	0.04	1276	2.25	443	54	0.10	3104	5.47
346	5	0.01	576	1.02	395	25	0.04	1301	2.29	444	60	0.11	3164	5.58
347	8	0.01	584	1.03	396	27	0.05	1328	2.34	445	53	0.09	3217	5.67
348	7	0.01	591	1.04	397	26	0.05	1354	2.39	446	74	0.13	3291	5.80
349	5	0.01	596	1.05	398	26	0.05	1380	2.43	447	55	0.10	3346	5.90
350	15	0.03	611	1.08	399	19	0.03	1399	2.47	448	50	0.09	3396	5.99
351	12	0.02	623	1.10	400	28	0.05	1427	2.52	449	71	0.13	3467	6.11
352	16	0.03	639	1.13	401	24	0.04	1451	2.56	450	67	0.12	3534	6.23
353	7	0.01	646	1.14	402	21	0.04	1472	2.60	451	71	0.13	3605	6.36
354	15	0.03	661	1.17	403	30	0.05	1502	2.65	452	50	0.09	3655	6.44
355	1	0.00	662	1.17	404	29	0.05	1531	2.70	453	61	0.11	3716	6.55
356	13	0.02	675	1.19	405	21	0.04	1552	2.74	454	57	0.10	3773	6.65
357	10	0.02	685	1.21	406	26	0.05	1578	2.78	455	75	0.13	3848	6.78
358	9	0.02	694	1.22	407	27	0.05	1605	2.83	456	64	0.11	3912	6.90



**Table 179. Mathematics Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
457	82	0.14	3994	7.04	506	193	0.34	10078	17.77	555	332	0.59	22844	40.28
458	86	0.15	4080	7.19	507	216	0.38	10294	18.15	556	343	0.60	23187	40.88
459	62	0.11	4142	7.30	508	175	0.31	10469	18.46	557	303	0.53	23490	41.42
460	75	0.13	4217	7.44	509	196	0.35	10665	18.80	558	326	0.57	23816	41.99
461	87	0.15	4304	7.59	510	210	0.37	10875	19.17	559	339	0.60	24155	42.59
462	77	0.14	4381	7.72	511	205	0.36	11080	19.54	560	324	0.57	24479	43.16
463	93	0.16	4474	7.89	512	219	0.39	11299	19.92	561	330	0.58	24809	43.74
464	82	0.14	4556	8.03	513	195	0.34	11494	20.27	562	313	0.55	25122	44.29
465	77	0.14	4633	8.17	514	213	0.38	11707	20.64	563	345	0.61	25467	44.90
466	111	0.20	4744	8.36	515	210	0.37	11917	21.01	564	322	0.57	25789	45.47
467	76	0.13	4820	8.50	516	215	0.38	12132	21.39	565	323	0.57	26112	46.04
468	84	0.15	4904	8.65	517	223	0.39	12355	21.78	566	349	0.62	26461	46.65
469	105	0.19	5009	8.83	518	239	0.42	12594	22.20	567	330	0.58	26791	47.24
470	81	0.14	5090	8.97	519	200	0.35	12794	22.56	568	326	0.57	27117	47.81
471	120	0.21	5210	9.19	520	220	0.39	13014	22.95	569	344	0.61	27461	48.42
472	97	0.17	5307	9.36	521	244	0.43	13258	23.38	570	365	0.64	27826	49.06
473	105	0.19	5412	9.54	522	201	0.35	13459	23.73	571	366	0.65	28192	49.71
474	96	0.17	5508	9.71	523	228	0.40	13687	24.13	572	339	0.60	28531	50.30
475	93	0.16	5601	9.88	524	222	0.39	13909	24.52	573	321	0.57	28852	50.87
476	116	0.20	5717	10.08	525	258	0.45	14167	24.98	574	349	0.62	29201	51.48
477	110	0.19	5827	10.27	526	217	0.38	14384	25.36	575	336	0.59	29537	52.08
478	106	0.19	5933	10.46	527	238	0.42	14622	25.78	576	346	0.61	29883	52.69
479	119	0.21	6052	10.67	528	258	0.45	14880	26.24	577	323	0.57	30206	53.26
480	113	0.20	6165	10.87	529	258	0.45	15138	26.69	578	340	0.60	30546	53.86
481	122	0.22	6287	11.08	530	256	0.45	15394	27.14	579	342	0.60	30888	54.46
482	123	0.22	6410	11.30	531	254	0.45	15648	27.59	580	342	0.60	31230	55.06
483	123	0.22	6533	11.52	532	258	0.45	15906	28.04	581	315	0.56	31545	55.62
484	137	0.24	6670	11.76	533	260	0.46	16166	28.50	582	351	0.62	31896	56.24
485	119	0.21	6789	11.97	534	290	0.51	16456	29.01	583	334	0.59	32230	56.82
486	106	0.19	6895	12.16	535	282	0.50	16738	29.51	584	308	0.54	32538	57.37
487	135	0.24	7030	12.39	536	283	0.50	17021	30.01	585	327	0.58	32865	57.94
488	146	0.26	7176	12.65	537	272	0.48	17293	30.49	586	324	0.57	33189	58.52
489	120	0.21	7296	12.86	538	263	0.46	17556	30.95	587	347	0.61	33536	59.13
490	156	0.28	7452	13.14	539	300	0.53	17856	31.48	588	306	0.54	33842	59.67
491	142	0.25	7594	13.39	540	285	0.50	18141	31.98	589	309	0.54	34151	60.21
492	149	0.26	7743	13.65	541	296	0.52	18437	32.51	590	342	0.60	34493	60.81
493	137	0.24	7880	13.89	542	295	0.52	18732	33.03	591	320	0.56	34813	61.38
494	154	0.27	8034	14.16	543	323	0.57	19055	33.60	592	295	0.52	35108	61.90
495	154	0.27	8188	14.44	544	305	0.54	19360	34.13	593	350	0.62	35458	62.52
496	176	0.31	8364	14.75	545	337	0.59	19697	34.73	594	312	0.55	35770	63.07
497	156	0.28	8520	15.02	546	283	0.50	19980	35.23	595	306	0.54	36076	63.61
498	163	0.29	8683	15.31	547	297	0.52	20277	35.75	596	323	0.57	36399	64.18
499	184	0.32	8867	15.63	548	318	0.56	20595	36.31	597	287	0.51	36686	64.68
500	163	0.29	9030	15.92	549	318	0.56	20913	36.87	598	341	0.60	37027	65.28
501	164	0.29	9194	16.21	550	325	0.57	21238	37.44	599	323	0.57	37350	65.85
502	159	0.28	9353	16.49	551	313	0.55	21551	38.00	600	323	0.57	37673	66.42
503	187	0.33	9540	16.82	552	317	0.56	21868	38.56	601	308	0.54	37981	66.96
504	187	0.33	9727	17.15	553	332	0.59	22200	39.14	602	296	0.52	38277	67.49
505	158	0.28	9885	17.43	554	312	0.55	22512	39.69	603	296	0.52	38573	68.01



**Table 179. Mathematics Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
604	294	0.52	38867	68.53	653	199	0.35	50452	88.95	702	46	0.08	55487	97.83
605	304	0.54	39171	69.06	654	179	0.32	50631	89.27	703	44	0.08	55531	97.91
606	271	0.48	39442	69.54	655	187	0.33	50818	89.60	704	47	0.08	55578	97.99
607	299	0.53	39741	70.07	656	147	0.26	50965	89.86	705	41	0.07	55619	98.06
608	270	0.48	40011	70.54	657	189	0.33	51154	90.19	706	47	0.08	55666	98.15
609	276	0.49	40287	71.03	658	146	0.26	51300	90.45	707	39	0.07	55705	98.21
610	307	0.54	40594	71.57	659	147	0.26	51447	90.71	708	34	0.06	55739	98.27
611	280	0.49	40874	72.07	660	151	0.27	51598	90.97	709	30	0.05	55769	98.33
612	302	0.53	41176	72.60	661	176	0.31	51774	91.28	710	43	0.08	55812	98.40
613	271	0.48	41447	73.08	662	135	0.24	51909	91.52	711	21	0.04	55833	98.44
614	286	0.50	41733	73.58	663	117	0.21	52026	91.73	712	36	0.06	55869	98.50
615	286	0.50	42019	74.08	664	142	0.25	52168	91.98	713	35	0.06	55904	98.56
616	242	0.43	42261	74.51	665	146	0.26	52314	92.24	714	32	0.06	55936	98.62
617	275	0.48	42536	75.00	666	150	0.26	52464	92.50	715	36	0.06	55972	98.68
618	288	0.51	42824	75.50	667	143	0.25	52607	92.75	716	32	0.06	56004	98.74
619	226	0.40	43050	75.90	668	114	0.20	52721	92.95	717	17	0.03	56021	98.77
620	248	0.44	43298	76.34	669	134	0.24	52855	93.19	718	29	0.05	56050	98.82
621	277	0.49	43575	76.83	670	108	0.19	52963	93.38	719	34	0.06	56084	98.88
622	251	0.44	43826	77.27	671	108	0.19	53071	93.57	720	23	0.04	56107	98.92
623	257	0.45	44083	77.72	672	118	0.21	53189	93.78	721	18	0.03	56125	98.95
624	254	0.45	44337	78.17	673	101	0.18	53290	93.96	722	26	0.05	56151	99.00
625	218	0.38	44555	78.56	674	92	0.16	53382	94.12	723	28	0.05	56179	99.05
626	243	0.43	44798	78.98	675	111	0.20	53493	94.31	724	17	0.03	56196	99.08
627	247	0.44	45045	79.42	676	102	0.18	53595	94.49	725	20	0.04	56216	99.11
628	274	0.48	45319	79.90	677	107	0.19	53702	94.68	726	27	0.05	56243	99.16
629	232	0.41	45551	80.31	678	95	0.17	53797	94.85	727	21	0.04	56264	99.20
630	224	0.39	45775	80.71	679	70	0.12	53867	94.97	728	18	0.03	56282	99.23
631	216	0.38	45991	81.09	680	79	0.14	53946	95.11	729	10	0.02	56292	99.25
632	224	0.39	46215	81.48	681	88	0.16	54034	95.27	730	13	0.02	56305	99.27
633	208	0.37	46423	81.85	682	102	0.18	54136	95.45	731	23	0.04	56328	99.31
634	236	0.42	46659	82.26	683	86	0.15	54222	95.60	732	13	0.02	56341	99.34
635	203	0.36	46862	82.62	684	98	0.17	54320	95.77	733	17	0.03	56358	99.37
636	238	0.42	47100	83.04	685	94	0.17	54414	95.94	734	11	0.02	56369	99.38
637	193	0.34	47293	83.38	686	83	0.15	54497	96.08	735	13	0.02	56382	99.41
638	227	0.40	47520	83.78	687	76	0.13	54573	96.22	736	14	0.02	56396	99.43
639	231	0.41	47751	84.19	688	83	0.15	54656	96.36	737	7	0.01	56403	99.44
640	205	0.36	47956	84.55	689	80	0.14	54736	96.51	738	14	0.02	56417	99.47
641	199	0.35	48155	84.90	690	77	0.14	54813	96.64	739	7	0.01	56424	99.48
642	203	0.36	48358	85.26	691	62	0.11	54875	96.75	740	8	0.01	56432	99.50
643	233	0.41	48591	85.67	692	75	0.13	54950	96.88	741	11	0.02	56443	99.52
644	192	0.34	48783	86.01	693	56	0.10	55006	96.98	742	10	0.02	56453	99.53
645	222	0.39	49005	86.40	694	58	0.10	55064	97.08	743	8	0.01	56461	99.55
646	166	0.29	49171	86.69	695	59	0.10	55123	97.19	744	14	0.02	56475	99.57
647	189	0.33	49360	87.03	696	55	0.10	55178	97.28	745	4	0.01	56479	99.58
648	186	0.33	49546	87.35	697	61	0.11	55239	97.39	746	5	0.01	56484	99.59
649	194	0.34	49740	87.70	698	53	0.09	55292	97.49	747	13	0.02	56497	99.61
650	172	0.30	49912	88.00	699	59	0.10	55351	97.59	748	7	0.01	56504	99.62
651	175	0.31	50087	88.31	700	36	0.06	55387	97.65	749	10	0.02	56514	99.64
652	166	0.29	50253	88.60	701	54	0.10	55441	97.75	750	13	0.02	56527	99.66



**Table 179. Mathematics Grade 8 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
751	6	0.01	56533	99.67	807	3	0.01	56694	99.96
752	3	0.01	56536	99.68	808	1	0.00	56695	99.96
753	8	0.01	56544	99.69	809	1	0.00	56696	99.96
754	6	0.01	56550	99.70	810	1	0.00	56697	99.96
755	3	0.01	56553	99.71	813	1	0.00	56698	99.96
756	4	0.01	56557	99.72	822	1	0.00	56699	99.97
757	5	0.01	56562	99.72	823	1	0.00	56700	99.97
758	7	0.01	56569	99.74	825	1	0.00	56701	99.97
759	9	0.02	56578	99.75	828	1	0.00	56702	99.97
760	7	0.01	56585	99.77	834	7	0.01	56709	99.98
761	8	0.01	56593	99.78	841	1	0.00	56710	99.99
762	6	0.01	56599	99.79	848	1	0.00	56711	99.99
763	4	0.01	56603	99.80	849	1	0.00	56712	99.99
764	3	0.01	56606	99.80	858	1	0.00	56713	99.99
765	5	0.01	56611	99.81	871	2	0.00	56715	99.99
766	1	0.00	56612	99.81	882	1	0.00	56716	100.00
767	5	0.01	56617	99.82	889	1	0.00	56717	100.00
768	6	0.01	56623	99.83	890	1	0.00	56718	100.00
769	5	0.01	56628	99.84					
770	4	0.01	56632	99.85					
771	2	0.00	56634	99.85					
772	3	0.01	56637	99.86					
773	3	0.01	56640	99.86					
774	3	0.01	56643	99.87					
775	2	0.00	56645	99.87					
776	1	0.00	56646	99.87					
777	2	0.00	56648	99.88					
778	6	0.01	56654	99.89					
779	1	0.00	56655	99.89					
780	2	0.00	56657	99.89					
781	2	0.00	56659	99.90					
782	1	0.00	56660	99.90					
785	2	0.00	56662	99.90					
788	4	0.01	56666	99.91					
789	2	0.00	56668	99.91					
791	2	0.00	56670	99.92					
792	1	0.00	56671	99.92					
793	1	0.00	56672	99.92					
794	2	0.00	56674	99.92					
795	2	0.00	56676	99.93					
796	4	0.01	56680	99.93					
797	1	0.00	56681	99.93					
799	2	0.00	56683	99.94					
800	1	0.00	56684	99.94					
801	1	0.00	56685	99.94					
802	1	0.00	56686	99.94					
804	2	0.00	56688	99.95					
805	2	0.00	56690	99.95					
806	1	0.00	56691	99.95					



**Table 180. Science Grade 8 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	685	1.21	685	1.21	349	31	0.05	1609	2.84	398	89	0.16	4378	7.72
301	11	0.02	696	1.23	350	34	0.06	1643	2.90	399	94	0.17	4472	7.89
302	8	0.01	704	1.24	351	28	0.05	1671	2.95	400	98	0.17	4570	8.06
303	8	0.01	712	1.26	352	34	0.06	1705	3.01	401	102	0.18	4672	8.24
304	9	0.02	721	1.27	353	33	0.06	1738	3.06	402	86	0.15	4758	8.39
305	13	0.02	734	1.29	354	27	0.05	1765	3.11	403	103	0.18	4861	8.57
306	8	0.01	742	1.31	355	21	0.04	1786	3.15	404	95	0.17	4956	8.74
307	11	0.02	753	1.33	356	39	0.07	1825	3.22	405	110	0.19	5066	8.93
308	13	0.02	766	1.35	357	34	0.06	1859	3.28	406	103	0.18	5169	9.12
309	12	0.02	778	1.37	358	38	0.07	1897	3.35	407	97	0.17	5266	9.29
310	10	0.02	788	1.39	359	37	0.07	1934	3.41	408	98	0.17	5364	9.46
311	12	0.02	800	1.41	360	46	0.08	1980	3.49	409	102	0.18	5466	9.64
312	12	0.02	812	1.43	361	40	0.07	2020	3.56	410	106	0.19	5572	9.83
313	10	0.02	822	1.45	362	46	0.08	2066	3.64	411	105	0.19	5677	10.01
314	14	0.02	836	1.47	363	55	0.10	2121	3.74	412	103	0.18	5780	10.19
315	12	0.02	848	1.50	364	53	0.09	2174	3.83	413	119	0.21	5899	10.40
316	12	0.02	860	1.52	365	39	0.07	2213	3.90	414	133	0.23	6032	10.64
317	10	0.02	870	1.53	366	47	0.08	2260	3.99	415	136	0.24	6168	10.88
318	17	0.03	887	1.56	367	41	0.07	2301	4.06	416	112	0.20	6280	11.07
319	14	0.02	901	1.59	368	55	0.10	2356	4.15	417	150	0.26	6430	11.34
320	16	0.03	917	1.62	369	41	0.07	2397	4.23	418	125	0.22	6555	11.56
321	19	0.03	936	1.65	370	71	0.13	2468	4.35	419	152	0.27	6707	11.83
322	16	0.03	952	1.68	371	49	0.09	2517	4.44	420	155	0.27	6862	12.10
323	20	0.04	972	1.71	372	45	0.08	2562	4.52	421	137	0.24	6999	12.34
324	14	0.02	986	1.74	373	54	0.10	2616	4.61	422	150	0.26	7149	12.61
325	18	0.03	1004	1.77	374	52	0.09	2668	4.71	423	148	0.26	7297	12.87
326	19	0.03	1023	1.80	375	48	0.08	2716	4.79	424	153	0.27	7450	13.14
327	25	0.04	1048	1.85	376	45	0.08	2761	4.87	425	151	0.27	7601	13.40
328	25	0.04	1073	1.89	377	56	0.10	2817	4.97	426	153	0.27	7754	13.67
329	25	0.04	1098	1.94	378	56	0.10	2873	5.07	427	171	0.30	7925	13.98
330	20	0.04	1118	1.97	379	62	0.11	2935	5.18	428	150	0.26	8075	14.24
331	24	0.04	1142	2.01	380	66	0.12	3001	5.29	429	155	0.27	8230	14.51
332	18	0.03	1160	2.05	381	66	0.12	3067	5.41	430	149	0.26	8379	14.78
333	27	0.05	1187	2.09	382	69	0.12	3136	5.53	431	157	0.28	8536	15.05
334	24	0.04	1211	2.14	383	62	0.11	3198	5.64	432	170	0.30	8706	15.35
335	21	0.04	1232	2.17	384	62	0.11	3260	5.75	433	177	0.31	8883	15.67
336	23	0.04	1255	2.21	385	54	0.10	3314	5.84	434	175	0.31	9058	15.97
337	41	0.07	1296	2.29	386	85	0.15	3399	5.99	435	181	0.32	9239	16.29
338	22	0.04	1318	2.32	387	66	0.12	3465	6.11	436	171	0.30	9410	16.59
339	16	0.03	1334	2.35	388	59	0.10	3524	6.21	437	198	0.35	9608	16.94
340	27	0.05	1361	2.40	389	78	0.14	3602	6.35	438	180	0.32	9788	17.26
341	29	0.05	1390	2.45	390	82	0.14	3684	6.50	439	198	0.35	9986	17.61
342	27	0.05	1417	2.50	391	76	0.13	3760	6.63	440	215	0.38	10201	17.99
343	26	0.05	1443	2.54	392	79	0.14	3839	6.77	441	194	0.34	10395	18.33
344	28	0.05	1471	2.59	393	89	0.16	3928	6.93	442	171	0.30	10566	18.63
345	25	0.04	1496	2.64	394	98	0.17	4026	7.10	443	175	0.31	10741	18.94
346	23	0.04	1519	2.68	395	88	0.16	4114	7.26	444	215	0.38	10956	19.32
347	31	0.05	1550	2.73	396	83	0.15	4197	7.40	445	224	0.40	11180	19.72
348	28	0.05	1578	2.78	397	92	0.16	4289	7.56	446	200	0.35	11380	20.07



**Table 180. Science Grade 8 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
447	220	0.39	11600	20.46	496	383	0.68	26350	46.47	545	295	0.52	44563	78.59
448	203	0.36	11803	20.81	497	374	0.66	26724	47.13	546	325	0.57	44888	79.16
449	233	0.41	12036	21.23	498	346	0.61	27070	47.74	547	339	0.60	45227	79.76
450	214	0.38	12250	21.60	499	386	0.68	27456	48.42	548	311	0.55	45538	80.31
451	232	0.41	12482	22.01	500	355	0.63	27811	49.05	549	296	0.52	45834	80.83
452	232	0.41	12714	22.42	501	403	0.71	28214	49.76	550	295	0.52	46129	81.35
453	259	0.46	12973	22.88	502	386	0.68	28600	50.44	551	290	0.51	46419	81.86
454	238	0.42	13211	23.30	503	392	0.69	28992	51.13	552	324	0.57	46743	82.43
455	232	0.41	13443	23.71	504	366	0.65	29358	51.77	553	328	0.58	47071	83.01
456	253	0.45	13696	24.15	505	377	0.66	29735	52.44	554	286	0.50	47357	83.51
457	259	0.46	13955	24.61	506	398	0.70	30133	53.14	555	261	0.46	47618	83.97
458	296	0.52	14251	25.13	507	426	0.75	30559	53.89	556	265	0.47	47883	84.44
459	266	0.47	14517	25.60	508	351	0.62	30910	54.51	557	228	0.40	48111	84.84
460	230	0.41	14747	26.01	509	375	0.66	31285	55.17	558	260	0.46	48371	85.30
461	268	0.47	15015	26.48	510	376	0.66	31661	55.83	559	252	0.44	48623	85.75
462	270	0.48	15285	26.96	511	406	0.72	32067	56.55	560	265	0.47	48888	86.21
463	280	0.49	15565	27.45	512	381	0.67	32448	57.22	561	238	0.42	49126	86.63
464	278	0.49	15843	27.94	513	416	0.73	32864	57.96	562	293	0.52	49419	87.15
465	269	0.47	16112	28.41	514	388	0.68	33252	58.64	563	259	0.46	49678	87.61
466	296	0.52	16408	28.94	515	382	0.67	33634	59.31	564	240	0.42	49918	88.03
467	311	0.55	16719	29.48	516	386	0.68	34020	59.99	565	223	0.39	50141	88.42
468	305	0.54	17024	30.02	517	368	0.65	34388	60.64	566	226	0.40	50367	88.82
469	286	0.50	17310	30.53	518	430	0.76	34818	61.40	567	234	0.41	50601	89.24
470	305	0.54	17615	31.06	519	375	0.66	35193	62.06	568	221	0.39	50822	89.63
471	304	0.54	17919	31.60	520	399	0.70	35592	62.77	569	225	0.40	51047	90.02
472	283	0.50	18202	32.10	521	367	0.65	35959	63.41	570	214	0.38	51261	90.40
473	312	0.55	18514	32.65	522	367	0.65	36326	64.06	571	185	0.33	51446	90.73
474	304	0.54	18818	33.19	523	396	0.70	36722	64.76	572	194	0.34	51640	91.07
475	314	0.55	19132	33.74	524	440	0.78	37162	65.54	573	183	0.32	51823	91.39
476	319	0.56	19451	34.30	525	387	0.68	37549	66.22	574	173	0.31	51996	91.70
477	306	0.54	19757	34.84	526	378	0.67	37927	66.88	575	151	0.27	52147	91.96
478	324	0.57	20081	35.41	527	339	0.60	38266	67.48	576	170	0.30	52317	92.26
479	340	0.60	20421	36.01	528	390	0.69	38656	68.17	577	150	0.26	52467	92.53
480	346	0.61	20767	36.62	529	360	0.63	39016	68.81	578	161	0.28	52628	92.81
481	362	0.64	21129	37.26	530	369	0.65	39385	69.46	579	173	0.31	52801	93.12
482	321	0.57	21450	37.83	531	344	0.61	39729	70.06	580	138	0.24	52939	93.36
483	312	0.55	21762	38.38	532	341	0.60	40070	70.66	581	174	0.31	53113	93.67
484	339	0.60	22101	38.98	533	369	0.65	40439	71.31	582	150	0.26	53263	93.93
485	364	0.64	22465	39.62	534	381	0.67	40820	71.99	583	133	0.23	53396	94.16
486	337	0.59	22802	40.21	535	390	0.69	41210	72.67	584	150	0.26	53546	94.43
487	341	0.60	23143	40.81	536	329	0.58	41539	73.25	585	134	0.24	53680	94.67
488	355	0.63	23498	41.44	537	377	0.66	41916	73.92	586	125	0.22	53805	94.89
489	336	0.59	23834	42.03	538	346	0.61	42262	74.53	587	146	0.26	53951	95.14
490	324	0.57	24158	42.60	539	337	0.59	42599	75.12	588	137	0.24	54088	95.38
491	348	0.61	24506	43.22	540	327	0.58	42926	75.70	589	108	0.19	54196	95.58
492	360	0.63	24866	43.85	541	343	0.60	43269	76.31	590	113	0.20	54309	95.77
493	349	0.62	25215	44.47	542	320	0.56	43589	76.87	591	117	0.21	54426	95.98
494	382	0.67	25597	45.14	543	326	0.57	43915	77.44	592	101	0.18	54527	96.16
495	370	0.65	25967	45.79	544	353	0.62	44268	78.07	593	123	0.22	54650	96.38



**Table 180. Science Grade 8 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
594	111	0.20	54761	96.57	643	5	0.01	56629	99.87
595	108	0.19	54869	96.76	644	4	0.01	56633	99.87
596	75	0.13	54944	96.89	645	6	0.01	56639	99.88
597	102	0.18	55046	97.07	646	4	0.01	56643	99.89
598	85	0.15	55131	97.22	647	4	0.01	56647	99.90
599	73	0.13	55204	97.35	648	6	0.01	56653	99.91
600	80	0.14	55284	97.49	649	3	0.01	56656	99.91
601	78	0.14	55362	97.63	650	1	0.00	56657	99.92
602	83	0.15	55445	97.78	651	5	0.01	56662	99.92
603	72	0.13	55517	97.90	652	2	0.00	56664	99.93
604	56	0.10	55573	98.00	653	3	0.01	56667	99.93
605	52	0.09	55625	98.10	654	1	0.00	56668	99.93
606	51	0.09	55676	98.19	655	2	0.00	56670	99.94
607	74	0.13	55750	98.32	656	3	0.01	56673	99.94
608	39	0.07	55789	98.38	657	1	0.00	56674	99.95
609	57	0.10	55846	98.49	658	2	0.00	56676	99.95
610	49	0.09	55895	98.57	659	2	0.00	56678	99.95
611	48	0.08	55943	98.66	660	1	0.00	56679	99.95
612	50	0.09	55993	98.74	661	1	0.00	56680	99.96
613	36	0.06	56029	98.81	662	3	0.01	56683	99.96
614	37	0.07	56066	98.87	664	1	0.00	56684	99.96
615	37	0.07	56103	98.94	666	1	0.00	56685	99.96
616	47	0.08	56150	99.02	667	2	0.00	56687	99.97
617	40	0.07	56190	99.09	668	1	0.00	56688	99.97
618	37	0.07	56227	99.16	669	1	0.00	56689	99.97
619	36	0.06	56263	99.22	673	2	0.00	56691	99.98
620	18	0.03	56281	99.25	675	1	0.00	56692	99.98
621	22	0.04	56303	99.29	676	1	0.00	56693	99.98
622	26	0.05	56329	99.34	677	1	0.00	56694	99.98
623	21	0.04	56350	99.37	678	1	0.00	56695	99.98
624	28	0.05	56378	99.42	679	2	0.00	56697	99.99
625	23	0.04	56401	99.46	680	2	0.00	56699	99.99
626	21	0.04	56422	99.50	685	2	0.00	56701	99.99
627	14	0.02	56436	99.53	689	1	0.00	56702	99.99
628	22	0.04	56458	99.56	696	1	0.00	56703	100.00
629	21	0.04	56479	99.60	698	1	0.00	56704	100.00
630	11	0.02	56490	99.62	704	1	0.00	56705	100.00
631	19	0.03	56509	99.65					
632	18	0.03	56527	99.69					
633	15	0.03	56542	99.71					
634	14	0.02	56556	99.74					
635	10	0.02	56566	99.75					
636	9	0.02	56575	99.77					
637	5	0.01	56580	99.78					
638	14	0.02	56594	99.80					
639	11	0.02	56605	99.82					
640	8	0.01	56613	99.84					
641	5	0.01	56618	99.85					
642	6	0.01	56624	99.86					



**Table 181. Reading Grade 9 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
350	186	0.32	186	0.32	432	2	0.00	261	0.44	484	9	0.02	478	0.81
354	1	0.00	187	0.32	433	2	0.00	263	0.45	485	9	0.02	487	0.83
362	1	0.00	188	0.32	434	4	0.01	267	0.45	486	6	0.01	493	0.84
363	1	0.00	189	0.32	435	2	0.00	269	0.46	487	16	0.03	509	0.86
366	1	0.00	190	0.32	436	1	0.00	270	0.46	488	11	0.02	520	0.88
375	1	0.00	191	0.32	437	1	0.00	271	0.46	489	18	0.03	538	0.91
376	1	0.00	192	0.33	438	6	0.01	277	0.47	490	10	0.02	548	0.93
378	1	0.00	193	0.33	439	2	0.00	279	0.47	491	15	0.03	563	0.95
380	2	0.00	195	0.33	440	3	0.01	282	0.48	492	18	0.03	581	0.98
382	1	0.00	196	0.33	441	1	0.00	283	0.48	493	11	0.02	592	1.00
383	1	0.00	197	0.33	442	1	0.00	284	0.48	494	14	0.02	606	1.03
384	1	0.00	198	0.34	443	6	0.01	290	0.49	495	11	0.02	617	1.05
385	1	0.00	199	0.34	444	3	0.01	293	0.50	496	10	0.02	627	1.06
386	3	0.01	202	0.34	446	4	0.01	297	0.50	497	15	0.03	642	1.09
387	1	0.00	203	0.34	448	3	0.01	300	0.51	498	9	0.02	651	1.10
388	1	0.00	204	0.35	449	2	0.00	302	0.51	499	20	0.03	671	1.14
389	1	0.00	205	0.35	451	5	0.01	307	0.52	500	14	0.02	685	1.16
390	1	0.00	206	0.35	452	5	0.01	312	0.53	501	11	0.02	696	1.18
391	2	0.00	208	0.35	453	4	0.01	316	0.54	502	17	0.03	713	1.21
393	3	0.01	211	0.36	454	1	0.00	317	0.54	503	10	0.02	723	1.23
394	1	0.00	212	0.36	455	4	0.01	321	0.54	504	14	0.02	737	1.25
395	2	0.00	214	0.36	456	5	0.01	326	0.55	505	13	0.02	750	1.27
396	3	0.01	217	0.37	457	3	0.01	329	0.56	506	14	0.02	764	1.29
397	1	0.00	218	0.37	458	6	0.01	335	0.57	507	13	0.02	777	1.32
398	1	0.00	219	0.37	459	8	0.01	343	0.58	508	18	0.03	795	1.35
399	2	0.00	221	0.37	460	4	0.01	347	0.59	509	16	0.03	811	1.37
401	1	0.00	222	0.38	461	3	0.01	350	0.59	510	22	0.04	833	1.41
402	3	0.01	225	0.38	462	1	0.00	351	0.59	511	17	0.03	850	1.44
404	2	0.00	227	0.38	463	4	0.01	355	0.60	512	26	0.04	876	1.48
405	2	0.00	229	0.39	464	1	0.00	356	0.60	513	16	0.03	892	1.51
407	1	0.00	230	0.39	465	6	0.01	362	0.61	514	16	0.03	908	1.54
408	3	0.01	233	0.39	466	4	0.01	366	0.62	515	17	0.03	925	1.57
409	2	0.00	235	0.40	467	1	0.00	367	0.62	516	17	0.03	942	1.60
411	1	0.00	236	0.40	468	4	0.01	371	0.63	517	30	0.05	972	1.65
412	1	0.00	237	0.40	469	2	0.00	373	0.63	518	21	0.04	993	1.68
413	2	0.00	239	0.41	470	3	0.01	376	0.64	519	26	0.04	1019	1.73
414	1	0.00	240	0.41	471	4	0.01	380	0.64	520	22	0.04	1041	1.76
415	2	0.00	242	0.41	472	6	0.01	386	0.65	521	28	0.05	1069	1.81
417	1	0.00	243	0.41	473	5	0.01	391	0.66	522	28	0.05	1097	1.86
418	1	0.00	244	0.41	474	7	0.01	398	0.67	523	22	0.04	1119	1.90
419	1	0.00	245	0.42	475	9	0.02	407	0.69	524	22	0.04	1141	1.93
422	4	0.01	249	0.42	476	8	0.01	415	0.70	525	22	0.04	1163	1.97
423	1	0.00	250	0.42	477	10	0.02	425	0.72	526	17	0.03	1180	2.00
424	2	0.00	252	0.43	478	8	0.01	433	0.73	527	34	0.06	1214	2.06
425	1	0.00	253	0.43	479	5	0.01	438	0.74	528	34	0.06	1248	2.12
426	1	0.00	254	0.43	480	4	0.01	442	0.75	529	27	0.05	1275	2.16
428	2	0.00	256	0.43	481	9	0.02	451	0.76	530	30	0.05	1305	2.21
429	1	0.00	257	0.44	482	8	0.01	459	0.78	531	36	0.06	1341	2.27
431	2	0.00	259	0.44	483	10	0.02	469	0.79	532	33	0.06	1374	2.33



**Table 181. Reading Grade 9 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
533	26	0.04	1400	2.37	582	123	0.21	4987	8.45	631	344	0.58	15519	26.30
534	37	0.06	1437	2.44	583	111	0.19	5098	8.64	632	308	0.52	15827	26.83
535	39	0.07	1476	2.50	584	128	0.22	5226	8.86	633	328	0.56	16155	27.38
536	43	0.07	1519	2.57	585	140	0.24	5366	9.10	634	356	0.60	16511	27.99
537	45	0.08	1564	2.65	586	136	0.23	5502	9.33	635	373	0.63	16884	28.62
538	62	0.11	1626	2.76	587	134	0.23	5636	9.55	636	349	0.59	17233	29.21
539	44	0.07	1670	2.83	588	108	0.18	5744	9.74	637	353	0.60	17586	29.81
540	51	0.09	1721	2.92	589	134	0.23	5878	9.96	638	378	0.64	17964	30.45
541	49	0.08	1770	3.00	590	132	0.22	6010	10.19	639	352	0.60	18316	31.05
542	48	0.08	1818	3.08	591	136	0.23	6146	10.42	640	359	0.61	18675	31.65
543	49	0.08	1867	3.16	592	140	0.24	6286	10.65	641	380	0.64	19055	32.30
544	58	0.10	1925	3.26	593	161	0.27	6447	10.93	642	405	0.69	19460	32.98
545	58	0.10	1983	3.36	594	152	0.26	6599	11.19	643	385	0.65	19845	33.64
546	55	0.09	2038	3.45	595	158	0.27	6757	11.45	644	376	0.64	20221	34.27
547	43	0.07	2081	3.53	596	177	0.30	6934	11.75	645	424	0.72	20645	34.99
548	48	0.08	2129	3.61	597	158	0.27	7092	12.02	646	401	0.68	21046	35.67
549	59	0.10	2188	3.71	598	196	0.33	7288	12.35	647	425	0.72	21471	36.39
550	55	0.09	2243	3.80	599	168	0.28	7456	12.64	648	397	0.67	21868	37.07
551	53	0.09	2296	3.89	600	193	0.33	7649	12.97	649	426	0.72	22294	37.79
552	68	0.12	2364	4.01	601	166	0.28	7815	13.25	650	423	0.72	22717	38.51
553	62	0.11	2426	4.11	602	195	0.33	8010	13.58	651	448	0.76	23165	39.26
554	63	0.11	2489	4.22	603	188	0.32	8198	13.90	652	410	0.69	23575	39.96
555	60	0.10	2549	4.32	604	194	0.33	8392	14.22	653	428	0.73	24003	40.69
556	66	0.11	2615	4.43	605	189	0.32	8581	14.54	654	403	0.68	24406	41.37
557	62	0.11	2677	4.54	606	199	0.34	8780	14.88	655	417	0.71	24823	42.08
558	62	0.11	2739	4.64	607	226	0.38	9006	15.27	656	455	0.77	25278	42.85
559	81	0.14	2820	4.78	608	227	0.38	9233	15.65	657	445	0.75	25723	43.60
560	75	0.13	2895	4.91	609	228	0.39	9461	16.04	658	426	0.72	26149	44.32
561	76	0.13	2971	5.04	610	235	0.40	9696	16.43	659	451	0.76	26600	45.09
562	86	0.15	3057	5.18	611	230	0.39	9926	16.82	660	451	0.76	27051	45.85
563	76	0.13	3133	5.31	612	220	0.37	10146	17.20	661	415	0.70	27466	46.55
564	82	0.14	3215	5.45	613	228	0.39	10374	17.58	662	432	0.73	27898	47.29
565	73	0.12	3288	5.57	614	246	0.42	10620	18.00	663	480	0.81	28378	48.10
566	82	0.14	3370	5.71	615	248	0.42	10868	18.42	664	462	0.78	28840	48.88
567	86	0.15	3456	5.86	616	281	0.48	11149	18.90	665	428	0.73	29268	49.61
568	99	0.17	3555	6.03	617	274	0.46	11423	19.36	666	477	0.81	29745	50.42
569	95	0.16	3650	6.19	618	289	0.49	11712	19.85	667	439	0.74	30184	51.16
570	77	0.13	3727	6.32	619	272	0.46	11984	20.31	668	486	0.82	30670	51.99
571	92	0.16	3819	6.47	620	245	0.42	12229	20.73	669	488	0.83	31158	52.81
572	87	0.15	3906	6.62	621	277	0.47	12506	21.20	670	479	0.81	31637	53.62
573	79	0.13	3985	6.75	622	277	0.47	12783	21.67	671	450	0.76	32087	54.39
574	100	0.17	4085	6.92	623	277	0.47	13060	22.14	672	444	0.75	32531	55.14
575	112	0.19	4197	7.11	624	306	0.52	13366	22.66	673	444	0.75	32975	55.89
576	95	0.16	4292	7.27	625	319	0.54	13685	23.20	674	468	0.79	33443	56.69
577	98	0.17	4390	7.44	626	256	0.43	13941	23.63	675	444	0.75	33887	57.44
578	111	0.19	4501	7.63	627	311	0.53	14252	24.16	676	459	0.78	34346	58.22
579	120	0.20	4621	7.83	628	326	0.55	14578	24.71	677	471	0.80	34817	59.01
580	125	0.21	4746	8.04	629	309	0.52	14887	25.23	678	490	0.83	35307	59.85
581	118	0.20	4864	8.24	630	288	0.49	15175	25.72	679	453	0.77	35760	60.61



**Table 181. Reading Grade 9 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
680	462	0.78	36222	61.40	729	221	0.37	53580	90.82	778	27	0.05	58555	99.25
681	424	0.72	36646	62.12	730	205	0.35	53785	91.17	779	19	0.03	58574	99.28
682	496	0.84	37142	62.96	731	211	0.36	53996	91.52	780	28	0.05	58602	99.33
683	438	0.74	37580	63.70	732	218	0.37	54214	91.89	781	16	0.03	58618	99.36
684	468	0.79	38048	64.49	733	189	0.32	54403	92.21	782	38	0.06	58656	99.42
685	483	0.82	38531	65.31	734	179	0.30	54582	92.52	783	15	0.03	58671	99.45
686	424	0.72	38955	66.03	735	196	0.33	54778	92.85	784	19	0.03	58690	99.48
687	437	0.74	39392	66.77	736	176	0.30	54954	93.15	785	22	0.04	58712	99.52
688	455	0.77	39847	67.54	737	169	0.29	55123	93.43	786	19	0.03	58731	99.55
689	426	0.72	40273	68.26	738	166	0.28	55289	93.71	787	14	0.02	58745	99.57
690	421	0.71	40694	68.98	739	171	0.29	55460	94.00	788	10	0.02	58755	99.59
691	449	0.76	41143	69.74	740	174	0.29	55634	94.30	789	19	0.03	58774	99.62
692	463	0.78	41606	70.52	741	145	0.25	55779	94.55	790	14	0.02	58788	99.65
693	407	0.69	42013	71.21	742	150	0.25	55929	94.80	791	7	0.01	58795	99.66
694	411	0.70	42424	71.91	743	139	0.24	56068	95.04	792	6	0.01	58801	99.67
695	372	0.63	42796	72.54	744	140	0.24	56208	95.27	793	10	0.02	58811	99.68
696	380	0.64	43176	73.18	745	111	0.19	56319	95.46	794	11	0.02	58822	99.70
697	417	0.71	43593	73.89	746	147	0.25	56466	95.71	795	7	0.01	58829	99.72
698	383	0.65	43976	74.54	747	119	0.20	56585	95.91	796	10	0.02	58839	99.73
699	412	0.70	44388	75.24	748	128	0.22	56713	96.13	797	16	0.03	58855	99.76
700	429	0.73	44817	75.96	749	110	0.19	56823	96.32	798	11	0.02	58866	99.78
701	400	0.68	45217	76.64	750	95	0.16	56918	96.48	799	6	0.01	58872	99.79
702	403	0.68	45620	77.33	751	96	0.16	57014	96.64	800	6	0.01	58878	99.80
703	386	0.65	46006	77.98	752	89	0.15	57103	96.79	801	5	0.01	58883	99.81
704	381	0.65	46387	78.63	753	93	0.16	57196	96.95	802	8	0.01	58891	99.82
705	353	0.60	46740	79.22	754	95	0.16	57291	97.11	803	9	0.02	58900	99.84
706	337	0.57	47077	79.80	755	84	0.14	57375	97.25	804	2	0.00	58902	99.84
707	347	0.59	47424	80.38	756	88	0.15	57463	97.40	805	4	0.01	58906	99.85
708	352	0.60	47776	80.98	757	65	0.11	57528	97.51	806	5	0.01	58911	99.85
709	320	0.54	48096	81.52	758	80	0.14	57608	97.65	807	10	0.02	58921	99.87
710	370	0.63	48466	82.15	759	66	0.11	57674	97.76	808	6	0.01	58927	99.88
711	331	0.56	48797	82.71	760	63	0.11	57737	97.86	809	6	0.01	58933	99.89
712	299	0.51	49096	83.22	761	64	0.11	57801	97.97	811	2	0.00	58935	99.89
713	306	0.52	49402	83.74	762	66	0.11	57867	98.08	812	3	0.01	58938	99.90
714	294	0.50	49696	84.23	763	57	0.10	57924	98.18	813	3	0.01	58941	99.91
715	302	0.51	49998	84.75	764	63	0.11	57987	98.29	814	4	0.01	58945	99.91
716	296	0.50	50294	85.25	765	63	0.11	58050	98.39	815	2	0.00	58947	99.92
717	284	0.48	50578	85.73	766	43	0.07	58093	98.47	816	2	0.00	58949	99.92
718	315	0.53	50893	86.26	767	44	0.07	58137	98.54	817	3	0.01	58952	99.92
719	277	0.47	51170	86.73	768	46	0.08	58183	98.62	818	7	0.01	58959	99.94
720	240	0.41	51410	87.14	769	44	0.07	58227	98.69	820	1	0.00	58960	99.94
721	245	0.42	51655	87.56	770	45	0.08	58272	98.77	821	2	0.00	58962	99.94
722	242	0.41	51897	87.97	771	45	0.08	58317	98.85	822	1	0.00	58963	99.94
723	265	0.45	52162	88.41	772	40	0.07	58357	98.92	823	3	0.01	58966	99.95
724	243	0.41	52405	88.83	773	41	0.07	58398	98.98	824	3	0.01	58969	99.95
725	237	0.40	52642	89.23	774	30	0.05	58428	99.04	825	2	0.00	58971	99.96
726	256	0.43	52898	89.66	775	36	0.06	58464	99.10	826	1	0.00	58972	99.96
727	235	0.40	53133	90.06	776	36	0.06	58500	99.16	827	2	0.00	58974	99.96
728	226	0.38	53359	90.44	777	28	0.05	58528	99.21	828	2	0.00	58976	99.96



**Table 181. Reading Grade 9 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
829	1	0.00	58977	99.97
830	1	0.00	58978	99.97
831	1	0.00	58979	99.97
832	2	0.00	58981	99.97
834	1	0.00	58982	99.97
836	1	0.00	58983	99.98
837	1	0.00	58984	99.98
838	3	0.01	58987	99.98
841	1	0.00	58988	99.98
843	1	0.00	58989	99.99
845	1	0.00	58990	99.99
854	1	0.00	58991	99.99
855	1	0.00	58992	99.99
862	1	0.00	58993	99.99
871	1	0.00	58994	99.99
878	1	0.00	58995	100.00
895	1	0.00	58996	100.00
914	1	0.00	58997	100.00



**Table 182. Writing Grade 9 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
260	83	0.14	83	0.14	321	6	0.01	223	0.38	370	26	0.04	733	1.24
261	3	0.01	86	0.15	322	4	0.01	227	0.38	371	19	0.03	752	1.27
262	2	0.00	88	0.15	323	8	0.01	235	0.40	372	22	0.04	774	1.31
265	1	0.00	89	0.15	324	4	0.01	239	0.40	373	20	0.03	794	1.34
266	2	0.00	91	0.15	325	7	0.01	246	0.42	374	9	0.02	803	1.36
267	2	0.00	93	0.16	326	2	0.00	248	0.42	375	26	0.04	829	1.40
268	2	0.00	95	0.16	327	5	0.01	253	0.43	376	22	0.04	851	1.44
269	2	0.00	97	0.16	328	5	0.01	258	0.44	377	21	0.04	872	1.48
270	1	0.00	98	0.17	329	9	0.02	267	0.45	378	14	0.02	886	1.50
271	2	0.00	100	0.17	330	6	0.01	273	0.46	379	20	0.03	906	1.53
273	3	0.01	103	0.17	331	5	0.01	278	0.47	380	19	0.03	925	1.57
275	4	0.01	107	0.18	332	5	0.01	283	0.48	381	23	0.04	948	1.60
278	1	0.00	108	0.18	333	13	0.02	296	0.50	382	32	0.05	980	1.66
279	3	0.01	111	0.19	334	7	0.01	303	0.51	383	27	0.05	1007	1.70
282	4	0.01	115	0.19	335	11	0.02	314	0.53	384	29	0.05	1036	1.75
283	2	0.00	117	0.20	336	5	0.01	319	0.54	385	31	0.05	1067	1.81
284	2	0.00	119	0.20	337	7	0.01	326	0.55	386	25	0.04	1092	1.85
285	2	0.00	121	0.20	338	4	0.01	330	0.56	387	22	0.04	1114	1.89
286	1	0.00	122	0.21	339	6	0.01	336	0.57	388	23	0.04	1137	1.92
287	2	0.00	124	0.21	340	9	0.02	345	0.58	389	18	0.03	1155	1.96
288	2	0.00	126	0.21	341	1	0.00	346	0.59	390	37	0.06	1192	2.02
290	2	0.00	128	0.22	342	7	0.01	353	0.60	391	31	0.05	1223	2.07
291	1	0.00	129	0.22	343	6	0.01	359	0.61	392	24	0.04	1247	2.11
292	1	0.00	130	0.22	344	11	0.02	370	0.63	393	27	0.05	1274	2.16
293	2	0.00	132	0.22	345	7	0.01	377	0.64	394	29	0.05	1303	2.21
295	3	0.01	135	0.23	346	14	0.02	391	0.66	395	32	0.05	1335	2.26
296	1	0.00	136	0.23	347	6	0.01	397	0.67	396	30	0.05	1365	2.31
297	4	0.01	140	0.24	348	12	0.02	409	0.69	397	33	0.06	1398	2.37
298	3	0.01	143	0.24	349	12	0.02	421	0.71	398	40	0.07	1438	2.43
299	1	0.00	144	0.24	350	8	0.01	429	0.73	399	28	0.05	1466	2.48
300	3	0.01	147	0.25	351	8	0.01	437	0.74	400	33	0.06	1499	2.54
301	2	0.00	149	0.25	352	12	0.02	449	0.76	401	32	0.05	1531	2.59
302	2	0.00	151	0.26	353	13	0.02	462	0.78	402	27	0.05	1558	2.64
303	5	0.01	156	0.26	354	13	0.02	475	0.80	403	44	0.07	1602	2.71
304	1	0.00	157	0.27	355	13	0.02	488	0.83	404	32	0.05	1634	2.77
305	3	0.01	160	0.27	356	13	0.02	501	0.85	405	26	0.04	1660	2.81
306	2	0.00	162	0.27	357	10	0.02	511	0.86	406	42	0.07	1702	2.88
307	5	0.01	167	0.28	358	15	0.03	526	0.89	407	31	0.05	1733	2.93
308	4	0.01	171	0.29	359	18	0.03	544	0.92	408	33	0.06	1766	2.99
309	7	0.01	178	0.30	360	18	0.03	562	0.95	409	39	0.07	1805	3.06
310	2	0.00	180	0.30	361	10	0.02	572	0.97	410	46	0.08	1851	3.13
311	3	0.01	183	0.31	362	13	0.02	585	0.99	411	44	0.07	1895	3.21
312	4	0.01	187	0.32	363	14	0.02	599	1.01	412	51	0.09	1946	3.29
313	6	0.01	193	0.33	364	20	0.03	619	1.05	413	45	0.08	1991	3.37
314	7	0.01	200	0.34	365	19	0.03	638	1.08	414	45	0.08	2036	3.45
315	7	0.01	207	0.35	366	14	0.02	652	1.10	415	49	0.08	2085	3.53
317	6	0.01	213	0.36	367	18	0.03	670	1.13	416	44	0.07	2129	3.60
319	3	0.01	216	0.37	368	20	0.03	690	1.17	417	56	0.09	2185	3.70
320	1	0.00	217	0.37	369	17	0.03	707	1.20	418	42	0.07	2227	3.77



**Table 182. Writing Grade 9 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
419	55	0.09	2282	3.86	468	134	0.23	6848	11.59	517	217	0.37	16145	27.33
420	54	0.09	2336	3.95	469	127	0.21	6975	11.81	518	262	0.44	16407	27.77
421	38	0.06	2374	4.02	470	137	0.23	7112	12.04	519	268	0.45	16675	28.23
422	54	0.09	2428	4.11	471	145	0.25	7257	12.28	520	252	0.43	16927	28.65
423	47	0.08	2475	4.19	472	162	0.27	7419	12.56	521	289	0.49	17216	29.14
424	58	0.10	2533	4.29	473	154	0.26	7573	12.82	522	259	0.44	17475	29.58
425	53	0.09	2586	4.38	474	142	0.24	7715	13.06	523	241	0.41	17716	29.99
426	66	0.11	2652	4.49	475	124	0.21	7839	13.27	524	278	0.47	17994	30.46
427	72	0.12	2724	4.61	476	142	0.24	7981	13.51	525	272	0.46	18266	30.92
428	61	0.10	2785	4.71	477	134	0.23	8115	13.74	526	270	0.46	18536	31.38
429	60	0.10	2845	4.82	478	137	0.23	8252	13.97	527	264	0.45	18800	31.82
430	67	0.11	2912	4.93	479	167	0.28	8419	14.25	528	286	0.48	19086	32.31
431	75	0.13	2987	5.06	480	163	0.28	8582	14.53	529	271	0.46	19357	32.77
432	70	0.12	3057	5.17	481	156	0.26	8738	14.79	530	302	0.51	19659	33.28
433	79	0.13	3136	5.31	482	148	0.25	8886	15.04	531	274	0.46	19933	33.74
434	67	0.11	3203	5.42	483	172	0.29	9058	15.33	532	284	0.48	20217	34.22
435	85	0.14	3288	5.57	484	172	0.29	9230	15.62	533	273	0.46	20490	34.68
436	69	0.12	3357	5.68	485	143	0.24	9373	15.87	534	299	0.51	20789	35.19
437	79	0.13	3436	5.82	486	171	0.29	9544	16.16	535	296	0.50	21085	35.69
438	93	0.16	3529	5.97	487	156	0.26	9700	16.42	536	278	0.47	21363	36.16
439	101	0.17	3630	6.14	488	154	0.26	9854	16.68	537	300	0.51	21663	36.67
440	86	0.15	3716	6.29	489	179	0.30	10033	16.98	538	313	0.53	21976	37.20
441	102	0.17	3818	6.46	490	202	0.34	10235	17.33	539	279	0.47	22255	37.67
442	83	0.14	3901	6.60	491	179	0.30	10414	17.63	540	287	0.49	22542	38.16
443	90	0.15	3991	6.76	492	203	0.34	10617	17.97	541	289	0.49	22831	38.65
444	90	0.15	4081	6.91	493	177	0.30	10794	18.27	542	291	0.49	23122	39.14
445	98	0.17	4179	7.07	494	168	0.28	10962	18.56	543	305	0.52	23427	39.66
446	89	0.15	4268	7.22	495	193	0.33	11155	18.88	544	306	0.52	23733	40.17
447	94	0.16	4362	7.38	496	205	0.35	11360	19.23	545	311	0.53	24044	40.70
448	103	0.17	4465	7.56	497	212	0.36	11572	19.59	546	316	0.53	24360	41.24
449	106	0.18	4571	7.74	498	200	0.34	11772	19.93	547	335	0.57	24695	41.80
450	106	0.18	4677	7.92	499	192	0.33	11964	20.25	548	303	0.51	24998	42.31
451	105	0.18	4782	8.09	500	228	0.39	12192	20.64	549	326	0.55	25324	42.87
452	94	0.16	4876	8.25	501	218	0.37	12410	21.01	550	300	0.51	25624	43.37
453	96	0.16	4972	8.42	502	198	0.34	12608	21.34	551	340	0.58	25964	43.95
454	129	0.22	5101	8.63	503	231	0.39	12839	21.73	552	332	0.56	26296	44.51
455	104	0.18	5205	8.81	504	196	0.33	13035	22.06	553	321	0.54	26617	45.06
456	116	0.20	5321	9.01	505	224	0.38	13259	22.44	554	291	0.49	26908	45.55
457	128	0.22	5449	9.22	506	243	0.41	13502	22.86	555	347	0.59	27255	46.14
458	126	0.21	5575	9.44	507	258	0.44	13760	23.29	556	317	0.54	27572	46.67
459	97	0.16	5672	9.60	508	207	0.35	13967	23.64	557	354	0.60	27926	47.27
460	107	0.18	5779	9.78	509	245	0.41	14212	24.06	558	332	0.56	28258	47.83
461	127	0.21	5906	10.00	510	226	0.38	14438	24.44	559	288	0.49	28546	48.32
462	124	0.21	6030	10.21	511	224	0.38	14662	24.82	560	332	0.56	28878	48.88
463	136	0.23	6166	10.44	512	260	0.44	14922	25.26	561	340	0.58	29218	49.46
464	123	0.21	6289	10.65	513	256	0.43	15178	25.69	562	325	0.55	29543	50.01
465	130	0.22	6419	10.87	514	261	0.44	15439	26.13	563	304	0.51	29847	50.52
466	137	0.23	6556	11.10	515	228	0.39	15667	26.52	564	312	0.53	30159	51.05
467	158	0.27	6714	11.37	516	261	0.44	15928	26.96	565	325	0.55	30484	51.60



**Table 182. Writing Grade 9 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
566	314	0.53	30798	52.13	615	238	0.40	45441	76.92	664	109	0.18	54091	91.56
567	381	0.64	31179	52.78	616	247	0.42	45688	77.34	665	97	0.16	54188	91.73
568	346	0.59	31525	53.36	617	233	0.39	45921	77.73	666	118	0.20	54306	91.93
569	327	0.55	31852	53.92	618	242	0.41	46163	78.14	667	126	0.21	54432	92.14
570	337	0.57	32189	54.49	619	234	0.40	46397	78.54	668	101	0.17	54533	92.31
571	335	0.57	32524	55.05	620	236	0.40	46633	78.94	669	94	0.16	54627	92.47
572	345	0.58	32869	55.64	621	235	0.40	46868	79.34	670	105	0.18	54732	92.65
573	333	0.56	33202	56.20	622	216	0.37	47084	79.70	671	102	0.17	54834	92.82
574	307	0.52	33509	56.72	623	220	0.37	47304	80.07	672	107	0.18	54941	93.00
575	306	0.52	33815	57.24	624	190	0.32	47494	80.39	673	89	0.15	55030	93.15
576	312	0.53	34127	57.77	625	243	0.41	47737	80.81	674	101	0.17	55131	93.32
577	328	0.56	34455	58.32	626	220	0.37	47957	81.18	675	104	0.18	55235	93.50
578	312	0.53	34767	58.85	627	205	0.35	48162	81.53	676	96	0.16	55331	93.66
579	318	0.54	35085	59.39	628	211	0.36	48373	81.88	677	83	0.14	55414	93.80
580	358	0.61	35443	60.00	629	214	0.36	48587	82.24	678	104	0.18	55518	93.98
581	344	0.58	35787	60.58	630	213	0.36	48800	82.61	679	77	0.13	55595	94.11
582	299	0.51	36086	61.08	631	205	0.35	49005	82.95	680	69	0.12	55664	94.22
583	299	0.51	36385	61.59	632	207	0.35	49212	83.30	681	85	0.14	55749	94.37
584	307	0.52	36692	62.11	633	206	0.35	49418	83.65	682	85	0.14	55834	94.51
585	326	0.55	37018	62.66	634	193	0.33	49611	83.98	683	81	0.14	55915	94.65
586	326	0.55	37344	63.21	635	172	0.29	49783	84.27	684	94	0.16	56009	94.81
587	307	0.52	37651	63.73	636	181	0.31	49964	84.58	685	79	0.13	56088	94.94
588	315	0.53	37966	64.27	637	166	0.28	50130	84.86	686	72	0.12	56160	95.06
589	298	0.50	38264	64.77	638	178	0.30	50308	85.16	687	75	0.13	56235	95.19
590	313	0.53	38577	65.30	639	164	0.28	50472	85.44	688	55	0.09	56290	95.28
591	313	0.53	38890	65.83	640	191	0.32	50663	85.76	689	84	0.14	56374	95.43
592	305	0.52	39195	66.35	641	161	0.27	50824	86.03	690	76	0.13	56450	95.55
593	286	0.48	39481	66.83	642	197	0.33	51021	86.37	691	57	0.10	56507	95.65
594	277	0.47	39758	67.30	643	172	0.29	51193	86.66	692	61	0.10	56568	95.75
595	292	0.49	40050	67.79	644	167	0.28	51360	86.94	693	69	0.12	56637	95.87
596	323	0.55	40373	68.34	645	147	0.25	51507	87.19	694	68	0.12	56705	95.99
597	294	0.50	40667	68.84	646	153	0.26	51660	87.45	695	62	0.10	56767	96.09
598	319	0.54	40986	69.38	647	148	0.25	51808	87.70	696	59	0.10	56826	96.19
599	283	0.48	41269	69.86	648	129	0.22	51937	87.92	697	68	0.12	56894	96.31
600	285	0.48	41554	70.34	649	167	0.28	52104	88.20	698	50	0.08	56944	96.39
601	283	0.48	41837	70.82	650	171	0.29	52275	88.49	699	84	0.14	57028	96.53
602	289	0.49	42126	71.31	651	146	0.25	52421	88.73	700	41	0.07	57069	96.60
603	273	0.46	42399	71.77	652	132	0.22	52553	88.96	701	43	0.07	57112	96.68
604	272	0.46	42671	72.23	653	140	0.24	52693	89.20	702	54	0.09	57166	96.77
605	258	0.44	42929	72.67	654	161	0.27	52854	89.47	703	57	0.10	57223	96.86
606	255	0.43	43184	73.10	655	142	0.24	52996	89.71	704	65	0.11	57288	96.97
607	271	0.46	43455	73.56	656	117	0.20	53113	89.91	705	44	0.07	57332	97.05
608	240	0.41	43695	73.96	657	154	0.26	53267	90.17	706	35	0.06	57367	97.11
609	258	0.44	43953	74.40	658	126	0.21	53393	90.38	707	44	0.07	57411	97.18
610	271	0.46	44224	74.86	659	135	0.23	53528	90.61	708	48	0.08	57459	97.26
611	227	0.38	44451	75.24	660	113	0.19	53641	90.80	709	41	0.07	57500	97.33
612	258	0.44	44709	75.68	661	117	0.20	53758	91.00	710	43	0.07	57543	97.41
613	251	0.42	44960	76.11	662	118	0.20	53876	91.20	711	35	0.06	57578	97.46
614	243	0.41	45203	76.52	663	106	0.18	53982	91.38	712	26	0.04	57604	97.51



**Table 182. Writing Grade 9 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
713	30	0.05	57634	97.56	762	3	0.01	58671	99.31	815	3	0.01	58938	99.77
714	89	0.15	57723	97.71	763	5	0.01	58676	99.32	816	4	0.01	58942	99.77
715	32	0.05	57755	97.76	764	4	0.01	58680	99.33	818	2	0.00	58944	99.78
716	43	0.07	57798	97.84	765	6	0.01	58686	99.34	819	1	0.00	58945	99.78
717	49	0.08	57847	97.92	766	24	0.04	58710	99.38	820	1	0.00	58946	99.78
718	30	0.05	57877	97.97	767	17	0.03	58727	99.41	821	8	0.01	58954	99.79
719	35	0.06	57912	98.03	768	6	0.01	58733	99.42	822	13	0.02	58967	99.82
720	26	0.04	57938	98.07	769	4	0.01	58737	99.43	824	6	0.01	58973	99.83
721	20	0.03	57958	98.11	770	4	0.01	58741	99.43	825	7	0.01	58980	99.84
722	32	0.05	57990	98.16	771	8	0.01	58749	99.45	827	2	0.00	58982	99.84
723	18	0.03	58008	98.19	772	6	0.01	58755	99.46	828	3	0.01	58985	99.85
724	20	0.03	58028	98.23	773	9	0.02	58764	99.47	829	1	0.00	58986	99.85
725	18	0.03	58046	98.26	774	3	0.01	58767	99.48	831	7	0.01	58993	99.86
726	26	0.04	58072	98.30	775	4	0.01	58771	99.48	833	2	0.00	58995	99.86
727	12	0.02	58084	98.32	776	7	0.01	58778	99.50	834	4	0.01	58999	99.87
728	32	0.05	58116	98.37	777	6	0.01	58784	99.51	835	1	0.00	59000	99.87
729	24	0.04	58140	98.42	778	9	0.02	58793	99.52	837	1	0.00	59001	99.87
730	41	0.07	58181	98.49	779	4	0.01	58797	99.53	838	4	0.01	59005	99.88
731	19	0.03	58200	98.52	780	6	0.01	58803	99.54	842	1	0.00	59006	99.88
732	11	0.02	58211	98.54	781	3	0.01	58806	99.54	844	4	0.01	59010	99.89
733	30	0.05	58241	98.59	782	5	0.01	58811	99.55	846	1	0.00	59011	99.89
734	17	0.03	58258	98.62	783	4	0.01	58815	99.56	853	2	0.00	59013	99.89
735	17	0.03	58275	98.64	784	5	0.01	58820	99.57	859	1	0.00	59014	99.90
736	11	0.02	58286	98.66	785	2	0.00	58822	99.57	863	1	0.00	59015	99.90
737	14	0.02	58300	98.69	786	2	0.00	58824	99.57	870	19	0.03	59034	99.93
738	24	0.04	58324	98.73	787	1	0.00	58825	99.58	872	1	0.00	59035	99.93
739	11	0.02	58335	98.75	788	4	0.01	58829	99.58	878	5	0.01	59040	99.94
740	6	0.01	58341	98.76	789	4	0.01	58833	99.59	879	6	0.01	59046	99.95
741	15	0.03	58356	98.78	790	10	0.02	58843	99.61	884	5	0.01	59051	99.96
742	14	0.02	58370	98.80	791	1	0.00	58844	99.61	897	4	0.01	59055	99.96
743	12	0.02	58382	98.83	792	15	0.03	58859	99.63	898	2	0.00	59057	99.97
744	22	0.04	58404	98.86	793	14	0.02	58873	99.66	904	1	0.00	59058	99.97
745	20	0.03	58424	98.90	795	2	0.00	58875	99.66	913	1	0.00	59059	99.97
746	30	0.05	58454	98.95	796	7	0.01	58882	99.67	915	2	0.00	59061	99.97
747	30	0.05	58484	99.00	797	8	0.01	58890	99.69	930	15	0.03	59076	100.00
748	20	0.03	58504	99.03	798	5	0.01	58895	99.69					
749	15	0.03	58519	99.06	799	9	0.02	58904	99.71					
750	14	0.02	58533	99.08	800	3	0.01	58907	99.71					
751	24	0.04	58557	99.12	801	4	0.01	58911	99.72					
752	19	0.03	58576	99.15	802	1	0.00	58912	99.72					
753	5	0.01	58581	99.16	803	1	0.00	58913	99.72					
754	12	0.02	58593	99.18	804	4	0.01	58917	99.73					
755	7	0.01	58600	99.19	805	2	0.00	58919	99.73					
756	14	0.02	58614	99.22	806	7	0.01	58926	99.75					
757	15	0.03	58629	99.24	807	2	0.00	58928	99.75					
758	8	0.01	58637	99.26	808	1	0.00	58929	99.75					
759	7	0.01	58644	99.27	810	3	0.01	58932	99.76					
760	12	0.02	58656	99.29	811	1	0.00	58933	99.76					
761	12	0.02	58668	99.31	813	2	0.00	58935	99.76					



**Table 183. Mathematics Grade 9 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
340	468	0.79	468	0.79	389	16	0.03	902	1.52	438	48	0.08	2367	3.99
341	1	0.00	469	0.79	390	14	0.02	916	1.54	439	37	0.06	2404	4.05
342	5	0.01	474	0.80	391	23	0.04	939	1.58	440	49	0.08	2453	4.14
343	2	0.00	476	0.80	392	23	0.04	962	1.62	441	44	0.07	2497	4.21
344	4	0.01	480	0.81	393	8	0.01	970	1.64	442	51	0.09	2548	4.30
345	6	0.01	486	0.82	394	24	0.04	994	1.68	443	46	0.08	2594	4.37
346	6	0.01	492	0.83	395	25	0.04	1019	1.72	444	57	0.10	2651	4.47
347	8	0.01	500	0.84	396	18	0.03	1037	1.75	445	44	0.07	2695	4.54
348	5	0.01	505	0.85	397	24	0.04	1061	1.79	446	52	0.09	2747	4.63
349	8	0.01	513	0.87	398	12	0.02	1073	1.81	447	47	0.08	2794	4.71
350	7	0.01	520	0.88	399	23	0.04	1096	1.85	448	55	0.09	2849	4.80
351	6	0.01	526	0.89	400	21	0.04	1117	1.88	449	56	0.09	2905	4.90
352	5	0.01	531	0.90	401	27	0.05	1144	1.93	450	60	0.10	2965	5.00
353	5	0.01	536	0.90	402	31	0.05	1175	1.98	451	58	0.10	3023	5.10
354	7	0.01	543	0.92	403	21	0.04	1196	2.02	452	50	0.08	3073	5.18
355	8	0.01	551	0.93	404	21	0.04	1217	2.05	453	61	0.10	3134	5.29
356	6	0.01	557	0.94	405	22	0.04	1239	2.09	454	65	0.11	3199	5.39
357	4	0.01	561	0.95	406	21	0.04	1260	2.12	455	61	0.10	3260	5.50
358	10	0.02	571	0.96	407	26	0.04	1286	2.17	456	72	0.12	3332	5.62
359	8	0.01	579	0.98	408	22	0.04	1308	2.21	457	71	0.12	3403	5.74
360	10	0.02	589	0.99	409	27	0.05	1335	2.25	458	69	0.12	3472	5.86
361	6	0.01	595	1.00	410	17	0.03	1352	2.28	459	79	0.13	3551	5.99
362	5	0.01	600	1.01	411	30	0.05	1382	2.33	460	82	0.14	3633	6.13
363	3	0.01	603	1.02	412	26	0.04	1408	2.37	461	84	0.14	3717	6.27
364	8	0.01	611	1.03	413	39	0.07	1447	2.44	462	70	0.12	3787	6.39
365	5	0.01	616	1.04	414	27	0.05	1474	2.49	463	60	0.10	3847	6.49
366	7	0.01	623	1.05	415	27	0.05	1501	2.53	464	76	0.13	3923	6.62
367	12	0.02	635	1.07	416	26	0.04	1527	2.58	465	85	0.14	4008	6.76
368	8	0.01	643	1.08	417	21	0.04	1548	2.61	466	80	0.13	4088	6.89
369	10	0.02	653	1.10	418	24	0.04	1572	2.65	467	78	0.13	4166	7.03
370	9	0.02	662	1.12	419	28	0.05	1600	2.70	468	99	0.17	4265	7.19
371	10	0.02	672	1.13	420	36	0.06	1636	2.76	469	91	0.15	4356	7.35
372	11	0.02	683	1.15	421	35	0.06	1671	2.82	470	82	0.14	4438	7.48
373	12	0.02	695	1.17	422	43	0.07	1714	2.89	471	90	0.15	4528	7.64
374	9	0.02	704	1.19	423	34	0.06	1748	2.95	472	83	0.14	4611	7.78
375	14	0.02	718	1.21	424	27	0.05	1775	2.99	473	105	0.18	4716	7.95
376	10	0.02	728	1.23	425	34	0.06	1809	3.05	474	92	0.16	4808	8.11
377	5	0.01	733	1.24	426	37	0.06	1846	3.11	475	109	0.18	4917	8.29
378	16	0.03	749	1.26	427	35	0.06	1881	3.17	476	101	0.17	5018	8.46
379	11	0.02	760	1.28	428	51	0.09	1932	3.26	477	88	0.15	5106	8.61
380	17	0.03	777	1.31	429	37	0.06	1969	3.32	478	117	0.20	5223	8.81
381	7	0.01	784	1.32	430	39	0.07	2008	3.39	479	92	0.16	5315	8.96
382	15	0.03	799	1.35	431	45	0.08	2053	3.46	480	120	0.20	5435	9.17
383	14	0.02	813	1.37	432	58	0.10	2111	3.56	481	91	0.15	5526	9.32
384	24	0.04	837	1.41	433	41	0.07	2152	3.63	482	95	0.16	5621	9.48
385	19	0.03	856	1.44	434	41	0.07	2193	3.70	483	106	0.18	5727	9.66
386	10	0.02	866	1.46	435	42	0.07	2235	3.77	484	114	0.19	5841	9.85
387	7	0.01	873	1.47	436	37	0.06	2272	3.83	485	118	0.20	5959	10.05
388	13	0.02	886	1.49	437	47	0.08	2319	3.91	486	116	0.20	6075	10.25



**Table 183. Mathematics Grade 9 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
487	110	0.19	6185	10.43	536	276	0.47	15284	25.78	585	367	0.62	30802	51.95
488	143	0.24	6328	10.67	537	273	0.46	15557	26.24	586	357	0.60	31159	52.55
489	115	0.19	6443	10.87	538	285	0.48	15842	26.72	587	371	0.63	31530	53.17
490	116	0.20	6559	11.06	539	300	0.51	16142	27.22	588	333	0.56	31863	53.74
491	132	0.22	6691	11.28	540	281	0.47	16423	27.70	589	334	0.56	32197	54.30
492	112	0.19	6803	11.47	541	274	0.46	16697	28.16	590	351	0.59	32548	54.89
493	145	0.24	6948	11.72	542	268	0.45	16965	28.61	591	377	0.64	32925	55.53
494	130	0.22	7078	11.94	543	259	0.44	17224	29.05	592	335	0.56	33260	56.09
495	146	0.25	7224	12.18	544	306	0.52	17530	29.56	593	350	0.59	33610	56.68
496	116	0.20	7340	12.38	545	294	0.50	17824	30.06	594	333	0.56	33943	57.24
497	150	0.25	7490	12.63	546	289	0.49	18113	30.55	595	359	0.61	34302	57.85
498	143	0.24	7633	12.87	547	291	0.49	18404	31.04	596	378	0.64	34680	58.49
499	153	0.26	7786	13.13	548	286	0.48	18690	31.52	597	341	0.58	35021	59.06
500	158	0.27	7944	13.40	549	300	0.51	18990	32.03	598	353	0.60	35374	59.66
501	152	0.26	8096	13.65	550	300	0.51	19290	32.53	599	326	0.55	35700	60.21
502	144	0.24	8240	13.90	551	299	0.50	19589	33.04	600	376	0.63	36076	60.84
503	156	0.26	8396	14.16	552	287	0.48	19876	33.52	601	364	0.61	36440	61.45
504	162	0.27	8558	14.43	553	287	0.48	20163	34.00	602	326	0.55	36766	62.00
505	172	0.29	8730	14.72	554	280	0.47	20443	34.48	603	345	0.58	37111	62.59
506	163	0.27	8893	15.00	555	328	0.55	20771	35.03	604	329	0.55	37440	63.14
507	177	0.30	9070	15.30	556	325	0.55	21096	35.58	605	340	0.57	37780	63.71
508	139	0.23	9209	15.53	557	332	0.56	21428	36.14	606	318	0.54	38098	64.25
509	180	0.30	9389	15.83	558	291	0.49	21719	36.63	607	329	0.55	38427	64.81
510	183	0.31	9572	16.14	559	324	0.55	22043	37.17	608	319	0.54	38746	65.34
511	175	0.30	9747	16.44	560	308	0.52	22351	37.69	609	326	0.55	39072	65.89
512	220	0.37	9967	16.81	561	323	0.54	22674	38.24	610	303	0.51	39375	66.40
513	195	0.33	10162	17.14	562	350	0.59	23024	38.83	611	353	0.60	39728	67.00
514	208	0.35	10370	17.49	563	322	0.54	23346	39.37	612	327	0.55	40055	67.55
515	223	0.38	10593	17.86	564	322	0.54	23668	39.92	613	331	0.56	40386	68.11
516	178	0.30	10771	18.16	565	322	0.54	23990	40.46	614	335	0.56	40721	68.67
517	199	0.34	10970	18.50	566	328	0.55	24318	41.01	615	296	0.50	41017	69.17
518	193	0.33	11163	18.83	567	316	0.53	24634	41.54	616	326	0.55	41343	69.72
519	171	0.29	11334	19.11	568	361	0.61	24995	42.15	617	338	0.57	41681	70.29
520	215	0.36	11549	19.48	569	330	0.56	25325	42.71	618	283	0.48	41964	70.77
521	205	0.35	11754	19.82	570	345	0.58	25670	43.29	619	326	0.55	42290	71.32
522	211	0.36	11965	20.18	571	327	0.55	25997	43.84	620	320	0.54	42610	71.86
523	194	0.33	12159	20.51	572	341	0.58	26338	44.42	621	271	0.46	42881	72.32
524	202	0.34	12361	20.85	573	326	0.55	26664	44.97	622	338	0.57	43219	72.89
525	232	0.39	12593	21.24	574	357	0.60	27021	45.57	623	319	0.54	43538	73.42
526	227	0.38	12820	21.62	575	344	0.58	27365	46.15	624	277	0.47	43815	73.89
527	219	0.37	13039	21.99	576	309	0.52	27674	46.67	625	289	0.49	44104	74.38
528	239	0.40	13278	22.39	577	340	0.57	28014	47.24	626	310	0.52	44414	74.90
529	222	0.37	13500	22.77	578	305	0.51	28319	47.76	627	329	0.55	44743	75.46
530	219	0.37	13719	23.14	579	339	0.57	28658	48.33	628	292	0.49	45035	75.95
531	255	0.43	13974	23.57	580	377	0.64	29035	48.97	629	335	0.56	45370	76.51
532	264	0.45	14238	24.01	581	320	0.54	29355	49.51	630	323	0.54	45693	77.06
533	237	0.40	14475	24.41	582	370	0.62	29725	50.13	631	316	0.53	46009	77.59
534	261	0.44	14736	24.85	583	322	0.54	30047	50.67	632	305	0.51	46314	78.11
535	272	0.46	15008	25.31	584	388	0.65	30435	51.33	633	302	0.51	46616	78.62



**Table 183. Mathematics Grade 9 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
634	283	0.48	46899	79.09	683	102	0.17	56562	95.39	732	8	0.01	58949	99.41
635	318	0.54	47217	79.63	684	94	0.16	56656	95.55	733	17	0.03	58966	99.44
636	286	0.48	47503	80.11	685	89	0.15	56745	95.70	734	15	0.03	58981	99.47
637	257	0.43	47760	80.55	686	98	0.17	56843	95.86	735	12	0.02	58993	99.49
638	256	0.43	48016	80.98	687	120	0.20	56963	96.07	736	18	0.03	59011	99.52
639	246	0.41	48262	81.39	688	92	0.16	57055	96.22	737	10	0.02	59021	99.54
640	275	0.46	48537	81.86	689	93	0.16	57148	96.38	738	16	0.03	59037	99.56
641	235	0.40	48772	82.25	690	90	0.15	57238	96.53	739	11	0.02	59048	99.58
642	259	0.44	49031	82.69	691	72	0.12	57310	96.65	740	7	0.01	59055	99.59
643	246	0.41	49277	83.10	692	61	0.10	57371	96.75	741	11	0.02	59066	99.61
644	238	0.40	49515	83.50	693	82	0.14	57453	96.89	742	10	0.02	59076	99.63
645	237	0.40	49752	83.90	694	83	0.14	57536	97.03	743	16	0.03	59092	99.66
646	240	0.40	49992	84.31	695	77	0.13	57613	97.16	744	6	0.01	59098	99.67
647	261	0.44	50253	84.75	696	66	0.11	57679	97.27	745	12	0.02	59110	99.69
648	246	0.41	50499	85.16	697	59	0.10	57738	97.37	746	8	0.01	59118	99.70
649	268	0.45	50767	85.62	698	47	0.08	57785	97.45	747	9	0.02	59127	99.71
650	245	0.41	51012	86.03	699	49	0.08	57834	97.53	748	11	0.02	59138	99.73
651	228	0.38	51240	86.41	700	77	0.13	57911	97.66	749	8	0.01	59146	99.75
652	235	0.40	51475	86.81	701	61	0.10	57972	97.77	750	9	0.02	59155	99.76
653	198	0.33	51673	87.14	702	47	0.08	58019	97.85	751	8	0.01	59163	99.78
654	218	0.37	51891	87.51	703	52	0.09	58071	97.93	752	8	0.01	59171	99.79
655	232	0.39	52123	87.90	704	66	0.11	58137	98.05	753	6	0.01	59177	99.80
656	228	0.38	52351	88.29	705	39	0.07	58176	98.11	754	3	0.01	59180	99.80
657	234	0.39	52585	88.68	706	56	0.09	58232	98.21	755	9	0.02	59189	99.82
658	190	0.32	52775	89.00	707	50	0.08	58282	98.29	756	3	0.01	59192	99.82
659	183	0.31	52958	89.31	708	44	0.07	58326	98.36	757	7	0.01	59199	99.84
660	177	0.30	53135	89.61	709	30	0.05	58356	98.41	758	3	0.01	59202	99.84
661	195	0.33	53330	89.94	710	46	0.08	58402	98.49	759	7	0.01	59209	99.85
662	172	0.29	53502	90.23	711	38	0.06	58440	98.56	760	3	0.01	59212	99.86
663	188	0.32	53690	90.55	712	36	0.06	58476	98.62	761	4	0.01	59216	99.87
664	185	0.31	53875	90.86	713	42	0.07	58518	98.69	762	2	0.00	59218	99.87
665	179	0.30	54054	91.16	714	28	0.05	58546	98.74	763	10	0.02	59228	99.89
666	172	0.29	54226	91.45	715	36	0.06	58582	98.80	764	4	0.01	59232	99.89
667	172	0.29	54398	91.74	716	32	0.05	58614	98.85	765	1	0.00	59233	99.89
668	161	0.27	54559	92.01	717	49	0.08	58663	98.93	766	1	0.00	59234	99.90
669	148	0.25	54707	92.26	718	25	0.04	58688	98.97	767	2	0.00	59236	99.90
670	142	0.24	54849	92.50	719	34	0.06	58722	99.03	768	1	0.00	59237	99.90
671	151	0.25	55000	92.75	720	24	0.04	58746	99.07	769	3	0.01	59240	99.91
672	172	0.29	55172	93.05	721	16	0.03	58762	99.10	770	2	0.00	59242	99.91
673	123	0.21	55295	93.25	722	30	0.05	58792	99.15	771	1	0.00	59243	99.91
674	149	0.25	55444	93.50	723	21	0.04	58813	99.19	772	1	0.00	59244	99.91
675	126	0.21	55570	93.72	724	20	0.03	58833	99.22	773	1	0.00	59245	99.91
676	141	0.24	55711	93.95	725	18	0.03	58851	99.25	775	3	0.01	59248	99.92
677	125	0.21	55836	94.16	726	22	0.04	58873	99.29	776	1	0.00	59249	99.92
678	137	0.23	55973	94.40	727	14	0.02	58887	99.31	777	2	0.00	59251	99.92
679	120	0.20	56093	94.60	728	10	0.02	58897	99.33	778	2	0.00	59253	99.93
680	128	0.22	56221	94.81	729	12	0.02	58909	99.35	780	3	0.01	59256	99.93
681	116	0.20	56337	95.01	730	14	0.02	58923	99.37	781	1	0.00	59257	99.93
682	123	0.21	56460	95.22	731	18	0.03	58941	99.40	782	3	0.01	59260	99.94



**Table 183. Mathematics Grade 9 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
783	3	0.01	59263	99.94
784	1	0.00	59264	99.95
785	3	0.01	59267	99.95
787	2	0.00	59269	99.95
788	1	0.00	59270	99.96
790	2	0.00	59272	99.96
791	1	0.00	59273	99.96
792	1	0.00	59274	99.96
793	1	0.00	59275	99.96
794	1	0.00	59276	99.97
796	1	0.00	59277	99.97
801	1	0.00	59278	99.97
804	2	0.00	59280	99.97
807	1	0.00	59281	99.97
810	2	0.00	59283	99.98
811	1	0.00	59284	99.98
829	1	0.00	59285	99.98
837	2	0.00	59287	99.98
848	1	0.00	59288	99.99
850	1	0.00	59289	99.99
859	1	0.00	59290	99.99
868	1	0.00	59291	99.99
872	1	0.00	59292	99.99
920	4	0.01	59296	100.00



**Table 184. Reading Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
370	232	0.42	232	0.42	451	1	0.00	348	0.63	500	11	0.02	595	1.08
373	1	0.00	233	0.42	452	5	0.01	353	0.64	501	7	0.01	602	1.09
374	1	0.00	234	0.42	453	3	0.01	356	0.64	502	13	0.02	615	1.11
379	1	0.00	235	0.43	454	5	0.01	361	0.65	503	10	0.02	625	1.13
382	1	0.00	236	0.43	455	3	0.01	364	0.66	504	17	0.03	642	1.16
383	1	0.00	237	0.43	456	2	0.00	366	0.66	505	6	0.01	648	1.17
386	1	0.00	238	0.43	457	5	0.01	371	0.67	506	8	0.01	656	1.19
388	1	0.00	239	0.43	458	2	0.00	373	0.67	507	10	0.02	666	1.20
390	1	0.00	240	0.43	459	4	0.01	377	0.68	508	11	0.02	677	1.22
396	3	0.01	243	0.44	460	6	0.01	383	0.69	509	15	0.03	692	1.25
399	2	0.00	245	0.44	461	4	0.01	387	0.70	510	15	0.03	707	1.28
400	1	0.00	246	0.44	462	4	0.01	391	0.71	511	13	0.02	720	1.30
404	1	0.00	247	0.45	463	1	0.00	392	0.71	512	15	0.03	735	1.33
406	1	0.00	248	0.45	464	4	0.01	396	0.72	513	16	0.03	751	1.36
408	1	0.00	249	0.45	465	3	0.01	399	0.72	514	9	0.02	760	1.37
409	2	0.00	251	0.45	466	2	0.00	401	0.73	515	7	0.01	767	1.39
410	2	0.00	253	0.46	467	2	0.00	403	0.73	516	10	0.02	777	1.41
413	4	0.01	257	0.46	468	4	0.01	407	0.74	517	13	0.02	790	1.43
414	1	0.00	258	0.47	469	2	0.00	409	0.74	518	18	0.03	808	1.46
417	3	0.01	261	0.47	470	8	0.01	417	0.75	519	12	0.02	820	1.48
418	1	0.00	262	0.47	471	2	0.00	419	0.76	520	20	0.04	840	1.52
419	1	0.00	263	0.48	472	2	0.00	421	0.76	521	14	0.03	854	1.54
420	3	0.01	266	0.48	473	7	0.01	428	0.77	522	25	0.05	879	1.59
422	2	0.00	268	0.48	474	4	0.01	432	0.78	523	16	0.03	895	1.62
426	2	0.00	270	0.49	475	1	0.00	433	0.78	524	9	0.02	904	1.64
427	3	0.01	273	0.49	476	7	0.01	440	0.80	525	18	0.03	922	1.67
428	1	0.00	274	0.50	477	4	0.01	444	0.80	526	21	0.04	943	1.71
429	2	0.00	276	0.50	478	3	0.01	447	0.81	527	16	0.03	959	1.73
430	5	0.01	281	0.51	479	4	0.01	451	0.82	528	20	0.04	979	1.77
431	3	0.01	284	0.51	480	6	0.01	457	0.83	529	21	0.04	1000	1.81
432	1	0.00	285	0.52	481	6	0.01	463	0.84	530	22	0.04	1022	1.85
433	1	0.00	286	0.52	482	5	0.01	468	0.85	531	20	0.04	1042	1.88
434	1	0.00	287	0.52	483	6	0.01	474	0.86	532	24	0.04	1066	1.93
435	2	0.00	289	0.52	484	9	0.02	483	0.87	533	29	0.05	1095	1.98
436	3	0.01	292	0.53	485	7	0.01	490	0.89	534	16	0.03	1111	2.01
437	3	0.01	295	0.53	486	5	0.01	495	0.90	535	13	0.02	1124	2.03
438	3	0.01	298	0.54	487	8	0.01	503	0.91	536	17	0.03	1141	2.06
439	7	0.01	305	0.55	488	7	0.01	510	0.92	537	23	0.04	1164	2.11
440	4	0.01	309	0.56	489	5	0.01	515	0.93	538	26	0.05	1190	2.15
441	1	0.00	310	0.56	490	5	0.01	520	0.94	539	21	0.04	1211	2.19
442	5	0.01	315	0.57	491	5	0.01	525	0.95	540	33	0.06	1244	2.25
443	4	0.01	319	0.58	492	7	0.01	532	0.96	541	22	0.04	1266	2.29
444	4	0.01	323	0.58	493	8	0.01	540	0.98	542	34	0.06	1300	2.35
445	4	0.01	327	0.59	494	3	0.01	543	0.98	543	25	0.05	1325	2.40
446	5	0.01	332	0.60	495	7	0.01	550	0.99	544	27	0.05	1352	2.45
447	7	0.01	339	0.61	496	8	0.01	558	1.01	545	24	0.04	1376	2.49
448	1	0.00	340	0.62	497	5	0.01	563	1.02	546	40	0.07	1416	2.56
449	2	0.00	342	0.62	498	13	0.02	576	1.04	547	38	0.07	1454	2.63
450	5	0.01	347	0.63	499	8	0.01	584	1.06	548	25	0.05	1479	2.68



**Table 184. Reading Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
549	36	0.07	1515	2.74	598	103	0.19	4696	8.49	647	247	0.45	13045	23.60
550	30	0.05	1545	2.79	599	117	0.21	4813	8.71	648	255	0.46	13300	24.06
551	27	0.05	1572	2.84	600	136	0.25	4949	8.95	649	288	0.52	13588	24.58
552	45	0.08	1617	2.92	601	101	0.18	5050	9.13	650	284	0.51	13872	25.09
553	41	0.07	1658	3.00	602	121	0.22	5171	9.35	651	288	0.52	14160	25.61
554	40	0.07	1698	3.07	603	120	0.22	5291	9.57	652	284	0.51	14444	26.13
555	49	0.09	1747	3.16	604	111	0.20	5402	9.77	653	313	0.57	14757	26.69
556	44	0.08	1791	3.24	605	119	0.22	5521	9.99	654	285	0.52	15042	27.21
557	44	0.08	1835	3.32	606	109	0.20	5630	10.18	655	286	0.52	15328	27.73
558	40	0.07	1875	3.39	607	128	0.23	5758	10.42	656	303	0.55	15631	28.27
559	51	0.09	1926	3.48	608	125	0.23	5883	10.64	657	305	0.55	15936	28.83
560	48	0.09	1974	3.57	609	122	0.22	6005	10.86	658	298	0.54	16234	29.37
561	59	0.11	2033	3.68	610	132	0.24	6137	11.10	659	349	0.63	16583	30.00
562	46	0.08	2079	3.76	611	133	0.24	6270	11.34	660	343	0.62	16926	30.62
563	43	0.08	2122	3.84	612	125	0.23	6395	11.57	661	313	0.57	17239	31.18
564	39	0.07	2161	3.91	613	118	0.21	6513	11.78	662	304	0.55	17543	31.73
565	47	0.09	2208	3.99	614	130	0.24	6643	12.02	663	321	0.58	17864	32.31
566	47	0.09	2255	4.08	615	126	0.23	6769	12.24	664	352	0.64	18216	32.95
567	64	0.12	2319	4.19	616	142	0.26	6911	12.50	665	351	0.63	18567	33.59
568	50	0.09	2369	4.29	617	158	0.29	7069	12.79	666	338	0.61	18905	34.20
569	52	0.09	2421	4.38	618	140	0.25	7209	13.04	667	332	0.60	19237	34.80
570	49	0.09	2470	4.47	619	167	0.30	7376	13.34	668	348	0.63	19585	35.43
571	60	0.11	2530	4.58	620	182	0.33	7558	13.67	669	339	0.61	19924	36.04
572	57	0.10	2587	4.68	621	163	0.29	7721	13.97	670	373	0.67	20297	36.71
573	69	0.12	2656	4.80	622	154	0.28	7875	14.24	671	371	0.67	20668	37.39
574	52	0.09	2708	4.90	623	146	0.26	8021	14.51	672	352	0.64	21020	38.02
575	73	0.13	2781	5.03	624	149	0.27	8170	14.78	673	367	0.66	21387	38.69
576	70	0.13	2851	5.16	625	167	0.30	8337	15.08	674	400	0.72	21787	39.41
577	80	0.14	2931	5.30	626	151	0.27	8488	15.35	675	391	0.71	22178	40.12
578	68	0.12	2999	5.42	627	209	0.38	8697	15.73	676	403	0.73	22581	40.85
579	66	0.12	3065	5.54	628	189	0.34	8886	16.07	677	407	0.74	22988	41.58
580	78	0.14	3143	5.69	629	180	0.33	9066	16.40	678	409	0.74	23397	42.32
581	62	0.11	3205	5.80	630	190	0.34	9256	16.74	679	414	0.75	23811	43.07
582	76	0.14	3281	5.93	631	192	0.35	9448	17.09	680	432	0.78	24243	43.85
583	75	0.14	3356	6.07	632	217	0.39	9665	17.48	681	378	0.68	24621	44.54
584	86	0.16	3442	6.23	633	214	0.39	9879	17.87	682	407	0.74	25028	45.27
585	79	0.14	3521	6.37	634	189	0.34	10068	18.21	683	432	0.78	25460	46.05
586	85	0.15	3606	6.52	635	202	0.37	10270	18.58	684	430	0.78	25890	46.83
587	75	0.14	3681	6.66	636	207	0.37	10477	18.95	685	396	0.72	26286	47.55
588	84	0.15	3765	6.81	637	227	0.41	10704	19.36	686	424	0.77	26710	48.32
589	80	0.14	3845	6.96	638	237	0.43	10941	19.79	687	430	0.78	27140	49.09
590	82	0.15	3927	7.10	639	233	0.42	11174	20.21	688	401	0.73	27541	49.82
591	95	0.17	4022	7.28	640	233	0.42	11407	20.63	689	412	0.75	27953	50.56
592	92	0.17	4114	7.44	641	239	0.43	11646	21.07	690	427	0.77	28380	51.34
593	88	0.16	4202	7.60	642	213	0.39	11859	21.45	691	443	0.80	28823	52.14
594	94	0.17	4296	7.77	643	212	0.38	12071	21.83	692	425	0.77	29248	52.91
595	101	0.18	4397	7.95	644	225	0.41	12296	22.24	693	433	0.78	29681	53.69
596	110	0.20	4507	8.15	645	249	0.45	12545	22.69	694	428	0.77	30109	54.46
597	86	0.16	4593	8.31	646	253	0.46	12798	23.15	695	428	0.77	30537	55.24



**Table 184. Reading Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
696	446	0.81	30983	56.04	745	245	0.44	48859	88.38	794	42	0.08	54560	98.69
697	455	0.82	31438	56.87	746	227	0.41	49086	88.79	795	32	0.06	54592	98.75
698	451	0.82	31889	57.68	747	207	0.37	49293	89.16	796	37	0.07	54629	98.82
699	472	0.85	32361	58.54	748	204	0.37	49497	89.53	797	36	0.07	54665	98.88
700	425	0.77	32786	59.31	749	226	0.41	49723	89.94	798	20	0.04	54685	98.92
701	469	0.85	33255	60.15	750	210	0.38	49933	90.32	799	30	0.05	54715	98.97
702	466	0.84	33721	61.00	751	199	0.36	50132	90.68	800	26	0.05	54741	99.02
703	432	0.78	34153	61.78	752	200	0.36	50332	91.04	801	30	0.05	54771	99.07
704	441	0.80	34594	62.58	753	206	0.37	50538	91.42	802	21	0.04	54792	99.11
705	398	0.72	34992	63.30	754	186	0.34	50724	91.75	803	25	0.05	54817	99.16
706	409	0.74	35401	64.04	755	204	0.37	50928	92.12	804	24	0.04	54841	99.20
707	404	0.73	35805	64.77	756	173	0.31	51101	92.44	805	31	0.06	54872	99.26
708	407	0.74	36212	65.50	757	172	0.31	51273	92.75	806	24	0.04	54896	99.30
709	404	0.73	36616	66.23	758	164	0.30	51437	93.04	807	25	0.05	54921	99.35
710	416	0.75	37032	66.99	759	161	0.29	51598	93.33	808	19	0.03	54940	99.38
711	414	0.75	37446	67.74	760	157	0.28	51755	93.62	809	14	0.03	54954	99.40
712	411	0.74	37857	68.48	761	135	0.24	51890	93.86	810	19	0.03	54973	99.44
713	392	0.71	38249	69.19	762	138	0.25	52028	94.11	811	15	0.03	54988	99.47
714	407	0.74	38656	69.92	763	127	0.23	52155	94.34	812	10	0.02	54998	99.48
715	432	0.78	39088	70.71	764	130	0.24	52285	94.58	813	16	0.03	55014	99.51
716	424	0.77	39512	71.47	765	125	0.23	52410	94.80	814	9	0.02	55023	99.53
717	401	0.73	39913	72.20	766	127	0.23	52537	95.03	815	13	0.02	55036	99.55
718	394	0.71	40307	72.91	767	107	0.19	52644	95.23	816	10	0.02	55046	99.57
719	431	0.78	40738	73.69	768	131	0.24	52775	95.46	817	13	0.02	55059	99.59
720	383	0.69	41121	74.38	769	106	0.19	52881	95.66	818	18	0.03	55077	99.63
721	358	0.65	41479	75.03	770	102	0.18	52983	95.84	819	11	0.02	55088	99.65
722	372	0.67	41851	75.70	771	110	0.20	53093	96.04	820	11	0.02	55099	99.67
723	365	0.66	42216	76.36	772	101	0.18	53194	96.22	821	11	0.02	55110	99.69
724	305	0.55	42521	76.92	773	85	0.15	53279	96.38	822	10	0.02	55120	99.71
725	359	0.65	42880	77.56	774	99	0.18	53378	96.55	823	8	0.01	55128	99.72
726	346	0.63	43226	78.19	775	83	0.15	53461	96.70	824	8	0.01	55136	99.73
727	360	0.65	43586	78.84	776	84	0.15	53545	96.86	825	13	0.02	55149	99.76
728	354	0.64	43940	79.48	777	85	0.15	53630	97.01	826	7	0.01	55156	99.77
729	338	0.61	44278	80.09	778	74	0.13	53704	97.14	827	7	0.01	55163	99.78
730	339	0.61	44617	80.71	779	68	0.12	53772	97.27	828	4	0.01	55167	99.79
731	341	0.62	44958	81.32	780	75	0.14	53847	97.40	829	6	0.01	55173	99.80
732	300	0.54	45258	81.87	781	73	0.13	53920	97.53	830	9	0.02	55182	99.82
733	314	0.57	45572	82.43	782	79	0.14	53999	97.68	831	3	0.01	55185	99.82
734	307	0.56	45879	82.99	783	44	0.08	54043	97.76	832	3	0.01	55188	99.83
735	300	0.54	46179	83.53	784	57	0.10	54100	97.86	833	7	0.01	55195	99.84
736	281	0.51	46460	84.04	785	43	0.08	54143	97.94	834	11	0.02	55206	99.86
737	282	0.51	46742	84.55	786	55	0.10	54198	98.04	835	8	0.01	55214	99.88
738	276	0.50	47018	85.05	787	44	0.08	54242	98.12	836	3	0.01	55217	99.88
739	275	0.50	47293	85.55	788	50	0.09	54292	98.21	837	4	0.01	55221	99.89
740	282	0.51	47575	86.06	789	46	0.08	54338	98.29	838	6	0.01	55227	99.90
741	262	0.47	47837	86.53	790	55	0.10	54393	98.39	839	1	0.00	55228	99.90
742	270	0.49	48107	87.02	791	40	0.07	54433	98.46	840	4	0.01	55232	99.91
743	250	0.45	48357	87.47	792	43	0.08	54476	98.54	841	3	0.01	55235	99.91
744	257	0.46	48614	87.94	793	42	0.08	54518	98.62	842	3	0.01	55238	99.92



**Table 184. Reading Grade 10 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
843	1	0.00	55239	99.92
844	3	0.01	55242	99.93
845	3	0.01	55245	99.93
846	1	0.00	55246	99.93
847	1	0.00	55247	99.93
848	5	0.01	55252	99.94
849	1	0.00	55253	99.95
850	1	0.00	55254	99.95
851	2	0.00	55256	99.95
852	4	0.01	55260	99.96
854	1	0.00	55261	99.96
855	1	0.00	55262	99.96
856	1	0.00	55263	99.96
857	3	0.01	55266	99.97
858	1	0.00	55267	99.97
859	1	0.00	55268	99.97
860	4	0.01	55272	99.98
863	1	0.00	55273	99.98
865	1	0.00	55274	99.98
868	1	0.00	55275	99.99
870	1	0.00	55276	99.99
874	1	0.00	55277	99.99
885	1	0.00	55278	99.99
888	1	0.00	55279	99.99
889	1	0.00	55280	99.99
891	1	0.00	55281	100.00
892	1	0.00	55282	100.00
906	1	0.00	55283	100.00



**Table 185. Writing Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
270	105	0.19	105	0.19	323	4	0.01	298	0.54	372	18	0.03	819	1.48
271	3	0.01	108	0.20	324	9	0.02	307	0.56	373	16	0.03	835	1.51
272	3	0.01	111	0.20	325	6	0.01	313	0.57	374	19	0.03	854	1.54
274	2	0.00	113	0.20	326	4	0.01	317	0.57	375	19	0.03	873	1.58
276	3	0.01	116	0.21	327	11	0.02	328	0.59	376	13	0.02	886	1.60
277	3	0.01	119	0.22	328	6	0.01	334	0.60	377	21	0.04	907	1.64
279	1	0.00	120	0.22	329	6	0.01	340	0.61	378	18	0.03	925	1.67
280	1	0.00	121	0.22	330	7	0.01	347	0.63	379	22	0.04	947	1.71
281	2	0.00	123	0.22	331	9	0.02	356	0.64	380	29	0.05	976	1.76
282	2	0.00	125	0.23	332	11	0.02	367	0.66	381	29	0.05	1005	1.82
283	1	0.00	126	0.23	333	4	0.01	371	0.67	382	18	0.03	1023	1.85
284	3	0.01	129	0.23	334	9	0.02	380	0.69	383	17	0.03	1040	1.88
285	2	0.00	131	0.24	335	7	0.01	387	0.70	384	25	0.05	1065	1.93
286	3	0.01	134	0.24	336	6	0.01	393	0.71	385	23	0.04	1088	1.97
287	2	0.00	136	0.25	337	8	0.01	401	0.73	386	29	0.05	1117	2.02
288	4	0.01	140	0.25	338	8	0.01	409	0.74	387	25	0.05	1142	2.06
289	6	0.01	146	0.26	339	8	0.01	417	0.75	388	30	0.05	1172	2.12
290	4	0.01	150	0.27	340	7	0.01	424	0.77	389	21	0.04	1193	2.16
291	1	0.00	151	0.27	341	9	0.02	433	0.78	390	35	0.06	1228	2.22
293	3	0.01	154	0.28	342	6	0.01	439	0.79	391	41	0.07	1269	2.29
294	4	0.01	158	0.29	343	8	0.01	447	0.81	392	27	0.05	1296	2.34
295	3	0.01	161	0.29	344	5	0.01	452	0.82	393	28	0.05	1324	2.39
296	9	0.02	170	0.31	345	7	0.01	459	0.83	394	30	0.05	1354	2.45
297	4	0.01	174	0.31	346	7	0.01	466	0.84	395	35	0.06	1389	2.51
298	2	0.00	176	0.32	347	11	0.02	477	0.86	396	29	0.05	1418	2.56
299	4	0.01	180	0.33	348	10	0.02	487	0.88	397	20	0.04	1438	2.60
300	6	0.01	186	0.34	349	8	0.01	495	0.90	398	43	0.08	1481	2.68
301	1	0.00	187	0.34	350	8	0.01	503	0.91	399	33	0.06	1514	2.74
302	5	0.01	192	0.35	351	7	0.01	510	0.92	400	41	0.07	1555	2.81
303	5	0.01	197	0.36	352	11	0.02	521	0.94	401	36	0.07	1591	2.88
304	6	0.01	203	0.37	353	8	0.01	529	0.96	402	40	0.07	1631	2.95
305	4	0.01	207	0.37	354	15	0.03	544	0.98	403	39	0.07	1670	3.02
306	9	0.02	216	0.39	355	10	0.02	554	1.00	404	24	0.04	1694	3.06
307	2	0.00	218	0.39	356	15	0.03	569	1.03	405	37	0.07	1731	3.13
308	3	0.01	221	0.40	357	14	0.03	583	1.05	406	44	0.08	1775	3.21
309	8	0.01	229	0.41	358	10	0.02	593	1.07	407	48	0.09	1823	3.30
310	7	0.01	236	0.43	359	16	0.03	609	1.10	408	49	0.09	1872	3.38
311	5	0.01	241	0.44	360	21	0.04	630	1.14	409	56	0.10	1928	3.49
312	2	0.00	243	0.44	361	17	0.03	647	1.17	410	42	0.08	1970	3.56
313	4	0.01	247	0.45	362	11	0.02	658	1.19	411	55	0.10	2025	3.66
314	3	0.01	250	0.45	363	20	0.04	678	1.23	412	54	0.10	2079	3.76
315	5	0.01	255	0.46	364	7	0.01	685	1.24	413	55	0.10	2134	3.86
316	6	0.01	261	0.47	365	16	0.03	701	1.27	414	57	0.10	2191	3.96
317	5	0.01	266	0.48	366	16	0.03	717	1.30	415	44	0.08	2235	4.04
318	3	0.01	269	0.49	367	18	0.03	735	1.33	416	54	0.10	2289	4.14
319	5	0.01	274	0.50	368	20	0.04	755	1.37	417	55	0.10	2344	4.24
320	8	0.01	282	0.51	369	12	0.02	767	1.39	418	60	0.11	2404	4.35
321	8	0.01	290	0.52	370	19	0.03	786	1.42	419	50	0.09	2454	4.44
322	4	0.01	294	0.53	371	15	0.03	801	1.45	420	47	0.08	2501	4.52



**Table 185. Writing Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
421	55	0.10	2556	4.62	470	96	0.17	6785	12.27	519	174	0.31	14322	25.90
422	74	0.13	2630	4.76	471	123	0.22	6908	12.49	520	187	0.34	14509	26.23
423	60	0.11	2690	4.86	472	116	0.21	7024	12.70	521	185	0.33	14694	26.57
424	47	0.08	2737	4.95	473	110	0.20	7134	12.90	522	196	0.35	14890	26.92
425	70	0.13	2807	5.08	474	141	0.25	7275	13.15	523	175	0.32	15065	27.24
426	64	0.12	2871	5.19	475	137	0.25	7412	13.40	524	221	0.40	15286	27.64
427	60	0.11	2931	5.30	476	119	0.22	7531	13.62	525	224	0.41	15510	28.04
428	68	0.12	2999	5.42	477	113	0.20	7644	13.82	526	192	0.35	15702	28.39
429	67	0.12	3066	5.54	478	119	0.22	7763	14.04	527	230	0.42	15932	28.81
430	77	0.14	3143	5.68	479	123	0.22	7886	14.26	528	182	0.33	16114	29.14
431	66	0.12	3209	5.80	480	123	0.22	8009	14.48	529	198	0.36	16312	29.49
432	63	0.11	3272	5.92	481	117	0.21	8126	14.69	530	219	0.40	16531	29.89
433	80	0.14	3352	6.06	482	154	0.28	8280	14.97	531	219	0.40	16750	30.29
434	80	0.14	3432	6.21	483	125	0.23	8405	15.20	532	243	0.44	16993	30.73
435	68	0.12	3500	6.33	484	147	0.27	8552	15.46	533	211	0.38	17204	31.11
436	75	0.14	3575	6.46	485	145	0.26	8697	15.73	534	232	0.42	17436	31.53
437	84	0.15	3659	6.62	486	143	0.26	8840	15.98	535	223	0.40	17659	31.93
438	78	0.14	3737	6.76	487	128	0.23	8968	16.22	536	226	0.41	17885	32.34
439	86	0.16	3823	6.91	488	147	0.27	9115	16.48	537	242	0.44	18127	32.78
440	83	0.15	3906	7.06	489	149	0.27	9264	16.75	538	244	0.44	18371	33.22
441	67	0.12	3973	7.18	490	173	0.31	9437	17.06	539	251	0.45	18622	33.67
442	83	0.15	4056	7.33	491	157	0.28	9594	17.35	540	230	0.42	18852	34.09
443	68	0.12	4124	7.46	492	153	0.28	9747	17.62	541	218	0.39	19070	34.48
444	75	0.14	4199	7.59	493	148	0.27	9895	17.89	542	268	0.48	19338	34.97
445	100	0.18	4299	7.77	494	143	0.26	10038	18.15	543	243	0.44	19581	35.40
446	97	0.18	4396	7.95	495	152	0.27	10190	18.42	544	237	0.43	19818	35.83
447	74	0.13	4470	8.08	496	145	0.26	10335	18.69	545	226	0.41	20044	36.24
448	94	0.17	4564	8.25	497	168	0.30	10503	18.99	546	257	0.46	20301	36.71
449	89	0.16	4653	8.41	498	168	0.30	10671	19.29	547	237	0.43	20538	37.14
450	98	0.18	4751	8.59	499	165	0.30	10836	19.59	548	253	0.46	20791	37.59
451	113	0.20	4864	8.79	500	153	0.28	10989	19.87	549	213	0.39	21004	37.98
452	107	0.19	4971	8.99	501	163	0.29	11152	20.16	550	231	0.42	21235	38.40
453	90	0.16	5061	9.15	502	170	0.31	11322	20.47	551	247	0.45	21482	38.84
454	110	0.20	5171	9.35	503	153	0.28	11475	20.75	552	271	0.49	21753	39.33
455	100	0.18	5271	9.53	504	170	0.31	11645	21.06	553	257	0.46	22010	39.80
456	94	0.17	5365	9.70	505	176	0.32	11821	21.37	554	248	0.45	22258	40.25
457	87	0.16	5452	9.86	506	168	0.30	11989	21.68	555	254	0.46	22512	40.70
458	98	0.18	5550	10.04	507	174	0.31	12163	21.99	556	241	0.44	22753	41.14
459	97	0.18	5647	10.21	508	154	0.28	12317	22.27	557	250	0.45	23003	41.59
460	105	0.19	5752	10.40	509	185	0.33	12502	22.61	558	264	0.48	23267	42.07
461	110	0.20	5862	10.60	510	187	0.34	12689	22.94	559	272	0.49	23539	42.56
462	107	0.19	5969	10.79	511	162	0.29	12851	23.24	560	262	0.47	23801	43.04
463	97	0.18	6066	10.97	512	166	0.30	13017	23.54	561	251	0.45	24052	43.49
464	92	0.17	6158	11.13	513	163	0.29	13180	23.83	562	248	0.45	24300	43.94
465	97	0.18	6255	11.31	514	186	0.34	13366	24.17	563	324	0.59	24624	44.52
466	99	0.18	6354	11.49	515	201	0.36	13567	24.53	564	261	0.47	24885	45.00
467	114	0.21	6468	11.69	516	203	0.37	13770	24.90	565	253	0.46	25138	45.45
468	106	0.19	6574	11.89	517	185	0.33	13955	25.23	566	291	0.53	25429	45.98
469	115	0.21	6689	12.09	518	193	0.35	14148	25.58	567	250	0.45	25679	46.43



**Table 185. Writing Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
568	267	0.48	25946	46.91	617	233	0.42	38847	70.24	666	140	0.25	48049	86.88
569	266	0.48	26212	47.39	618	256	0.46	39103	70.70	667	142	0.26	48191	87.14
570	253	0.46	26465	47.85	619	243	0.44	39346	71.14	668	165	0.30	48356	87.43
571	280	0.51	26745	48.36	620	222	0.40	39568	71.54	669	124	0.22	48480	87.66
572	275	0.50	27020	48.86	621	243	0.44	39811	71.98	670	125	0.23	48605	87.88
573	284	0.51	27304	49.37	622	211	0.38	40022	72.36	671	150	0.27	48755	88.15
574	249	0.45	27553	49.82	623	200	0.36	40222	72.73	672	121	0.22	48876	88.37
575	230	0.42	27783	50.24	624	209	0.38	40431	73.10	673	137	0.25	49013	88.62
576	268	0.48	28051	50.72	625	204	0.37	40635	73.47	674	117	0.21	49130	88.83
577	269	0.49	28320	51.21	626	214	0.39	40849	73.86	675	130	0.24	49260	89.07
578	275	0.50	28595	51.70	627	231	0.42	41080	74.28	676	126	0.23	49386	89.30
579	317	0.57	28912	52.28	628	208	0.38	41288	74.65	677	131	0.24	49517	89.53
580	282	0.51	29194	52.79	629	234	0.42	41522	75.08	678	126	0.23	49643	89.76
581	276	0.50	29470	53.29	630	230	0.42	41752	75.49	679	119	0.22	49762	89.98
582	298	0.54	29768	53.82	631	198	0.36	41950	75.85	680	106	0.19	49868	90.17
583	249	0.45	30017	54.27	632	203	0.37	42153	76.22	681	124	0.22	49992	90.39
584	314	0.57	30331	54.84	633	220	0.40	42373	76.62	682	124	0.22	50116	90.62
585	292	0.53	30623	55.37	634	189	0.34	42562	76.96	683	103	0.19	50219	90.80
586	278	0.50	30901	55.87	635	221	0.40	42783	77.36	684	105	0.19	50324	90.99
587	276	0.50	31177	56.37	636	210	0.38	42993	77.74	685	99	0.18	50423	91.17
588	261	0.47	31438	56.84	637	184	0.33	43177	78.07	686	77	0.14	50500	91.31
589	288	0.52	31726	57.36	638	189	0.34	43366	78.41	687	101	0.18	50601	91.49
590	271	0.49	31997	57.85	639	192	0.35	43558	78.76	688	98	0.18	50699	91.67
591	272	0.49	32269	58.35	640	200	0.36	43758	79.12	689	110	0.20	50809	91.87
592	262	0.47	32531	58.82	641	204	0.37	43962	79.49	690	97	0.18	50906	92.04
593	273	0.49	32804	59.31	642	195	0.35	44157	79.84	691	87	0.16	50993	92.20
594	221	0.40	33025	59.71	643	180	0.33	44337	80.17	692	87	0.16	51080	92.36
595	282	0.51	33307	60.22	644	190	0.34	44527	80.51	693	88	0.16	51168	92.52
596	261	0.47	33568	60.70	645	172	0.31	44699	80.82	694	78	0.14	51246	92.66
597	276	0.50	33844	61.19	646	186	0.34	44885	81.16	695	99	0.18	51345	92.84
598	255	0.46	34099	61.66	647	177	0.32	45062	81.48	696	99	0.18	51444	93.02
599	271	0.49	34370	62.15	648	200	0.36	45262	81.84	697	92	0.17	51536	93.18
600	266	0.48	34636	62.63	649	161	0.29	45423	82.13	698	81	0.15	51617	93.33
601	272	0.49	34908	63.12	650	184	0.33	45607	82.46	699	84	0.15	51701	93.48
602	278	0.50	35186	63.62	651	174	0.31	45781	82.78	700	84	0.15	51785	93.63
603	244	0.44	35430	64.06	652	160	0.29	45941	83.07	701	73	0.13	51858	93.77
604	234	0.42	35664	64.48	653	166	0.30	46107	83.37	702	75	0.14	51933	93.90
605	299	0.54	35963	65.03	654	164	0.30	46271	83.66	703	96	0.17	52029	94.07
606	255	0.46	36218	65.49	655	144	0.26	46415	83.92	704	75	0.14	52104	94.21
607	241	0.44	36459	65.92	656	178	0.32	46593	84.25	705	73	0.13	52177	94.34
608	253	0.46	36712	66.38	657	157	0.28	46750	84.53	706	81	0.15	52258	94.49
609	248	0.45	36960	66.83	658	155	0.28	46905	84.81	707	72	0.13	52330	94.62
610	245	0.44	37205	67.27	659	142	0.26	47047	85.07	708	82	0.15	52412	94.77
611	239	0.43	37444	67.70	660	156	0.28	47203	85.35	709	80	0.14	52492	94.91
612	264	0.48	37708	68.18	661	154	0.28	47357	85.63	710	62	0.11	52554	95.02
613	227	0.41	37935	68.59	662	138	0.25	47495	85.88	711	63	0.11	52617	95.14
614	210	0.38	38145	68.97	663	157	0.28	47652	86.16	712	68	0.12	52685	95.26
615	252	0.46	38397	69.43	664	140	0.25	47792	86.41	713	49	0.09	52734	95.35
616	217	0.39	38614	69.82	665	117	0.21	47909	86.63	714	65	0.12	52799	95.47



**Table 185. Writing Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
715	49	0.09	52848	95.56	764	25	0.05	54647	98.81	814	3	0.01	55127	99.68
716	56	0.10	52904	95.66	765	17	0.03	54664	98.84	815	4	0.01	55131	99.68
717	35	0.06	52939	95.72	766	25	0.05	54689	98.88	816	5	0.01	55136	99.69
718	52	0.09	52991	95.81	767	16	0.03	54705	98.91	817	4	0.01	55140	99.70
719	55	0.10	53046	95.91	768	7	0.01	54712	98.93	818	1	0.00	55141	99.70
720	57	0.10	53103	96.02	769	14	0.03	54726	98.95	819	2	0.00	55143	99.71
721	60	0.11	53163	96.13	770	18	0.03	54744	98.98	820	3	0.01	55146	99.71
722	47	0.08	53210	96.21	771	14	0.03	54758	99.01	821	2	0.00	55148	99.71
723	59	0.11	53269	96.32	772	12	0.02	54770	99.03	822	4	0.01	55152	99.72
724	52	0.09	53321	96.41	773	7	0.01	54777	99.04	823	5	0.01	55157	99.73
725	60	0.11	53381	96.52	774	10	0.02	54787	99.06	824	2	0.00	55159	99.73
726	53	0.10	53434	96.62	775	12	0.02	54799	99.08	825	6	0.01	55165	99.75
727	49	0.09	53483	96.70	776	18	0.03	54817	99.12	826	5	0.01	55170	99.75
728	50	0.09	53533	96.79	777	23	0.04	54840	99.16	827	2	0.00	55172	99.76
729	48	0.09	53581	96.88	778	7	0.01	54847	99.17	828	7	0.01	55179	99.77
730	49	0.09	53630	96.97	779	6	0.01	54853	99.18	829	4	0.01	55183	99.78
731	37	0.07	53667	97.04	780	12	0.02	54865	99.20	830	4	0.01	55187	99.78
732	51	0.09	53718	97.13	781	9	0.02	54874	99.22	833	3	0.01	55190	99.79
733	45	0.08	53763	97.21	782	8	0.01	54882	99.23	834	2	0.00	55192	99.79
734	37	0.07	53800	97.28	783	9	0.02	54891	99.25	835	2	0.00	55194	99.80
735	41	0.07	53841	97.35	784	11	0.02	54902	99.27	836	4	0.01	55198	99.80
736	30	0.05	53871	97.41	785	16	0.03	54918	99.30	837	3	0.01	55201	99.81
737	22	0.04	53893	97.45	786	12	0.02	54930	99.32	838	2	0.00	55203	99.81
738	40	0.07	53933	97.52	787	9	0.02	54939	99.34	839	2	0.00	55205	99.82
739	33	0.06	53966	97.58	788	5	0.01	54944	99.35	840	2	0.00	55207	99.82
740	36	0.07	54002	97.64	789	11	0.02	54955	99.37	841	1	0.00	55208	99.82
741	39	0.07	54041	97.71	790	9	0.02	54964	99.38	842	3	0.01	55211	99.83
742	43	0.08	54084	97.79	791	8	0.01	54972	99.40	844	5	0.01	55216	99.84
743	48	0.09	54132	97.88	792	8	0.01	54980	99.41	846	1	0.00	55217	99.84
744	38	0.07	54170	97.95	793	3	0.01	54983	99.42	847	1	0.00	55218	99.84
745	38	0.07	54208	98.01	794	2	0.00	54985	99.42	851	1	0.00	55219	99.84
746	29	0.05	54237	98.07	795	9	0.02	54994	99.44	853	1	0.00	55220	99.84
747	36	0.07	54273	98.13	796	4	0.01	54998	99.44	857	1	0.00	55221	99.85
748	27	0.05	54300	98.18	797	5	0.01	55003	99.45	858	2	0.00	55223	99.85
749	29	0.05	54329	98.23	798	14	0.03	55017	99.48	860	3	0.01	55226	99.86
750	22	0.04	54351	98.27	799	9	0.02	55026	99.49	861	4	0.01	55230	99.86
751	18	0.03	54369	98.31	800	12	0.02	55038	99.52	862	3	0.01	55233	99.87
752	16	0.03	54385	98.33	801	11	0.02	55049	99.54	864	1	0.00	55234	99.87
753	20	0.04	54405	98.37	803	4	0.01	55053	99.54	866	8	0.01	55242	99.88
754	23	0.04	54428	98.41	804	6	0.01	55059	99.55	868	8	0.01	55250	99.90
755	17	0.03	54445	98.44	805	5	0.01	55064	99.56	869	2	0.00	55252	99.90
756	20	0.04	54465	98.48	806	5	0.01	55069	99.57	870	2	0.00	55254	99.91
757	23	0.04	54488	98.52	807	5	0.01	55074	99.58	875	2	0.00	55256	99.91
758	37	0.07	54525	98.59	808	7	0.01	55081	99.59	877	1	0.00	55257	99.91
759	31	0.06	54556	98.64	809	13	0.02	55094	99.62	878	3	0.01	55260	99.92
760	18	0.03	54574	98.68	810	5	0.01	55099	99.63	879	1	0.00	55261	99.92
761	13	0.02	54587	98.70	811	10	0.02	55109	99.64	882	2	0.00	55263	99.92
762	15	0.03	54602	98.73	812	10	0.02	55119	99.66	885	1	0.00	55264	99.92
763	20	0.04	54622	98.76	813	5	0.01	55124	99.67	886	2	0.00	55266	99.93



**Table 185. Writing Grade 10 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

<b>SS</b>	<b>Freq.</b>	<b>%</b>	<b>Cum. Freq.</b>	<b>Cum. %</b>
889	3	0.01	55269	99.93
890	2	0.00	55271	99.94
892	2	0.00	55273	99.94
893	1	0.00	55274	99.94
898	1	0.00	55275	99.94
903	2	0.00	55277	99.95
917	1	0.00	55278	99.95
921	1	0.00	55279	99.95
923	1	0.00	55280	99.95
925	1	0.00	55281	99.95
929	2	0.00	55283	99.96
930	1	0.00	55284	99.96
932	2	0.00	55286	99.96
935	6	0.01	55292	99.97
950	14	0.03	55306	100.00



**Table 186. Mathematics Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
370	784	1.41	784	1.41	419	38	0.07	1715	3.09	468	74	0.13	4021	7.24
371	10	0.02	794	1.43	420	27	0.05	1742	3.13	469	71	0.13	4092	7.36
372	14	0.03	808	1.45	421	34	0.06	1776	3.20	470	101	0.18	4193	7.55
373	10	0.02	818	1.47	422	34	0.06	1810	3.26	471	70	0.13	4263	7.67
374	17	0.03	835	1.50	423	38	0.07	1848	3.33	472	66	0.12	4329	7.79
375	11	0.02	846	1.52	424	33	0.06	1881	3.39	473	80	0.14	4409	7.93
376	19	0.03	865	1.56	425	31	0.06	1912	3.44	474	75	0.13	4484	8.07
377	12	0.02	877	1.58	426	33	0.06	1945	3.50	475	93	0.17	4577	8.24
378	9	0.02	886	1.59	427	30	0.05	1975	3.55	476	69	0.12	4646	8.36
379	13	0.02	899	1.62	428	43	0.08	2018	3.63	477	81	0.15	4727	8.51
380	19	0.03	918	1.65	429	44	0.08	2062	3.71	478	86	0.15	4813	8.66
381	12	0.02	930	1.67	430	42	0.08	2104	3.79	479	79	0.14	4892	8.80
382	18	0.03	948	1.71	431	28	0.05	2132	3.84	480	76	0.14	4968	8.94
383	19	0.03	967	1.74	432	34	0.06	2166	3.90	481	76	0.14	5044	9.08
384	21	0.04	988	1.78	433	38	0.07	2204	3.97	482	92	0.17	5136	9.24
385	14	0.03	1002	1.80	434	39	0.07	2243	4.04	483	117	0.21	5253	9.45
386	8	0.01	1010	1.82	435	40	0.07	2283	4.11	484	83	0.15	5336	9.60
387	13	0.02	1023	1.84	436	40	0.07	2323	4.18	485	91	0.16	5427	9.77
388	15	0.03	1038	1.87	437	28	0.05	2351	4.23	486	98	0.18	5525	9.94
389	14	0.03	1052	1.89	438	39	0.07	2390	4.30	487	87	0.16	5612	10.10
390	18	0.03	1070	1.93	439	33	0.06	2423	4.36	488	100	0.18	5712	10.28
391	19	0.03	1089	1.96	440	41	0.07	2464	4.43	489	102	0.18	5814	10.46
392	13	0.02	1102	1.98	441	42	0.08	2506	4.51	490	95	0.17	5909	10.63
393	20	0.04	1122	2.02	442	40	0.07	2546	4.58	491	112	0.20	6021	10.84
394	9	0.02	1131	2.04	443	47	0.08	2593	4.67	492	93	0.17	6114	11.00
395	17	0.03	1148	2.07	444	55	0.10	2648	4.77	493	103	0.19	6217	11.19
396	23	0.04	1171	2.11	445	37	0.07	2685	4.83	494	114	0.21	6331	11.39
397	15	0.03	1186	2.13	446	54	0.10	2739	4.93	495	109	0.20	6440	11.59
398	16	0.03	1202	2.16	447	53	0.10	2792	5.02	496	100	0.18	6540	11.77
399	17	0.03	1219	2.19	448	51	0.09	2843	5.12	497	86	0.15	6626	11.92
400	15	0.03	1234	2.22	449	53	0.10	2896	5.21	498	124	0.22	6750	12.15
401	21	0.04	1255	2.26	450	52	0.09	2948	5.31	499	119	0.21	6869	12.36
402	22	0.04	1277	2.30	451	49	0.09	2997	5.39	500	110	0.20	6979	12.56
403	33	0.06	1310	2.36	452	56	0.10	3053	5.49	501	125	0.22	7104	12.78
404	21	0.04	1331	2.40	453	64	0.12	3117	5.61	502	109	0.20	7213	12.98
405	23	0.04	1354	2.44	454	55	0.10	3172	5.71	503	123	0.22	7336	13.20
406	23	0.04	1377	2.48	455	62	0.11	3234	5.82	504	129	0.23	7465	13.43
407	23	0.04	1400	2.52	456	58	0.10	3292	5.92	505	129	0.23	7594	13.67
408	29	0.05	1429	2.57	457	59	0.11	3351	6.03	506	131	0.24	7725	13.90
409	22	0.04	1451	2.61	458	55	0.10	3406	6.13	507	136	0.24	7861	14.15
410	23	0.04	1474	2.65	459	49	0.09	3455	6.22	508	127	0.23	7988	14.38
411	22	0.04	1496	2.69	460	56	0.10	3511	6.32	509	131	0.24	8119	14.61
412	18	0.03	1514	2.72	461	54	0.10	3565	6.42	510	139	0.25	8258	14.86
413	29	0.05	1543	2.78	462	71	0.13	3636	6.54	511	120	0.22	8378	15.08
414	25	0.04	1568	2.82	463	75	0.13	3711	6.68	512	146	0.26	8524	15.34
415	24	0.04	1592	2.86	464	57	0.10	3768	6.78	513	137	0.25	8661	15.59
416	25	0.04	1617	2.91	465	64	0.12	3832	6.90	514	145	0.26	8806	15.85
417	32	0.06	1649	2.97	466	54	0.10	3886	6.99	515	136	0.24	8942	16.09
418	28	0.05	1677	3.02	467	61	0.11	3947	7.10	516	153	0.28	9095	16.37



**Table 186. Mathematics Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
517	150	0.27	9245	16.64	566	287	0.52	19587	35.25	615	306	0.55	34785	62.60
518	149	0.27	9394	16.91	567	253	0.46	19840	35.70	616	324	0.58	35109	63.18
519	161	0.29	9555	17.20	568	267	0.48	20107	36.18	617	298	0.54	35407	63.72
520	172	0.31	9727	17.50	569	259	0.47	20366	36.65	618	304	0.55	35711	64.27
521	137	0.25	9864	17.75	570	280	0.50	20646	37.15	619	305	0.55	36016	64.81
522	135	0.24	9999	17.99	571	280	0.50	20926	37.66	620	282	0.51	36298	65.32
523	163	0.29	10162	18.29	572	281	0.51	21207	38.16	621	310	0.56	36608	65.88
524	163	0.29	10325	18.58	573	307	0.55	21514	38.72	622	327	0.59	36935	66.47
525	163	0.29	10488	18.87	574	279	0.50	21793	39.22	623	334	0.60	37269	67.07
526	182	0.33	10670	19.20	575	353	0.64	22146	39.85	624	306	0.55	37575	67.62
527	179	0.32	10849	19.52	576	289	0.52	22435	40.37	625	327	0.59	37902	68.21
528	157	0.28	11006	19.81	577	308	0.55	22743	40.93	626	310	0.56	38212	68.77
529	170	0.31	11176	20.11	578	310	0.56	23053	41.49	627	304	0.55	38516	69.31
530	156	0.28	11332	20.39	579	301	0.54	23354	42.03	628	319	0.57	38835	69.89
531	186	0.33	11518	20.73	580	307	0.55	23661	42.58	629	301	0.54	39136	70.43
532	177	0.32	11695	21.05	581	312	0.56	23973	43.14	630	292	0.53	39428	70.95
533	191	0.34	11886	21.39	582	288	0.52	24261	43.66	631	315	0.57	39743	71.52
534	210	0.38	12096	21.77	583	315	0.57	24576	44.23	632	312	0.56	40055	72.08
535	192	0.35	12288	22.11	584	307	0.55	24883	44.78	633	309	0.56	40364	72.64
536	216	0.39	12504	22.50	585	319	0.57	25202	45.35	634	308	0.55	40672	73.19
537	200	0.36	12704	22.86	586	290	0.52	25492	45.88	635	295	0.53	40967	73.72
538	228	0.41	12932	23.27	587	310	0.56	25802	46.43	636	263	0.47	41230	74.20
539	207	0.37	13139	23.64	588	322	0.58	26124	47.01	637	325	0.58	41555	74.78
540	204	0.37	13343	24.01	589	313	0.56	26437	47.58	638	294	0.53	41849	75.31
541	211	0.38	13554	24.39	590	324	0.58	26761	48.16	639	296	0.53	42145	75.84
542	235	0.42	13789	24.81	591	306	0.55	27067	48.71	640	309	0.56	42454	76.40
543	205	0.37	13994	25.18	592	313	0.56	27380	49.27	641	315	0.57	42769	76.97
544	209	0.38	14203	25.56	593	315	0.57	27695	49.84	642	263	0.47	43032	77.44
545	221	0.40	14424	25.96	594	304	0.55	27999	50.39	643	286	0.51	43318	77.95
546	208	0.37	14632	26.33	595	320	0.58	28319	50.96	644	287	0.52	43605	78.47
547	213	0.38	14845	26.72	596	348	0.63	28667	51.59	645	279	0.50	43884	78.97
548	247	0.44	15092	27.16	597	337	0.61	29004	52.20	646	277	0.50	44161	79.47
549	229	0.41	15321	27.57	598	325	0.58	29329	52.78	647	260	0.47	44421	79.94
550	210	0.38	15531	27.95	599	303	0.55	29632	53.33	648	247	0.44	44668	80.38
551	219	0.39	15750	28.34	600	299	0.54	29931	53.86	649	258	0.46	44926	80.85
552	245	0.44	15995	28.78	601	345	0.62	30276	54.48	650	253	0.46	45179	81.30
553	238	0.43	16233	29.21	602	305	0.55	30581	55.03	651	244	0.44	45423	81.74
554	269	0.48	16502	29.70	603	274	0.49	30855	55.53	652	253	0.46	45676	82.20
555	245	0.44	16747	30.14	604	342	0.62	31197	56.14	653	228	0.41	45904	82.61
556	252	0.45	16999	30.59	605	301	0.54	31498	56.68	654	232	0.42	46136	83.03
557	248	0.45	17247	31.04	606	365	0.66	31863	57.34	655	251	0.45	46387	83.48
558	285	0.51	17532	31.55	607	309	0.56	32172	57.90	656	230	0.41	46617	83.89
559	240	0.43	17772	31.98	608	328	0.59	32500	58.49	657	242	0.44	46859	84.33
560	263	0.47	18035	32.46	609	330	0.59	32830	59.08	658	239	0.43	47098	84.76
561	245	0.44	18280	32.90	610	275	0.49	33105	59.58	659	227	0.41	47325	85.17
562	250	0.45	18530	33.35	611	315	0.57	33420	60.14	660	206	0.37	47531	85.54
563	243	0.44	18773	33.78	612	361	0.65	33781	60.79	661	214	0.39	47745	85.92
564	273	0.49	19046	34.28	613	329	0.59	34110	61.38	662	196	0.35	47941	86.27
565	254	0.46	19300	34.73	614	369	0.66	34479	62.05	663	215	0.39	48156	86.66



**Table 186. Mathematics Grade 10 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
664	205	0.37	48361	87.03	713	39	0.07	54515	98.11	762	3	0.01	55479	99.84
665	191	0.34	48552	87.37	714	54	0.10	54569	98.20	763	3	0.01	55482	99.85
666	198	0.36	48750	87.73	715	39	0.07	54608	98.27	764	4	0.01	55486	99.85
667	169	0.30	48919	88.03	716	52	0.09	54660	98.37	765	2	0.00	55488	99.86
668	202	0.36	49121	88.40	717	41	0.07	54701	98.44	766	5	0.01	55493	99.87
669	195	0.35	49316	88.75	718	40	0.07	54741	98.51	767	6	0.01	55499	99.88
670	193	0.35	49509	89.10	719	41	0.07	54782	98.59	768	4	0.01	55503	99.88
671	199	0.36	49708	89.45	720	29	0.05	54811	98.64	769	4	0.01	55507	99.89
672	182	0.33	49890	89.78	721	45	0.08	54856	98.72	770	1	0.00	55508	99.89
673	175	0.31	50065	90.10	722	28	0.05	54884	98.77	771	5	0.01	55513	99.90
674	191	0.34	50256	90.44	723	31	0.06	54915	98.82	772	5	0.01	55518	99.91
675	165	0.30	50421	90.74	724	27	0.05	54942	98.87	773	3	0.01	55521	99.92
676	171	0.31	50592	91.05	725	31	0.06	54973	98.93	774	3	0.01	55524	99.92
677	176	0.32	50768	91.36	726	31	0.06	55004	98.99	776	3	0.01	55527	99.93
678	174	0.31	50942	91.68	727	24	0.04	55028	99.03	777	1	0.00	55528	99.93
679	140	0.25	51082	91.93	728	22	0.04	55050	99.07	778	3	0.01	55531	99.93
680	167	0.30	51249	92.23	729	25	0.04	55075	99.11	779	2	0.00	55533	99.94
681	160	0.29	51409	92.52	730	32	0.06	55107	99.17	781	3	0.01	55536	99.94
682	155	0.28	51564	92.79	731	19	0.03	55126	99.20	782	4	0.01	55540	99.95
683	149	0.27	51713	93.06	732	20	0.04	55146	99.24	783	2	0.00	55542	99.95
684	126	0.23	51839	93.29	733	21	0.04	55167	99.28	784	1	0.00	55543	99.96
685	146	0.26	51985	93.55	734	17	0.03	55184	99.31	785	4	0.01	55547	99.96
686	132	0.24	52117	93.79	735	23	0.04	55207	99.35	786	1	0.00	55548	99.96
687	129	0.23	52246	94.02	736	20	0.04	55227	99.39	791	2	0.00	55550	99.97
688	124	0.22	52370	94.24	737	15	0.03	55242	99.41	792	2	0.00	55552	99.97
689	125	0.22	52495	94.47	738	20	0.04	55262	99.45	793	1	0.00	55553	99.97
690	115	0.21	52610	94.68	739	20	0.04	55282	99.49	796	1	0.00	55554	99.97
691	111	0.20	52721	94.88	740	9	0.02	55291	99.50	805	1	0.00	55555	99.98
692	106	0.19	52827	95.07	741	13	0.02	55304	99.52	806	1	0.00	55556	99.98
693	120	0.22	52947	95.28	742	14	0.03	55318	99.55	807	1	0.00	55557	99.98
694	93	0.17	53040	95.45	743	6	0.01	55324	99.56	808	2	0.00	55559	99.98
695	91	0.16	53131	95.61	744	7	0.01	55331	99.57	814	1	0.00	55560	99.99
696	91	0.16	53222	95.78	745	14	0.03	55345	99.60	816	1	0.00	55561	99.99
697	97	0.17	53319	95.95	746	10	0.02	55355	99.62	826	1	0.00	55562	99.99
698	105	0.19	53424	96.14	747	4	0.01	55359	99.62	838	1	0.00	55563	99.99
699	79	0.14	53503	96.28	748	18	0.03	55377	99.66	841	1	0.00	55564	99.99
700	105	0.19	53608	96.47	749	7	0.01	55384	99.67	862	1	0.00	55565	99.99
701	92	0.17	53700	96.64	750	8	0.01	55392	99.68	867	1	0.00	55566	100.00
702	70	0.13	53770	96.76	751	11	0.02	55403	99.70	879	1	0.00	55567	100.00
703	80	0.14	53850	96.91	752	6	0.01	55409	99.71	886	1	0.00	55568	100.00
704	79	0.14	53929	97.05	753	11	0.02	55420	99.73					
705	67	0.12	53996	97.17	754	4	0.01	55424	99.74					
706	75	0.13	54071	97.31	755	8	0.01	55432	99.76					
707	74	0.13	54145	97.44	756	12	0.02	55444	99.78					
708	77	0.14	54222	97.58	757	10	0.02	55454	99.79					
709	77	0.14	54299	97.72	758	6	0.01	55460	99.81					
710	58	0.10	54357	97.82	759	6	0.01	55466	99.82					
711	65	0.12	54422	97.94	760	5	0.01	55471	99.83					
712	54	0.10	54476	98.03	761	5	0.01	55476	99.83					



**Table 187. Science Grade 10 Scale Score Distribution**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
300	822	1.48	822	1.48	349	26	0.05	1572	2.83	398	76	0.14	3855	6.94
301	11	0.02	833	1.50	350	19	0.03	1591	2.86	399	80	0.14	3935	7.08
302	7	0.01	840	1.51	351	27	0.05	1618	2.91	400	77	0.14	4012	7.22
303	8	0.01	848	1.53	352	24	0.04	1642	2.95	401	72	0.13	4084	7.35
304	7	0.01	855	1.54	353	34	0.06	1676	3.02	402	78	0.14	4162	7.49
305	9	0.02	864	1.55	354	24	0.04	1700	3.06	403	96	0.17	4258	7.66
306	11	0.02	875	1.57	355	18	0.03	1718	3.09	404	93	0.17	4351	7.83
307	6	0.01	881	1.58	356	25	0.04	1743	3.14	405	87	0.16	4438	7.98
308	11	0.02	892	1.60	357	35	0.06	1778	3.20	406	90	0.16	4528	8.15
309	13	0.02	905	1.63	358	36	0.06	1814	3.26	407	83	0.15	4611	8.30
310	9	0.02	914	1.64	359	34	0.06	1848	3.32	408	91	0.16	4702	8.46
311	15	0.03	929	1.67	360	29	0.05	1877	3.38	409	106	0.19	4808	8.65
312	8	0.01	937	1.69	361	31	0.06	1908	3.43	410	102	0.18	4910	8.83
313	8	0.01	945	1.70	362	35	0.06	1943	3.50	411	76	0.14	4986	8.97
314	16	0.03	961	1.73	363	28	0.05	1971	3.55	412	118	0.21	5104	9.18
315	13	0.02	974	1.75	364	32	0.06	2003	3.60	413	99	0.18	5203	9.36
316	11	0.02	985	1.77	365	31	0.06	2034	3.66	414	101	0.18	5304	9.54
317	10	0.02	995	1.79	366	36	0.06	2070	3.72	415	118	0.21	5422	9.75
318	10	0.02	1005	1.81	367	33	0.06	2103	3.78	416	94	0.17	5516	9.92
319	10	0.02	1015	1.83	368	31	0.06	2134	3.84	417	132	0.24	5648	10.16
320	12	0.02	1027	1.85	369	33	0.06	2167	3.90	418	95	0.17	5743	10.33
321	14	0.03	1041	1.87	370	49	0.09	2216	3.99	419	121	0.22	5864	10.55
322	17	0.03	1058	1.90	371	46	0.08	2262	4.07	420	116	0.21	5980	10.76
323	13	0.02	1071	1.93	372	41	0.07	2303	4.14	421	129	0.23	6109	10.99
324	10	0.02	1081	1.94	373	36	0.06	2339	4.21	422	144	0.26	6253	11.25
325	7	0.01	1088	1.96	374	49	0.09	2388	4.30	423	125	0.22	6378	11.47
326	27	0.05	1115	2.01	375	43	0.08	2431	4.37	424	123	0.22	6501	11.70
327	17	0.03	1132	2.04	376	47	0.08	2478	4.46	425	121	0.22	6622	11.91
328	22	0.04	1154	2.08	377	47	0.08	2525	4.54	426	157	0.28	6779	12.20
329	15	0.03	1169	2.10	378	51	0.09	2576	4.63	427	126	0.23	6905	12.42
330	19	0.03	1188	2.14	379	50	0.09	2626	4.72	428	152	0.27	7057	12.70
331	18	0.03	1206	2.17	380	61	0.11	2687	4.83	429	143	0.26	7200	12.95
332	12	0.02	1218	2.19	381	55	0.10	2742	4.93	430	146	0.26	7346	13.22
333	22	0.04	1240	2.23	382	49	0.09	2791	5.02	431	158	0.28	7504	13.50
334	16	0.03	1256	2.26	383	58	0.10	2849	5.13	432	173	0.31	7677	13.81
335	19	0.03	1275	2.29	384	57	0.10	2906	5.23	433	169	0.30	7846	14.12
336	15	0.03	1290	2.32	385	57	0.10	2963	5.33	434	149	0.27	7995	14.38
337	22	0.04	1312	2.36	386	58	0.10	3021	5.43	435	169	0.30	8164	14.69
338	23	0.04	1335	2.40	387	58	0.10	3079	5.54	436	158	0.28	8322	14.97
339	15	0.03	1350	2.43	388	63	0.11	3142	5.65	437	186	0.33	8508	15.31
340	18	0.03	1368	2.46	389	61	0.11	3203	5.76	438	186	0.33	8694	15.64
341	20	0.04	1388	2.50	390	73	0.13	3276	5.89	439	163	0.29	8857	15.93
342	24	0.04	1412	2.54	391	67	0.12	3343	6.01	440	165	0.30	9022	16.23
343	21	0.04	1433	2.58	392	70	0.13	3413	6.14	441	179	0.32	9201	16.55
344	16	0.03	1449	2.61	393	64	0.12	3477	6.26	442	187	0.34	9388	16.89
345	18	0.03	1467	2.64	394	76	0.14	3553	6.39	443	178	0.32	9566	17.21
346	24	0.04	1491	2.68	395	73	0.13	3626	6.52	444	185	0.33	9751	17.54
347	32	0.06	1523	2.74	396	75	0.13	3701	6.66	445	216	0.39	9967	17.93
348	23	0.04	1546	2.78	397	78	0.14	3779	6.80	446	185	0.33	10152	18.26



**Table 187. Science Grade 10 Scale Score Distribution (Continued)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
447	182	0.33	10334	18.59	496	381	0.69	24593	44.24	545	326	0.59	43745	78.70
448	198	0.36	10532	18.95	497	364	0.65	24957	44.90	546	355	0.64	44100	79.34
449	226	0.41	10758	19.35	498	397	0.71	25354	45.61	547	335	0.60	44435	79.94
450	239	0.43	10997	19.78	499	419	0.75	25773	46.37	548	325	0.58	44760	80.53
451	213	0.38	11210	20.17	500	406	0.73	26179	47.10	549	319	0.57	45079	81.10
452	225	0.40	11435	20.57	501	408	0.73	26587	47.83	550	330	0.59	45409	81.69
453	191	0.34	11626	20.92	502	372	0.67	26959	48.50	551	305	0.55	45714	82.24
454	198	0.36	11824	21.27	503	407	0.73	27366	49.23	552	305	0.55	46019	82.79
455	224	0.40	12048	21.67	504	365	0.66	27731	49.89	553	300	0.54	46319	83.33
456	237	0.43	12285	22.10	505	409	0.74	28140	50.63	554	273	0.49	46592	83.82
457	238	0.43	12523	22.53	506	400	0.72	28540	51.34	555	302	0.54	46894	84.36
458	222	0.40	12745	22.93	507	368	0.66	28908	52.01	556	271	0.49	47165	84.85
459	227	0.41	12972	23.34	508	394	0.71	29302	52.72	557	262	0.47	47427	85.32
460	239	0.43	13211	23.77	509	417	0.75	29719	53.47	558	281	0.51	47708	85.83
461	270	0.49	13481	24.25	510	388	0.70	30107	54.16	559	243	0.44	47951	86.27
462	272	0.49	13753	24.74	511	394	0.71	30501	54.87	560	257	0.46	48208	86.73
463	271	0.49	14024	25.23	512	411	0.74	30912	55.61	561	236	0.42	48444	87.15
464	219	0.39	14243	25.62	513	410	0.74	31322	56.35	562	252	0.45	48696	87.61
465	279	0.50	14522	26.13	514	419	0.75	31741	57.10	563	228	0.41	48924	88.02
466	283	0.51	14805	26.63	515	434	0.78	32175	57.88	564	246	0.44	49170	88.46
467	251	0.45	15056	27.09	516	388	0.70	32563	58.58	565	241	0.43	49411	88.89
468	272	0.49	15328	27.58	517	440	0.79	33003	59.37	566	252	0.45	49663	89.35
469	267	0.48	15595	28.06	518	429	0.77	33432	60.15	567	209	0.38	49872	89.72
470	268	0.48	15863	28.54	519	449	0.81	33881	60.95	568	208	0.37	50080	90.10
471	282	0.51	16145	29.05	520	424	0.76	34305	61.72	569	197	0.35	50277	90.45
472	281	0.51	16426	29.55	521	408	0.73	34713	62.45	570	210	0.38	50487	90.83
473	314	0.56	16740	30.12	522	402	0.72	35115	63.17	571	203	0.37	50690	91.19
474	290	0.52	17030	30.64	523	414	0.74	35529	63.92	572	190	0.34	50880	91.54
475	260	0.47	17290	31.11	524	426	0.77	35955	64.68	573	178	0.32	51058	91.86
476	304	0.55	17594	31.65	525	428	0.77	36383	65.45	574	211	0.38	51269	92.24
477	315	0.57	17909	32.22	526	399	0.72	36782	66.17	575	168	0.30	51437	92.54
478	309	0.56	18218	32.78	527	412	0.74	37194	66.91	576	148	0.27	51585	92.80
479	314	0.56	18532	33.34	528	368	0.66	37562	67.58	577	163	0.29	51748	93.10
480	308	0.55	18840	33.89	529	393	0.71	37955	68.28	578	171	0.31	51919	93.40
481	357	0.64	19197	34.54	530	396	0.71	38351	69.00	579	138	0.25	52057	93.65
482	344	0.62	19541	35.16	531	355	0.64	38706	69.63	580	161	0.29	52218	93.94
483	374	0.67	19915	35.83	532	355	0.64	39061	70.27	581	140	0.25	52358	94.19
484	351	0.63	20266	36.46	533	411	0.74	39472	71.01	582	168	0.30	52526	94.50
485	349	0.63	20615	37.09	534	390	0.70	39862	71.71	583	148	0.27	52674	94.76
486	344	0.62	20959	37.71	535	343	0.62	40205	72.33	584	145	0.26	52819	95.02
487	347	0.62	21306	38.33	536	351	0.63	40556	72.96	585	125	0.22	52944	95.25
488	381	0.69	21687	39.02	537	365	0.66	40921	73.62	586	117	0.21	53061	95.46
489	352	0.63	22039	39.65	538	392	0.71	41313	74.32	587	106	0.19	53167	95.65
490	363	0.65	22402	40.30	539	381	0.69	41694	75.01	588	126	0.23	53293	95.88
491	337	0.61	22739	40.91	540	344	0.62	42038	75.63	589	111	0.20	53404	96.08
492	364	0.65	23103	41.56	541	384	0.69	42422	76.32	590	100	0.18	53504	96.26
493	364	0.65	23467	42.22	542	354	0.64	42776	76.96	591	105	0.19	53609	96.45
494	373	0.67	23840	42.89	543	326	0.59	43102	77.54	592	110	0.20	53719	96.64
495	372	0.67	24212	43.56	544	317	0.57	43419	78.11	593	95	0.17	53814	96.81



**Table 187. Science Grade 10 Scale Score Distribution (Concluded)**

(SS = Scale Score, Freq. = Frequency, Cum. = Cumulative)

SS	Freq.	%	Cum. Freq.	Cum. %	SS	Freq.	%	Cum. Freq.	Cum. %
594	104	0.19	53918	97.00	643	5	0.01	55521	99.88
595	86	0.15	54004	97.16	644	2	0.00	55523	99.89
596	83	0.15	54087	97.31	645	9	0.02	55532	99.90
597	85	0.15	54172	97.46	646	2	0.00	55534	99.91
598	72	0.13	54244	97.59	647	3	0.01	55537	99.91
599	70	0.13	54314	97.71	648	1	0.00	55538	99.92
600	69	0.12	54383	97.84	649	4	0.01	55542	99.92
601	59	0.11	54442	97.94	650	4	0.01	55546	99.93
602	65	0.12	54507	98.06	651	3	0.01	55549	99.94
603	56	0.10	54563	98.16	652	2	0.00	55551	99.94
604	52	0.09	54615	98.25	654	3	0.01	55554	99.94
605	66	0.12	54681	98.37	655	1	0.00	55555	99.95
606	50	0.09	54731	98.46	656	1	0.00	55556	99.95
607	49	0.09	54780	98.55	658	4	0.01	55560	99.96
608	49	0.09	54829	98.64	659	4	0.01	55564	99.96
609	52	0.09	54881	98.73	660	2	0.00	55566	99.97
610	45	0.08	54926	98.81	661	2	0.00	55568	99.97
611	40	0.07	54966	98.89	664	2	0.00	55570	99.97
612	38	0.07	55004	98.95	665	1	0.00	55571	99.97
613	34	0.06	55038	99.02	667	1	0.00	55572	99.98
614	35	0.06	55073	99.08	668	2	0.00	55574	99.98
615	32	0.06	55105	99.14	669	1	0.00	55575	99.98
616	24	0.04	55129	99.18	671	2	0.00	55577	99.99
617	24	0.04	55153	99.22	675	1	0.00	55578	99.99
618	27	0.05	55180	99.27	678	2	0.00	55580	99.99
619	26	0.05	55206	99.32	682	1	0.00	55581	99.99
620	33	0.06	55239	99.38	694	1	0.00	55582	99.99
621	23	0.04	55262	99.42	695	1	0.00	55583	100.00
622	17	0.03	55279	99.45	702	1	0.00	55584	100.00
623	15	0.03	55294	99.48	716	1	0.00	55585	100.00
624	18	0.03	55312	99.51					
625	24	0.04	55336	99.55					
626	17	0.03	55353	99.58					
627	15	0.03	55368	99.61					
628	10	0.02	55378	99.63					
629	13	0.02	55391	99.65					
630	20	0.04	55411	99.69					
631	12	0.02	55423	99.71					
632	10	0.02	55433	99.73					
633	7	0.01	55440	99.74					
634	6	0.01	55446	99.75					
635	7	0.01	55453	99.76					
636	12	0.02	55465	99.78					
637	8	0.01	55473	99.80					
638	13	0.02	55486	99.82					
639	9	0.02	55495	99.84					
640	10	0.02	55505	99.86					
641	7	0.01	55512	99.87					
642	4	0.01	55516	99.88					



**Table 188. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 3**

Name	CS1	SA1_4	SA2	SA3	Total
Mean	553.7	554.5	545.0	571.9	553.7
STD	83.21	95.38	119.4	126.6	83.21
N	5768	5768	5768	5768	5768
CS1		0.914	0.856	0.748	1.000
SA1_4			0.728	0.615	0.914
SA2				0.595	0.856
SA3					0.748

**Table 189. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 4**

Name	CS1	CS4	CS5	CS6	SA1_4	SA2	SA3	Total
Mean	588.3	585.8	584.8	584.7	585.7	588.1	646.2	586.0
STD	69.66	96.53	97.20	85.67	70.17	80.57	168.6	61.77
N	5800	5800	5800	5800	5800	5800	5800	5800
CS1		0.697	0.689	0.700	0.854	0.836	0.692	0.911
CS4			0.611	0.621	0.790	0.714	0.504	0.793
CS5				0.620	0.698	0.648	0.511	0.802
CS6					0.851	0.696	0.491	0.818
SA1_4						0.756	0.566	0.934
SA2							0.528	0.854
SA3								0.653

**Table 190. Scale Score Correlations by Content Standard and Subcontent Area, Reading Grade 5**

Name	CS1	CS4	CS5	CS6	SA1_4	SA2	SA3	Total
Mean	619.4	611.3	614.6	615.8	615.1	614.5	649.2	613.4
STD	86.94	98.27	90.21	94.83	79.58	93.03	152.5	69.66
N	57009	57009	57009	57009	57009	57009	57009	57009
CS1		0.698	0.694	0.702	0.823	0.798	0.735	0.888
CS4			0.677	0.676	0.819	0.776	0.544	0.840
CS5				0.680	0.727	0.692	0.552	0.847
CS6					0.840	0.756	0.541	0.844
SA1_4						0.751	0.585	0.926
SA2							0.551	0.870
SA3								0.680



**Table 191. Scale Score Correlations by Content Standard and Subcontent Area  
Reading Grade 6**

Name	CS1	CS4	CS5	CS6	SA1_4	SA2	SA3	Total
Mean	630.5	624.2	648.5	622.2	626.8	621.0	658.1	627.6
STD	74.77	84.12	119.1	90.95	73.13	94.73	132.1	65.03
N	5685	5685	5685	5685	5685	5685	5685	5685
CS1		0.726	0.651	0.733	0.853	0.741	0.786	0.916
CS4			0.589	0.702	0.795	0.875	0.552	0.853
CS5				0.581	0.633	0.574	0.542	0.760
CS6					0.904	0.672	0.558	0.846
SA1_4						0.725	0.604	0.927
SA2							0.539	0.822
SA3								0.714

**Table 192. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 7**

Name	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
Mean	640.3	638.4	640.2	637.9	643.5	636.7	667.0	638.7	638.2
STD	72.70	77.36	84.45	82.61	87.71	76.64	135.9	78.68	64.25
N	56780	56780	56780	56780	56780	56780	56780	56780	56780
CS1		0.760	0.728	0.742	0.765	0.840	0.775	0.763	0.924
CS4			0.694	0.717	0.690	0.873	0.594	0.792	0.881
CS5				0.684	0.680	0.698	0.574	0.681	0.853
CS6					0.746	0.738	0.582	0.854	0.863
SA1						0.675	0.512	0.644	0.811
SA2							0.587	0.719	0.891
SA3								0.582	0.722
SA4									0.862

**Table 193. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 8**

Nam	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
Mean	652.0	653.3	654.1	651.6	701.5	652.3	656.2	647.6	651.6
STD	69.75	82.42	90.82	76.45	168.4	69.29	110.8	84.05	62.77
N	5659	5659	5659	5659	5659	5659	5659	5659	5659
CS1		0.744	0.736	0.772	0.575	0.906	0.792	0.761	0.938
CS4			0.670	0.690	0.519	0.876	0.626	0.669	0.846
CS5				0.683	0.514	0.739	0.594	0.644	0.835
CS6					0.725	0.781	0.632	0.816	0.874
SA1						0.573	0.479	0.507	0.656
SA2							0.661	0.714	0.939
SA3								0.569	0.758
SA4									0.820



**Table 194. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 9**

Nam	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
Mean	662.2	661.8	666.5	659.0	662.8	662.8	664.6	655.2	660.7
STD	64.00	75.16	84.18	74.76	76.69	65.63	112.6	87.99	57.82
N	5899	5899	5899	5899	5899	5899	5899	5899	5899
CS1		0.765	0.714	0.736	0.767	0.880	0.781	0.707	0.930
CS4			0.675	0.704	0.758	0.880	0.597	0.652	0.868
CS5				0.657	0.656	0.703	0.578	0.606	0.824
CS6					0.846	0.754	0.552	0.817	0.857
SA1						0.742	0.559	0.654	0.854
SA2							0.623	0.671	0.919
SA3								0.521	0.726
SA4									0.781

**Table 195. Scale Score Correlations by Content Standard and Subcontent Area,  
Reading Grade 10**

Nam	CS1	CS4	CS5	CS6	SA1	SA2	SA3	SA4	Total
Mean	683.3	682.1	687.2	678.7	681.5	687.6	692.3	679.7	681.7
STD	68.64	77.64	87.80	80.09	72.48	99.98	110.5	79.12	61.13
N	5528	5528	5528	5528	5528	5528	5528	5528	5528
CS1		0.747	0.700	0.748	0.879	0.742	0.755	0.739	0.923
CS4			0.631	0.719	0.796	0.774	0.539	0.782	0.860
CS5				0.645	0.669	0.558	0.585	0.642	0.815
CS6					0.800	0.634	0.566	0.885	0.864
SA1						0.663	0.580	0.726	0.903
SA2							0.468	0.624	0.765
SA3								0.574	0.712
SA4									0.857



**Table 196. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 3**

Nam	CS2	CS3	SA5	SA7	SA8	Total
Mean	467.6	472.2	469.1	474.0	486.6	466.0
STD	58.33	65.67	59.79	80.95	87.35	52.28
N	57763	57763	57763	57763	57763	57763
CS2		0.678	0.932	0.593	0.586	0.902
CS3			0.670	0.845	0.818	0.902
SA5				0.558	0.567	0.869
SA7					0.558	0.782
SA8						0.779

**Table 197. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 4**

Nam	CS2	CS3	SA5	SA6	SA7	SA8	Total
Mean	489.1	492.4	488.6	517.2	505.8	493.0	487.6
STD	56.44	65.39	64.66	112.7	92.34	95.56	51.69
N	57957	57957	57957	57957	57957	57957	57957
CS2		0.713	0.865	0.761	0.616	0.623	0.932
CS3			0.625	0.489	0.825	0.841	0.893
SA5				0.522	0.533	0.560	0.810
SA6					0.404	0.434	0.675
SA7						0.564	0.769
SA8							0.779

**Table 198. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 5**

Nam	CS2	CS3	SA5	SA6	SA7	SA8	Total
Mean	511.8	513.4	511.8	534.9	515.8	513.4	509.9
STD	64.27	67.31	75.21	120.2	76.41	109.4	58.39
N	5701	5701	5701	5701	5701	5701	5701
CS2		0.729	0.840	0.666	0.720	0.620	0.926
CS3			0.603	0.415	0.906	0.775	0.921
SA5				0.478	0.561	0.500	0.772
SA6					0.364	0.348	0.575
SA7						0.596	0.867
SA8							0.751



**Table 199. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 6**

Nam	CS2	CS3	SA5	SA6	SA7	SA8	Total
Mean	528.2	529.7	533.1	558.1	533.5	532.4	525.9
STD	69.91	75.36	83.43	138.4	90.39	95.31	63.28
N	56901	56901	56901	56901	56901	56901	56901
CS2		0.726	0.864	0.698	0.685	0.700	0.923
CS3			0.627	0.421	0.892	0.816	0.916
SA5				0.483	0.580	0.557	0.798
SA6					0.372	0.373	0.590
SA7						0.636	0.844
SA8							0.818

**Table 200. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 7**

Nam	CS2	CS3	SA5	SA6	SA7	SA8	Total
Mean	552.0	553.2	553.4	579.9	552.5	556.3	550.6
STD	76.94	78.73	89.03	142.7	90.86	101.2	70.35
N	56813	56813	56813	56813	56813	56813	56813
CS2		0.763	0.873	0.715	0.728	0.722	0.933
CS3			0.664	0.464	0.887	0.874	0.936
SA5				0.501	0.602	0.605	0.814
SA6					0.403	0.417	0.621
SA7						0.696	0.859
SA8							0.850

**Table 201. Scale Score Correlations by Content Standard and Subcontent Area, Writing Grade 8**

Nam	CS2	CS3	SA5	SA6	SA7	SA8	Total
Mean	562.1	562.0	564.0	579.7	567.8	559.4	559.8
STD	83.44	84.19	91.92	131.2	108.4	102.4	75.77
N	56658	56658	56658	56658	56658	56658	56658
CS2		0.758	0.920	0.677	0.700	0.706	0.924
CS3			0.699	0.438	0.871	0.891	0.940
SA5				0.494	0.626	0.634	0.851
SA6					0.364	0.385	0.577
SA7						0.686	0.841
SA8							0.855



**Table 202. Scale Score Correlations by Content Standard and Subcontent Area,  
Writing Grade 9**

<b>Nam</b>	<b>CS2</b>	<b>CS3</b>	<b>SA5</b>	<b>SA6</b>	<b>SA7</b>	<b>SA8</b>	<b>Total</b>
Mean	561.9	564.2	567.0	568.6	578.8	562.1	560.7
STD	84.72	88.59	98.16	118.8	127.9	100.9	78.70
N	59076	59076	59076	59076	59076	59076	59076
CS2		0.776	0.905	0.754	0.681	0.732	0.949
CS3			0.691	0.511	0.871	0.894	0.927
SA5				0.566	0.601	0.638	0.853
SA6					0.427	0.456	0.679
SA7						0.679	0.811
SA8							0.853

**Table 203. Scale Score Correlations by Content Standard and Subcontent Area,  
Writing Grade 10**

<b>Nam</b>	<b>CS2</b>	<b>CS3</b>	<b>SA5</b>	<b>SA6</b>	<b>SA7</b>	<b>SA8</b>	<b>Total</b>
Mean	573.9	574.9	578.7	589.6	576.0	578.6	572.0
STD	95.40	95.65	109.3	142.5	108.7	117.5	87.34
N	55306	55306	55306	55306	55306	55306	55306
CS2		0.773	0.900	0.762	0.727	0.731	0.933
CS3			0.697	0.508	0.942	0.863	0.943
SA5				0.548	0.653	0.635	0.841
SA6					0.456	0.451	0.662
SA7						0.730	0.887
SA8							0.848



**Table 204. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 3**

Name	CS1	CS2_3	CS4_5	CS6	Total
Mean	483.3	469.9	470.4	478.9	463.7
STD	138.5	118.4	107.1	126.2	92.18
N	5922	5922	5922	5922	5922
CS1		0.627	0.622	0.571	0.775
CS2_			0.704	0.632	0.882
CS4_				0.629	0.888
CS6					0.806

**Table 205. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 4**

Name	CS1	CS2	CS3	CS4_5	CS6	SA1	SA2	SA3	Total
Mean	494.2	510.9	495.8	500.1	502.8	497.7	511.8	513.0	488.7
STD	100.2	127.3	110.7	102.1	115.0	103.8	129.3	132.3	78.67
N	5821	5821	5821	5821	5821	5821	5821	5821	5821
CS1		0.647	0.675	0.677	0.692	0.896	0.642	0.586	0.875
CS2			0.622	0.627	0.635	0.644	0.987	0.543	0.790
CS3				0.673	0.649	0.673	0.616	0.573	0.837
CS4_					0.657	0.677	0.621	0.828	0.851
CS6						0.749	0.631	0.571	0.846
SA1							0.638	0.583	0.865
SA2								0.539	0.783
SA3									0.726

**Table 206. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 5**

Name	CS1	CS2	CS3	CS4_5	CS6	SA1	SA2	SA3	Total
Mean	538.1	527.6	524.7	525.6	526.8	547.4	529.2	529.2	520.3
STD	112.4	96.37	93.85	92.14	98.93	128.3	103.1	102.0	72.46
N	5709	5709	5709	5709	5709	5709	5709	5709	5709
CS1		0.682	0.668	0.684	0.700	0.891	0.652	0.621	0.839
CS2			0.692	0.706	0.710	0.663	0.954	0.661	0.860
CS3				0.709	0.693	0.650	0.662	0.922	0.858
CS4_					0.703	0.676	0.676	0.670	0.872
CS6						0.686	0.681	0.650	0.870
SA1							0.634	0.604	0.814
SA2								0.624	0.824
SA3									0.803



**Table 207. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 6**

Name	CS1	CS2	CS3	CS4_5	CS6	SA1	SA2	SA3	Total
Mean	540.3	538.1	550.5	539.3	567.5	555.1	539.6	539.2	537.0
STD	103.4	92.53	112.4	87.40	139.7	131.4	99.75	97.01	75.43
N	5697	5697	5697	5697	5697	5697	5697	5697	5697
CS1		0.712	0.676	0.740	0.643	0.836	0.684	0.691	0.868
CS2			0.674	0.755	0.634	0.684	0.925	0.697	0.875
CS3				0.708	0.607	0.642	0.678	0.661	0.827
CS4_					0.667	0.709	0.724	0.928	0.910
CS6						0.714	0.606	0.627	0.780
SA1							0.655	0.663	0.823
SA2								0.666	0.836
SA3									0.846

**Table 208. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 7**

Name	CS1_6	CS2	CS3	CS4_5	SA1	SA2	Total
Mean	549.2	549.8	545.2	545.6	547.1	531.9	548.2
STD	83.82	92.37	90.70	84.13	84.99	123.1	73.43
N	5688	5688	5688	5688	5688	5688	5688
CS1_		0.777	0.765	0.776	0.858	0.663	0.925
CS2			0.736	0.752	0.737	0.630	0.889
CS3				0.746	0.774	0.624	0.879
CS4_					0.777	0.809	0.899
SA1						0.628	0.875
SA2							0.752

**Table 209. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 8**

Name	CS1_6	CS2	CS3	CS4_5	SA1	SA2	SA3	Total
Mean	565.0	570.4	569.0	563.9	572.4	562.2	556.8	568.0
STD	89.35	89.84	95.49	87.36	95.25	97.16	108.7	74.06
N	56718	56718	56718	56718	56718	56718	56718	56718
CS1_6		0.753	0.730	0.742	0.730	0.844	0.670	0.885
CS2			0.744	0.749	0.970	0.706	0.677	0.905
CS3				0.731	0.722	0.697	0.657	0.871
CS4_5					0.724	0.750	0.881	0.888
SA1						0.685	0.654	0.878
SA2							0.637	0.829
SA3								0.796



**Table 210. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 9**

Name	CS1_	CS2	CS3	CS4_	SA1	SA2	Total
Mean	568.1	577.5	574.9	555.3	576.2	563.5	576.7
STD	103.5	78.47	82.57	107.0	81.52	102.7	71.29
N	59296	5929	5929	59296	5929	5929	5929
CS1_		0.741	0.705	0.629	0.716	0.889	0.837
CS2			0.795	0.687	0.943	0.730	0.938
CS3				0.655	0.813	0.699	0.906
CS4_					0.666	0.684	0.772
SA1						0.706	0.915
SA2							0.826

**Table 211. Scale Score Correlations by Content Standard and Subcontent Area, Mathematics Grade 10**

Name	CS1_6	CS2	CS3	CS4_5	SA1	SA2	Total
Mean	573.9	586.1	585.2	576.8	588.0	586.8	585.8
STD	103.4	83.66	81.99	90.54	85.84	101.8	73.99
N	55568	55568	55568	55568	55568	55568	55568
CS1_6		0.747	0.701	0.680	0.707	0.553	0.839
CS2			0.781	0.743	0.888	0.609	0.933
CS3				0.708	0.813	0.763	0.893
CS4_5					0.712	0.563	0.845
SA1						0.588	0.891
SA2							0.690



**Table 212. Scale Score Correlations by Content Standard and Subcontent Area, Science Grade 5**

Name	CS1_	CS2	CS3	CS4	SA1	SA2	Total
Mean	498.7	493.4	502.0	498.8	512.0	523.1	493.2
STD	82.15	77.06	91.55	88.36	113.3	140.3	63.55
N	57053	5705	5705	5705	5705	5705	5705
CS1_		0.670	0.608	0.631	0.817	0.776	0.869
CS2			0.622	0.656	0.568	0.537	0.859
CS3				0.592	0.517	0.491	0.775
CS4					0.534	0.514	0.809
SA1						0.502	0.733
SA2							0.699

**Table 213. Scale Score Correlations by Content Standard and Subcontent Area, Science Grade 8**

Name	CS1_5	CS2	CS3	CS4	SA1	SA2	SA3	SA5	SA6	Total
Mean	495.3	491.1	489.7	486.0	495.5	499.5	495.4	488.2	483.4	494.9
STD	68.38	80.34	81.25	88.46	76.81	86.80	89.57	90.24	96.94	63.50
N	56705	56705	56705	56705	56705	56705	56705	56705	56705	56705
CS1_5		0.739	0.758	0.694	0.935	0.865	0.680	0.694	0.647	0.951
CS2			0.685	0.640	0.690	0.631	0.914	0.637	0.604	0.838
CS3				0.661	0.710	0.647	0.629	0.927	0.621	0.863
CS4					0.645	0.587	0.593	0.617	0.878	0.795
SA1						0.704	0.634	0.651	0.602	0.886
SA2							0.581	0.591	0.546	0.813
SA3								0.584	0.561	0.771
SA5									0.581	0.798
SA6										0.741

**Table 214. Scale Score Correlations by Content Standard and Subcontent Area, Science Grade 10**

Name	CS1_5	CS2	CS3	CS4	SA1	SA2	SA4	SA5	SA6	Total
Mean	496.9	490.1	497.7	497.1	497.6	509.3	487.0	496.7	499.9	497.0
STD	67.15	81.09	75.20	75.98	71.04	113.5	88.86	84.74	84.82	61.98
N	5558	5558	5558	5558	5558	5558	5558	5558	5558	5558
CS1_		0.708	0.739	0.737	0.950	0.765	0.653	0.664	0.695	0.947
CS2			0.643	0.662	0.673	0.553	0.915	0.581	0.624	0.806
CS3				0.699	0.708	0.555	0.598	0.899	0.659	0.845
CS4					0.705	0.555	0.609	0.631	0.933	0.853
SA1						0.624	0.618	0.638	0.664	0.901
SA2							0.519	0.500	0.525	0.716
SA4								0.540	0.574	0.747
SA5									0.596	0.760
SA6										0.801



**Table 215. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Reading Grade 3**

Name	CS1	SA1_4	SA2	SA3	Total
Mean	518.5	518.0	517.8	518.1	518.5
STD	45.78	56.69	60.35	71.18	45.78
N	1490	1490	1490	1490	1490
CS1		0.913	0.824	0.791	1.000
SA1_4			0.649	0.632	0.913
SA2				0.602	0.824
SA3					0.791

**Table 216. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Reading Grade 4**

Nam	CS1	CS4	CS5	CS6	SA1_	SA2	SA3	Total
Mean	512.9	516.1	510.7	512.6	516.5	517.7	515.2	518.9
STD	63.33	59.20	78.96	54.09	45.47	52.72	97.91	43.10
N	176	176	176	176	176	176	176	176
CS1		0.716	0.622	0.618	0.826	0.798	0.761	0.875
CS4			0.635	0.632	0.823	0.813	0.543	0.864
CS5				0.531	0.685	0.543	0.464	0.779
CS6					0.761	0.646	0.585	0.755
SA1_4						0.751	0.652	0.954
SA2							0.585	0.841
SA3								0.710



**Table 217. Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Writing Grade 3**

Name	CS2	CS3	SA5	SA7	SA8	Total
Mean	501.8	505.9	506.6	511.0	514.1	501.5
STD	80.09	81.44	94.60	94.64	120.6	72.18
N	1481	1481	1481	1481	1481	1481
CS2		0.759	0.904	0.673	0.589	0.934
CS3			0.674	0.905	0.816	0.931
SA5				0.552	0.507	0.840
SA7					0.592	0.838
SA8						0.749

**Table 218. WR Scale Score Correlations by Content Standard and Subcontent Area,  
Spanish Writing Grade 4**

Name	CS2	CS3	SA5	SA6	SA7	SA8	Total
Mean	496.	499.	493.	486.	499.	490.	499.
STD	40.2	47.2	50.2	66.5	59.9	74.4	38.5
N	174.	174.	174.	174.	174.	174.	174.
CS2		0.66	0.80	0.69	0.58	0.37	0.88
CS3			0.51	0.51	0.89	0.61	0.91
SA5				0.34	0.43	0.34	0.69
SA6					0.41	0.17	0.64
SA7						0.40	0.83
SA8							0.54



**Table 219. Cronbach Alpha Reliability Coefficients for Content Standards**

Content Area	Grade	Content Standard						Total Alpha
		1 Alpha	2 Alpha	3 Alpha	4 Alpha	5 Alpha	6 Alpha	
Reading	3	0.90						0.90
Reading	4	0.86			0.75	0.75	0.68	0.93
Reading	5	0.83			0.73	0.73	0.65	0.92
Reading	6	0.81			0.71	0.79	0.71	0.92
Reading	7	0.80			0.71	0.77	0.68	0.92
Reading	8	0.81			0.73	0.76	0.75	0.93
Reading	9	0.83			0.74	0.77	0.76	0.93
Reading	10	0.81			0.69	0.78	0.72	0.92
Spanish Reading	3	0.87						0.87
Spanish Reading	4	0.87			0.72	0.68	0.49	0.92
Writing	3		0.80	0.85				0.90
Writing	4		0.83	0.87				0.92
Writing	5		0.83	0.86				0.91
Writing	6		0.83	0.86				0.91
Writing	7		0.83	0.85				0.91
Writing	8		0.83	0.86				0.91
Writing	9		0.85	0.85				0.92
Writing	10		0.84	0.86				0.92
Spanish Writing	3		0.84	0.86				0.92
Spanish Writing	4		0.70	0.79				0.85
Mathematics	3	0.65	0.77		0.72		0.69	0.91
Mathematics	4	0.78	0.70	0.74	0.79		0.79	0.94
Mathematics	5	0.81	0.74	0.74	0.77		0.79	0.94
Mathematics	6	0.76	0.73	0.76	0.79		0.74	0.94
Mathematics	7	0.81	0.75	0.69	0.77			0.93
Mathematics	8	0.80	0.81	0.73	0.78			0.94
Mathematics	9	0.78	0.79	0.78	0.77			0.93
Mathematics	10	0.68	0.80	0.72	0.78			0.92
Science	5	0.86	0.69	0.67	0.70			0.93
Science	8	0.86	0.69	0.73	0.67			0.93
Science	10	0.84	0.74	0.72	0.73			0.92



**Table 220. Cronbach Alpha Reliability Coefficients for Subcontent Areas**

Content Area	Grade	Subcontent Area							
		1 Alpha	2 Alpha	3 Alpha	4 Alpha	5 Alpha	6 Alpha	7 Alpha	8 Alpha
Reading	3	0.81	0.75	0.67					
Reading	4	0.85	0.76	0.73					
Reading	5	0.84	0.74	0.64					
Reading	6	0.81	0.74	0.71					
Reading	7	0.72	0.75	0.66	0.66				
Reading	8	0.56	0.84	0.65	0.67				
Reading	9	0.73	0.83	0.68	0.62				
Reading	10	0.78	0.69	0.57	0.71				
Spanish Reading	3	0.79	0.64	0.64					
Spanish Reading	4	0.83	0.74	0.66					
Writing	3					0.80		0.68	0.74
Writing	4					0.66	0.71	0.81	0.73
Writing	5					0.62	0.70	0.86	0.68
Writing	6					0.69	0.71	0.82	0.76
Writing	7					0.69	0.73	0.74	0.81
Writing	8					0.73	0.73	0.80	0.77
Writing	9					0.77	0.75	0.80	0.74
Writing	10					0.73	0.74	0.80	0.74
Spanish Writing	3					0.86		0.81	0.72
Spanish Writing	4					0.54	0.63	0.77	0.53
Mathematics	3								
Mathematics	4	0.79	0.67	0.50					
Mathematics	5	0.80	0.67	0.68					
Mathematics	6	0.75	0.67	0.65					
Mathematics	7	0.74	0.59						
Mathematics	8	0.78	0.68	0.64					
Mathematics	9	0.79	0.79						
Mathematics	10	0.73	0.44						
Science	5	0.74	0.73						
Science	8	0.79	0.68	0.55		0.64	0.62		
Science	10	0.74	0.67		0.70	0.58	0.68		



**Table 221. Subgroup Reliability for the CSAP Mathematics Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
3	No Disability	53364	471.96	88.56	150	700	150	700	0.898	28.28
	Disability	5864	388.45	90.37	150	700	150	700	0.905	27.89
	No IEP	53364	471.97	88.55	150	700	150	700	0.898	28.28
	IEP	5840	388.25	90.37	150	700	150	700	0.905	27.91
	No Accommodation	48814	479.38	86.72	150	700	150	700	0.893	28.43
	Accommodation	10414	390.19	80.73	150	700	150	700	0.886	27.29
	Am. Indian/AK Nat.	677	432.33	84.37	150	700	171	700	0.900	26.69
	Asian/Pac. Isl.	2143	496.56	93.01	150	700	150	700	0.904	28.83
	Black	3581	414.41	91.04	150	700	150	700	0.910	27.34
	Hispanic	17847	422.04	85.08	150	700	150	700	0.898	27.18
	White	34976	488.59	85.68	150	700	150	700	0.888	28.69
	Free Lunch Elig.	19058	418.05	85.38	150	700	150	700	0.898	27.23
	Reduced Lunch	4554	449.05	85.76	150	700	150	700	0.898	27.45
	Not FRL Elig.	35583	490.03	86.34	150	700	150	700	0.890	28.63
	Female	28979	462.36	90.66	150	700	150	700	0.904	28.13
	Male	30241	464.99	93.60	150	700	150	700	0.911	27.95
	Lang. Prof. NA	48311	475.31	89.59	150	700	150	700	0.901	28.21
	Lang. Prof. NEP	3300	355.54	77.60	150	700	150	696	0.869	28.08
	Lang. Prof. LEP	5273	420.83	70.54	150	700	150	700	0.859	26.51
	Lang. Prof. FEP	2330	473.24	78.36	150	700	204	700	0.875	27.76
4	Not Mig. or Immig.	57818	465.02	91.86	150	700	150	700	0.907	28.08
	Mig. or Immig.	1385	409.14	88.85	150	700	150	700	0.904	27.48
	No Disability	52229	496.97	73.95	180	780	180	780	0.936	18.71
	Disability	5987	416.17	81.38	180	780	180	780	0.945	19.13
	No IEP	52230	496.97	73.95	180	780	180	780	0.936	18.71
	IEP	5972	416.02	81.35	180	780	180	780	0.945	19.13
	No Accommodation	48418	502.29	72.46	180	780	180	780	0.933	18.82
	Accommodation	9798	421.29	73.31	180	780	180	780	0.936	18.61
	Am. Indian/AK Nat.	671	459.52	75.46	180	780	180	732	0.942	18.14
	Asian/Pac. Isl.	2136	521.32	79.91	180	780	180	780	0.943	19.08
	Black	3537	447.84	81.53	180	780	180	780	0.948	18.62
	Hispanic	17118	453.19	73.94	180	780	180	780	0.940	18.17
	White	34754	508.84	72.24	180	780	180	780	0.933	18.73
	Free Lunch Elig.	18342	448.77	74.24	180	780	180	780	0.940	18.17
	Reduced Lunch	4474	474.37	71.34	180	780	188	780	0.936	17.98
	Not FRL Elig.	35372	511.17	72.97	180	780	180	780	0.933	18.85
	Female	28634	486.92	78.00	180	780	180	780	0.944	18.49
	Male	29574	490.36	79.28	180	780	180	780	0.945	18.52
	Lang. Prof. NA	47623	498.20	75.97	180	780	180	780	0.940	18.57
	Lang. Prof. NEP	2340	382.68	69.73	180	780	180	650	0.919	19.90
	Lang. Prof. LEP	4951	441.96	61.49	180	780	180	774	0.918	17.64
	Lang. Prof. FEP	3298	496.26	64.60	180	780	202	780	0.915	18.87
	Not Mig. or Immig.	57044	489.80	78.21	180	780	180	780	0.944	18.52
	Mig. or Immig.	1157	432.98	81.13	180	780	180	780	0.945	19.08



**Table 221. Subgroup Reliability for the CSAP Mathematics Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
5	No Disability	51239	528.27	68.00	220	800	220	800	0.938	16.87
	Disability	5857	450.41	72.76	220	800	220	774	0.941	17.73
	No IEP	51240	528.26	68.00	220	800	220	800	0.938	16.87
	IEP	5844	450.34	72.75	220	800	220	774	0.941	17.73
	No Accommodation	48044	531.94	67.29	220	800	220	800	0.937	16.91
	Accommodation	9052	458.42	67.37	220	800	220	800	0.934	17.30
	Am. Indian/AK Nat.	666	496.84	70.15	220	800	224	774	0.943	16.80
	Asian/Pac. Isl.	2086	553.54	71.49	220	800	220	800	0.941	17.40
	Black	3262	483.10	70.56	220	800	220	740	0.944	16.65
	Hispanic	16320	486.51	65.83	220	800	220	800	0.938	16.36
	White	34762	538.08	68.28	220	800	220	800	0.939	16.90
	Free Lunch Elig.	17224	482.41	65.89	220	800	220	800	0.938	16.44
	Reduced Lunch	4341	504.63	64.72	220	800	220	800	0.937	16.30
	Not FRL Elig.	35508	540.58	68.44	220	800	220	800	0.939	16.95
	Female	27988	519.02	69.88	220	800	220	800	0.943	16.63
	Male	29105	521.50	74.83	220	800	220	800	0.949	16.93
	Lang. Prof. NA	47156	528.23	70.76	220	800	220	800	0.943	16.84
	Lang. Prof. NEP	1517	421.87	65.33	220	800	220	675	0.919	18.55
	Lang. Prof. LEP	4623	471.76	55.92	220	800	220	800	0.919	15.94
	Lang. Prof. FEP	3796	519.97	61.11	220	800	220	800	0.930	16.19
	Not Mig. or Immig.	55958	521.27	72.13	220	800	220	800	0.946	16.81
	Mig. or Immig.	1125	471.54	72.02	220	800	220	733	0.944	17.03
6	No Disability	51283	546.07	69.38	240	830	240	830	0.931	18.16
	Disability	5692	455.71	79.02	240	830	240	762	0.924	21.77
	No IEP	51284	546.05	69.41	240	830	240	830	0.932	18.16
	IEP	5676	455.71	78.96	240	830	240	762	0.924	21.76
	No Accommodation	49668	547.76	69.18	240	830	240	830	0.931	18.17
	Accommodation	7307	464.20	75.83	240	830	240	797	0.922	21.22
	Am. Indian/AK Nat.	700	514.12	73.31	240	830	240	693	0.935	18.75
	Asian/Pac. Isl.	2025	571.71	77.34	240	830	240	830	0.939	19.09
	Black	3420	496.35	79.75	240	830	240	830	0.937	19.95
	Hispanic	15778	502.39	71.10	240	830	240	830	0.928	19.04
	White	35050	555.07	69.24	240	830	240	830	0.932	18.07
	Free Lunch Elig.	16632	496.75	72.33	240	830	240	830	0.928	19.41
	Reduced Lunch	4270	521.79	68.57	240	830	240	830	0.930	18.16
	Not FRL Elig.	36053	557.45	69.48	240	830	240	830	0.932	18.12
	Female	27872	537.59	72.60	240	830	240	830	0.937	18.23
	Male	29101	536.52	78.05	240	830	240	830	0.942	18.82
	Lang. Prof. NA	47572	544.98	73.07	240	830	240	830	0.937	18.32
	Lang. Prof. NEP	1203	425.80	79.79	240	830	240	665	0.907	24.38
	Lang. Prof. LEP	3913	478.44	60.38	240	830	240	735	0.900	19.12
	Lang. Prof. FEP	4283	533.72	62.81	240	830	242	767	0.919	17.92
	Not Mig. or Immig.	55923	538.11	74.94	240	830	240	830	0.939	18.50
	Mig. or Immig.	1036	480.17	80.15	240	830	240	797	0.929	21.40



**Table 221. Subgroup Reliability for the CSAP Mathematics Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
7	No Disability	51402	556.86	67.30	280	860	280	860	0.921	18.91
	Disability	5478	467.32	79.02	280	860	280	741	0.903	24.65
	No IEP	51393	556.87	67.30	280	860	280	860	0.921	18.91
	IEP	5469	467.19	78.96	280	860	280	741	0.902	24.66
	No Accommodation	51180	556.43	67.94	280	860	280	860	0.921	19.04
	Accommodation	5700	474.73	79.71	280	860	280	747	0.911	23.77
	Am. Indian/AK Nat.	650	526.33	71.62	280	860	280	778	0.919	20.39
	Asian/Pac. Isl.	2037	580.05	70.21	280	860	280	830	0.929	18.67
	Black	3393	508.12	74.57	280	860	280	788	0.910	22.32
	Hispanic	15358	511.60	69.41	280	860	280	779	0.906	21.26
	White	35437	566.53	67.22	280	860	280	860	0.921	18.85
	Free Lunch Elig.	15745	506.40	69.84	280	860	280	756	0.903	21.76
	Reduced Lunch	4152	531.42	66.51	280	860	280	721	0.908	20.14
	Not FRL Elig.	36955	567.97	67.48	280	860	280	860	0.922	18.84
	Female	27627	548.52	69.71	280	860	280	860	0.924	19.19
	Male	29247	547.98	76.78	280	860	280	855	0.931	20.21
	Lang. Prof. NA	48152	556.11	70.93	280	860	280	860	0.925	19.41
	Lang. Prof. NEP	1101	437.51	78.92	280	860	280	701	0.878	27.51
	Lang. Prof. LEP	3326	486.70	59.16	280	860	280	702	0.861	22.03
	Lang. Prof. FEP	4295	536.04	61.37	280	860	280	775	0.902	19.24
	Not Mig. or Immig.	55816	549.29	72.92	280	860	280	860	0.927	19.70
	Mig. or Immig.	1042	492.71	79.20	280	860	280	706	0.916	22.94
8	No Disability	51611	576.48	67.63	310	890	310	890	0.931	17.74
	Disability	5107	482.38	81.45	310	890	310	730	0.891	26.88
	No IEP	51602	576.48	67.64	310	890	310	890	0.931	17.74
	IEP	5099	482.37	81.43	310	890	310	730	0.891	26.88
	No Accommodation	51603	575.26	68.87	310	890	310	890	0.932	18.01
	Accommodation	5115	494.90	84.18	310	890	310	825	0.916	24.47
	Am. Indian/AK Nat.	737	540.96	71.57	310	890	310	734	0.916	20.79
	Asian/Pac. Isl.	1885	601.39	72.96	310	890	310	890	0.940	17.80
	Black	3471	527.35	76.92	310	890	310	738	0.914	22.55
	Hispanic	15138	530.25	69.75	310	890	310	849	0.906	21.35
	White	35484	586.89	67.24	310	890	310	889	0.931	17.63
	Free Lunch Elig.	15354	524.90	72.12	310	890	310	800	0.905	22.22
	Reduced Lunch	3994	552.01	67.38	310	890	310	841	0.915	19.70
	Not FRL Elig.	37346	587.46	67.32	310	890	310	890	0.932	17.57
	Female	27722	566.39	70.77	310	890	310	890	0.932	18.51
	Male	28990	569.57	77.03	310	890	310	882	0.938	19.22
	Lang. Prof. NA	48303	575.50	71.77	310	890	310	890	0.934	18.44
	Lang. Prof. NEP	882	457.20	77.85	310	890	310	703	0.865	28.56
	Lang. Prof. LEP	2856	501.69	62.92	310	890	310	712	0.855	23.98
	Lang. Prof. FEP	4672	552.13	62.60	310	890	310	825	0.913	18.47
	Not Mig. or Immig.	55752	568.98	73.60	310	890	310	890	0.935	18.82
	Mig. or Immig.	946	511.63	78.61	310	890	310	825	0.917	22.60



**Table 221. Subgroup Reliability for the CSAP Mathematics Tests (Concluded)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
9	No Disability	54371	583.96	66.38	340	920	340	920	0.926	18.00
	Disability	4925	496.96	74.80	340	920	340	743	0.883	25.54
	No IEP	54366	583.95	66.39	340	920	340	920	0.926	18.00
	IEP	4911	496.91	74.77	340	920	340	743	0.883	25.55
	No Accommodation	55574	581.96	67.79	340	920	340	920	0.927	18.27
	Accommodation	3722	498.59	76.30	340	920	340	804	0.891	25.18
	Am. Indian/AK Nat.	748	550.97	70.11	340	920	340	708	0.909	21.18
	Asian/Pac. Isl.	1817	603.77	71.95	340	920	340	920	0.939	17.77
	Black	3641	533.98	70.21	340	920	340	730	0.892	23.10
	Hispanic	15788	537.89	68.11	340	920	340	770	0.896	21.96
	White	37300	596.55	63.44	340	920	340	920	0.926	17.29
	Free Lunch Elig.	14450	533.79	68.09	340	920	340	757	0.889	22.69
	Reduced Lunch	3697	560.48	64.11	340	920	340	758	0.906	19.65
	Not FRL Elig.	41126	593.30	66.17	340	920	340	920	0.928	17.71
	Female	28822	575.30	68.23	340	920	340	920	0.925	18.69
	Male	30468	578.10	74.03	340	920	340	920	0.933	19.10
	Lang. Prof. NA	51081	584.15	68.67	340	920	340	920	0.929	18.35
	Lang. Prof. NEP	1105	464.85	71.80	340	920	340	712	0.831	29.50
	Lang. Prof. LEP	2597	511.98	59.02	340	920	340	733	0.839	23.67
	Lang. Prof. FEP	4510	557.43	60.43	340	920	340	778	0.898	19.33
	Not Mig. or Immig.	58176	578.03	70.50	340	920	340	920	0.929	18.76
	Mig. or Immig.	1096	508.76	78.88	340	920	340	752	0.899	25.05
10	No Disability	51270	593.24	68.81	370	950	370	886	0.917	19.88
	Disability	4298	497.26	76.15	370	950	370	750	0.866	27.92
	No IEP	51253	593.25	68.81	370	950	370	886	0.917	19.88
	IEP	4294	497.22	76.18	370	950	370	750	0.866	27.93
	No Accommodation	52486	590.79	70.67	370	950	370	886	0.918	20.29
	Accommodation	3082	501.15	77.89	370	950	370	791	0.880	26.97
	Am. Indian/AK Nat.	639	560.81	72.61	370	950	370	761	0.896	23.40
	Asian/Pac. Isl.	1824	614.04	71.74	370	950	370	808	0.933	18.59
	Black	3386	539.89	76.24	370	950	370	774	0.885	25.88
	Hispanic	13269	544.78	70.24	370	950	370	772	0.876	24.73
	White	36449	604.05	66.85	370	950	370	886	0.916	19.34
	Free Lunch Elig.	11149	538.20	71.48	370	950	370	792	0.870	25.81
	Reduced Lunch	3102	566.37	67.85	370	950	370	765	0.891	22.35
	Not FRL Elig.	41288	600.18	69.21	370	950	370	886	0.919	19.71
	Female	27457	585.55	69.81	370	950	370	826	0.914	20.51
	Male	28106	586.09	77.87	370	950	370	886	0.925	21.36
	Lang. Prof. NA	48872	592.41	71.71	370	950	370	886	0.919	20.43
	Lang. Prof. NEP	853	472.77	71.70	370	950	370	755	0.824	30.12
	Lang. Prof. LEP	2120	518.69	62.26	370	950	370	732	0.817	26.61
	Lang. Prof. FEP	3715	563.55	65.26	370	950	370	796	0.887	21.91
	Not Mig. or Immig.	54664	587.00	73.26	370	950	370	886	0.919	20.82
	Mig. or Immig.	879	513.75	82.53	370	950	370	755	0.894	26.82



**Table 222. Subgroup Reliability for the CSAP Reading Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
3	No Disability	51962	563.12	72.99	150	795	150	795	0.900	23.06
	Disability	5718	467.94	115.30	150	795	150	779	0.910	34.63
	No IEP	51951	563.12	72.99	150	795	150	795	0.900	23.06
	IEP	5679	467.34	115.10	150	795	150	779	0.909	34.71
	No Accommodation	47462	569.71	69.27	150	795	150	795	0.893	22.70
	Accommodation	10218	479.26	100.40	150	795	150	795	0.892	32.96
	Am. Indian/AK Nat.	673	528.17	82.81	150	795	150	795	0.900	26.21
	Asian/Pac. Isl.	2142	569.14	75.86	150	795	150	795	0.907	23.08
	Black	3576	517.11	93.66	150	795	150	756	0.906	28.71
	Hispanic	16290	517.05	87.54	150	795	150	795	0.900	27.64
	White	34975	574.00	72.55	150	795	150	795	0.898	23.20
	Free Lunch Elig.	17759	513.18	89.55	150	795	150	795	0.900	28.37
	Reduced Lunch	4461	538.36	82.77	150	795	150	795	0.903	25.79
	Not FRL Elig.	35406	575.92	70.99	150	795	150	795	0.897	22.81
	Female	28274	560.87	77.77	150	795	150	795	0.906	23.84
	Male	29378	546.74	87.58	150	795	150	795	0.915	25.50
	Lang. Prof. NA	48247	563.84	77.60	150	795	150	795	0.905	23.92
	Lang. Prof. NEP	2343	422.63	106.80	150	795	150	718	0.820	45.30
	Lang. Prof. LEP	4781	511.71	63.60	150	795	150	724	0.843	25.18
	Lang. Prof. FEP	2275	561.25	62.46	150	795	150	795	0.871	22.43
4	Not Mig. or Immig.	56485	554.96	82.29	150	795	150	795	0.911	24.60
	Mig. or Immig.	1142	490.84	101.80	150	795	150	738	0.901	32.01
	No Disability	52048	593.73	53.01	180	940	180	842	0.932	13.83
	Disability	5955	518.34	86.57	180	940	180	721	0.933	22.39
	No IEP	52049	593.72	53.02	180	940	180	842	0.932	13.83
	IEP	5939	518.21	86.61	180	940	180	721	0.933	22.41
	No Accommodation	47185	597.87	51.10	180	940	180	842	0.929	13.64
	Accommodation	10818	534.20	75.94	180	940	180	762	0.929	20.28
	Am. Indian/AK Nat.	672	565.04	69.78	180	940	180	728	0.942	16.87
	Asian/Pac. Isl.	2122	599.69	54.90	180	940	180	780	0.931	14.40
	Black	3536	560.55	70.94	180	940	180	752	0.937	17.77
	Hispanic	16949	556.02	65.11	180	940	180	769	0.931	17.10
	White	34724	602.78	52.03	180	940	180	842	0.930	13.77
	Free Lunch Elig.	18184	553.34	67.23	180	940	180	748	0.931	17.61
	Reduced Lunch	4470	576.82	54.59	180	940	180	752	0.928	14.63
	Not FRL Elig.	35323	603.96	51.74	180	940	180	842	0.929	13.80
	Female	28549	591.79	58.13	180	940	180	785	0.940	14.30
	Male	29450	580.37	64.60	180	940	180	842	0.941	15.64
	Lang. Prof. NA	47622	595.06	56.43	180	940	180	842	0.935	14.36
	Lang. Prof. NEP	2153	473.33	87.67	180	940	180	648	0.846	34.36
	Lang. Prof. LEP	4930	546.48	42.08	180	940	180	675	0.880	14.59
	Lang. Prof. FEP	3294	587.70	40.55	180	940	180	752	0.897	13.03
	Not Mig. or Immig.	56934	587.07	60.81	180	940	180	842	0.940	14.89
	Mig. or Immig.	1053	527.91	82.08	180	940	180	720	0.933	21.26



**Table 222. Subgroup Reliability for the CSAP Reading Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
5	No Disability	51195	622.44	60.70	220	955	220	955	0.923	16.80
	Disability	5814	534.04	90.06	220	955	220	835	0.931	23.73
	No IEP	51195	622.44	60.71	220	955	220	955	0.923	16.80
	IEP	5801	533.94	90.11	220	955	220	835	0.931	23.74
	No Accommodation	47889	625.92	59.45	220	955	220	955	0.920	16.77
	Accommodation	9120	547.82	81.51	220	955	220	832	0.925	22.34
	Am. Indian/AK Nat.	665	592.69	76.26	220	955	220	807	0.939	18.84
	Asian/Pac. Isl.	2085	632.81	65.40	220	955	220	843	0.929	17.46
	Black	3254	587.20	73.44	220	955	220	830	0.933	19.03
	Hispanic	16274	578.70	72.60	220	955	220	815	0.928	19.45
	White	34728	631.40	60.32	220	955	220	955	0.923	16.73
	Free Lunch Elig.	17184	575.13	73.72	220	955	220	830	0.928	19.79
	Reduced Lunch	4333	600.87	63.79	220	955	220	871	0.924	17.64
	Not FRL Elig.	35466	633.53	59.44	220	955	220	955	0.921	16.66
	Female	27958	620.27	66.37	220	955	220	955	0.933	17.22
	Male	29044	606.85	72.08	220	955	220	854	0.937	18.08
	Lang. Prof. NA	47094	623.34	63.87	220	955	220	955	0.929	17.03
	Lang. Prof. NEP	1487	472.98	96.70	220	955	220	700	0.873	34.47
	Lang. Prof. LEP	4627	559.82	52.81	220	955	220	738	0.884	18.03
	Lang. Prof. FEP	3795	610.89	52.30	220	955	220	798	0.899	16.61
6	Not Mig. or Immig.	55883	614.86	68.35	220	955	220	955	0.934	17.53
	Mig. or Immig.	1106	541.74	93.49	220	955	220	759	0.933	24.20
	No Disability	51216	635.95	57.67	260	970	260	872	0.919	16.38
	Disability	5634	551.43	77.49	260	970	260	765	0.923	21.55
	No IEP	51210	635.95	57.67	260	970	260	872	0.919	16.38
	IEP	5626	551.41	77.52	260	970	260	765	0.923	21.55
	No Accommodation	49077	637.90	56.54	260	970	260	872	0.917	16.33
	Accommodation	7773	562.43	76.34	260	970	260	872	0.926	20.71
	Am. Indian/AK Nat.	698	610.33	64.07	260	970	260	795	0.926	17.40
	Asian/Pac. Isl.	2021	643.24	66.45	260	970	260	844	0.932	17.33
	Black	3423	601.64	67.97	260	970	260	808	0.927	18.35
	Hispanic	15726	593.02	67.11	260	970	260	840	0.925	18.39
	White	34979	645.10	55.94	260	970	260	872	0.917	16.11
	Free Lunch Elig.	16564	589.57	67.15	260	970	260	844	0.924	18.56
	Reduced Lunch	4265	613.98	59.39	260	970	260	814	0.919	16.86
	Not FRL Elig.	36001	646.68	55.97	260	970	260	872	0.916	16.24
	Female	27826	635.87	61.74	260	970	260	872	0.927	16.74
	Male	29020	619.63	67.08	260	970	260	872	0.935	17.10
	Lang. Prof. NA	47480	637.26	59.20	260	970	260	872	0.923	16.40
	Lang. Prof. NEP	1172	485.60	84.60	260	970	260	763	0.871	30.35
	Lang. Prof. LEP	3910	561.77	50.72	260	970	260	805	0.868	18.40
	Lang. Prof. FEP	4284	619.16	48.96	260	970	260	834	0.885	16.63
	Not Mig. or Immig.	55811	629.11	63.62	260	970	260	872	0.930	16.83
	Mig. or Immig.	1024	544.88	84.56	260	970	260	761	0.928	22.65



**Table 222. Subgroup Reliability for the CSAP Reading Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
7	No Disability	51339	646.14	57.90	300	980	300	891	0.914	16.96
	Disability	5441	563.74	72.89	300	980	300	797	0.917	21.00
	No IEP	51332	646.14	57.90	300	980	300	891	0.914	16.96
	IEP	5433	563.67	72.88	300	980	300	797	0.917	21.01
	No Accommodation	51125	646.00	58.06	300	980	300	891	0.914	16.98
	Accommodation	5655	568.15	74.32	300	980	300	817	0.922	20.75
	Am. Indian/AK Nat.	648	621.03	64.40	300	980	300	763	0.923	17.89
	Asian/Pac. Isl.	2038	653.68	65.22	300	980	300	843	0.926	17.71
	Black	3386	612.47	64.79	300	980	300	804	0.921	18.25
	Hispanic	15327	605.45	63.79	300	980	300	818	0.917	18.42
	White	35377	654.35	57.72	300	980	300	891	0.915	16.82
	Free Lunch Elig.	15709	600.73	64.90	300	980	300	820	0.916	18.83
	Reduced Lunch	4149	625.37	58.30	300	980	300	801	0.911	17.39
	Not FRL Elig.	36897	655.68	57.04	300	980	300	891	0.914	16.76
	Female	27599	648.74	61.81	300	980	300	869	0.923	17.15
	Male	29175	628.33	64.93	300	980	300	891	0.927	17.55
	Lang. Prof. NA	48064	646.55	60.12	300	980	300	891	0.920	17.04
	Lang. Prof. NEP	1087	504.32	70.99	300	980	300	723	0.853	27.20
	Lang. Prof. LEP	3324	574.26	49.08	300	980	300	745	0.852	18.89
	Lang. Prof. FEP	4301	628.74	49.10	300	980	300	821	0.880	16.99
	Not Mig. or Immig.	55728	639.67	63.08	300	980	300	891	0.925	17.30
	Mig. or Immig.	1034	561.79	78.99	300	980	300	757	0.926	21.43
8	No Disability	51509	659.16	56.21	330	990	330	990	0.923	15.56
	Disability	5086	575.39	73.88	330	990	330	795	0.915	21.49
	No IEP	51505	659.15	56.25	330	990	330	990	0.923	15.57
	IEP	5074	575.39	73.75	330	990	330	795	0.915	21.47
	No Accommodation	51939	658.00	57.52	330	990	330	990	0.925	15.73
	Accommodation	4656	580.54	74.07	330	990	330	821	0.920	20.90
	Am. Indian/AK Nat.	734	634.31	62.29	330	990	330	829	0.925	17.11
	Asian/Pac. Isl.	1878	664.86	59.38	330	990	330	840	0.928	15.93
	Black	3456	625.66	65.96	330	990	330	809	0.926	17.94
	Hispanic	15076	618.62	61.47	330	990	330	821	0.919	17.46
	White	35445	667.87	56.42	330	990	330	990	0.924	15.60
	Free Lunch Elig.	15279	614.29	63.73	330	990	330	808	0.920	18.04
	Reduced Lunch	3984	637.10	59.21	330	990	330	813	0.921	16.67
	Not FRL Elig.	37308	668.49	55.31	330	990	330	990	0.922	15.49
	Female	27682	660.55	59.62	330	990	330	990	0.931	15.67
	Male	28904	643.10	64.50	330	990	330	904	0.934	16.61
	Lang. Prof. NA	48212	659.53	59.18	330	990	330	990	0.928	15.90
	Lang. Prof. NEP	852	517.68	71.17	330	990	330	711	0.817	30.48
	Lang. Prof. LEP	2845	584.10	49.10	330	990	330	773	0.853	18.84
	Lang. Prof. FEP	4679	635.70	47.33	330	990	330	785	0.892	15.55
	Not Mig. or Immig.	55641	653.01	61.59	330	990	330	990	0.932	16.10
	Mig. or Immig.	935	570.05	76.84	330	990	330	763	0.918	21.95



**Table 222. Subgroup Reliability for the CSAP Reading Tests (Concluded)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
9	No Disability	54144	666.73	53.37	350	995	350	914	0.934	13.71
	Disability	4853	593.63	63.03	350	995	350	787	0.922	17.56
	No IEP	54136	666.72	53.40	350	995	350	914	0.934	13.71
	IEP	4845	593.73	62.92	350	995	350	787	0.922	17.54
	No Accommodation	55703	664.82	54.84	350	995	350	914	0.936	13.85
	Accommodation	3294	591.37	62.72	350	995	350	782	0.921	17.66
	Am. Indian/AK Nat.	731	643.31	58.04	350	995	350	808	0.935	14.79
	Asian/Pac. Isl.	1809	671.11	56.75	350	995	350	895	0.939	13.97
	Black	3613	634.79	57.99	350	995	350	800	0.933	14.97
	Hispanic	15672	629.60	56.92	350	995	350	841	0.931	14.91
	White	37171	676.20	51.64	350	995	350	914	0.930	13.69
	Free Lunch Elig.	14331	626.68	56.68	350	995	350	845	0.930	15.03
	Reduced Lunch	3677	647.15	54.19	350	995	350	798	0.929	14.45
	Not FRL Elig.	40969	673.86	53.22	350	995	350	914	0.934	13.72
	Female	28718	669.43	53.54	350	995	350	914	0.936	13.51
	Male	30273	652.47	60.47	350	995	350	871	0.944	14.35
	Lang. Prof. NA	50859	667.55	54.99	350	995	350	914	0.936	13.91
	Lang. Prof. NEP	1074	553.43	56.68	350	995	350	720	0.829	23.42
	Lang. Prof. LEP	2568	600.21	44.95	350	995	350	755	0.873	16.05
	Lang. Prof. FEP	4491	643.66	45.68	350	995	350	817	0.909	13.81
	Not Mig. or Immig.	57898	662.09	56.79	350	995	350	914	0.939	13.97
	Mig. or Immig.	1077	587.80	65.67	350	995	350	760	0.925	17.97
10	No Disability	50997	687.75	56.59	370	999	370	906	0.920	15.97
	Disability	4286	609.50	66.75	370	999	370	805	0.912	19.81
	No IEP	50986	687.75	56.59	370	999	370	906	0.920	15.97
	IEP	4272	609.36	66.76	370	999	370	805	0.912	19.83
	No Accommodation	52579	685.27	58.72	370	999	370	906	0.924	16.20
	Accommodation	2704	611.91	65.01	370	999	370	838	0.915	18.96
	Am. Indian/AK Nat.	630	668.28	56.29	370	999	370	816	0.919	16.00
	Asian/Pac. Isl.	1823	694.59	60.31	370	999	370	870	0.928	16.17
	Black	3369	655.13	65.07	370	999	370	863	0.928	17.47
	Hispanic	13142	651.13	61.29	370	999	370	852	0.921	17.26
	White	36310	694.79	55.80	370	999	370	906	0.917	16.07
	Free Lunch Elig.	11044	645.62	62.62	370	999	370	833	0.921	17.57
	Reduced Lunch	3092	667.40	57.47	370	999	370	854	0.917	16.52
	Not FRL Elig.	41114	692.47	56.91	370	999	370	906	0.921	16.05
	Female	27337	693.37	55.70	370	999	370	906	0.921	15.64
	Male	27930	670.26	63.99	370	999	370	892	0.933	16.59
	Lang. Prof. NA	48640	687.45	58.41	370	999	370	906	0.923	16.19
	Lang. Prof. NEP	840	567.76	64.97	370	999	370	745	0.827	27.05
	Lang. Prof. LEP	2114	621.35	51.13	370	999	370	775	0.869	18.53
	Lang. Prof. FEP	3680	666.15	53.30	370	999	370	824	0.902	16.64
	Not Mig. or Immig.	54386	682.91	60.18	370	999	370	906	0.927	16.24
	Mig. or Immig.	869	605.21	71.30	370	999	370	765	0.914	20.88



**Table 223. Subgroup Reliability for the CSAP Writing Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
3	No Disability	52048	471.07	50.10	150	680	150	680	0.894	16.33
	Disability	5715	419.68	48.79	150	680	150	680	0.898	15.59
	No IEP	52045	471.07	50.11	150	680	150	680	0.894	16.33
	IEP	5694	419.58	48.73	150	680	150	680	0.898	15.59
	No Accommodation	48115	474.13	49.86	150	680	150	680	0.895	16.18
	Accommodation	9648	425.36	44.50	150	680	150	680	0.882	15.28
	Am. Indian/AK Nat.	678	446.81	50.55	150	680	150	587	0.910	15.15
	Asian/Pac. Isl.	2148	478.59	54.10	150	680	150	680	0.912	16.07
	Black	3581	444.45	55.96	150	680	150	680	0.920	15.82
	Hispanic	16358	444.63	48.92	150	680	150	680	0.901	15.36
	White	34996	477.77	49.25	150	680	150	680	0.885	16.68
	Free Lunch Elig.	17784	441.37	48.83	150	680	150	680	0.902	15.33
	Reduced Lunch Elig.	4463	457.47	48.82	150	680	150	680	0.898	15.56
	Not FRL Elig.	35484	479.40	49.58	150	680	150	680	0.887	16.64
	Female	28286	474.39	52.11	150	680	150	680	0.899	16.52
	Male	29472	457.93	51.15	150	680	150	680	0.906	15.66
	Lang. Prof. NA	48325	471.65	50.72	150	680	150	680	0.898	16.22
	Lang. Prof. NEP	2364	393.83	51.54	150	680	150	581	0.881	17.77
	Lang. Prof. LEP	4774	441.02	35.54	150	680	285	624	0.840	14.24
	Lang. Prof. FEP	2290	472.97	43.09	150	680	205	680	0.858	16.22
	Not Mig. or Immig.	56592	466.73	51.83	150	680	150	680	0.903	16.10
	Mig. or Immig.	1146	429.33	60.54	150	680	150	581	0.921	16.97
4	No Disability	52003	493.05	49.49	190	730	190	730	0.908	14.98
	Disability	5954	439.63	45.32	190	730	190	694	0.897	14.52
	No IEP	52004	493.04	49.50	190	730	190	730	0.908	14.98
	IEP	5938	439.58	45.32	190	730	190	694	0.897	14.53
	No Accommodation	46925	496.30	49.12	190	730	190	730	0.907	14.95
	Accommodation	11032	450.40	45.48	190	730	190	730	0.897	14.59
	Am. Indian/AK Nat.	672	468.24	49.37	190	730	227	632	0.914	14.51
	Asian/Pac. Isl.	2125	502.33	52.24	190	730	225	730	0.914	15.32
	Black	3532	468.57	50.10	190	730	190	730	0.916	14.53
	Hispanic	16943	461.70	46.75	190	730	190	704	0.906	14.31
	White	34685	501.59	48.44	190	730	247	730	0.901	15.22
	Free Lunch Elig.	18179	459.64	45.98	190	730	190	730	0.904	14.22
	Reduced Lunch Elig.	4463	476.95	44.83	190	730	238	704	0.901	14.08
	Not FRL Elig.	35289	503.28	48.79	190	730	190	730	0.902	15.28
	Female	28519	496.49	52.93	190	730	190	730	0.917	15.24
	Male	29434	478.90	48.94	190	730	190	730	0.916	14.20
	Lang. Prof. NA	47567	495.14	49.50	190	730	190	730	0.908	14.97
	Lang. Prof. NEP	2159	406.36	42.17	190	730	190	576	0.834	17.19
	Lang. Prof. LEP	4931	449.94	32.91	190	730	284	645	0.839	13.19
	Lang. Prof. FEP	3296	487.55	39.68	190	730	317	730	0.862	14.72
	Not Mig. or Immig.	56886	488.44	51.24	190	730	190	730	0.916	14.84
	Mig. or Immig.	1055	440.17	54.06	190	730	190	625	0.918	15.48



**Table 223. Subgroup Reliability for the CSAP Writing Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
5	No Disability	51190	516.30	55.63	220	780	220	780	0.906	17.09
	Disability	5829	453.93	51.77	220	780	220	655	0.893	16.92
	No IEP	51190	516.29	55.63	220	780	220	780	0.906	17.09
	IEP	5816	453.88	51.79	220	780	220	655	0.893	16.92
	No Accommodation	47399	519.19	55.01	220	780	220	780	0.904	17.01
	Accommodation	9620	464.27	52.84	220	780	220	741	0.894	17.20
	Am. Indian/AK Nat.	664	488.91	57.20	220	780	303	711	0.917	16.50
	Asian/Pac. Isl.	2082	530.38	59.65	220	780	220	780	0.908	18.06
	Black	3256	487.89	54.96	220	780	220	679	0.912	16.33
	Hispanic	16275	481.02	54.84	220	780	220	768	0.905	16.89
	White	34739	524.71	54.22	220	780	220	780	0.900	17.11
	Free Lunch Elig.	17190	477.62	53.51	220	780	220	734	0.903	16.65
	Reduced Lunch Elig.	4331	497.97	51.52	220	780	220	709	0.897	16.52
	Not FRL Elig.	35472	527.05	54.32	220	780	220	780	0.899	17.25
	Female	27959	518.88	58.01	220	780	220	780	0.911	17.32
	Male	29053	501.31	57.46	220	780	220	780	0.917	16.53
	Lang. Prof. NA	47114	518.03	55.65	220	780	220	780	0.907	16.96
	Lang. Prof. NEP	1481	408.69	56.36	220	780	220	625	0.837	22.73
	Lang. Prof. LEP	4628	463.88	39.95	220	780	220	709	0.847	15.64
	Lang. Prof. FEP	3790	504.93	46.65	220	780	318	734	0.875	16.46
	Not Mig. or Immig.	55896	511.07	57.64	220	780	220	780	0.914	16.93
	Mig. or Immig.	1103	452.25	67.05	220	780	220	679	0.914	19.61
6	No Disability	51230	533.29	59.51	230	840	230	840	0.903	18.52
	Disability	5671	458.75	56.44	230	840	230	735	0.889	18.79
	No IEP	51224	533.29	59.51	230	840	230	840	0.903	18.53
	IEP	5663	458.73	56.46	230	840	230	735	0.889	18.79
	No Accommodation	49167	534.71	58.86	230	840	230	840	0.902	18.47
	Accommodation	7734	469.58	61.41	230	840	230	805	0.901	19.33
	Am. Indian/AK Nat.	698	505.10	59.29	230	840	309	688	0.910	17.82
	Asian/Pac. Isl.	2021	545.38	67.20	230	840	243	840	0.919	19.10
	Black	3423	500.10	61.70	230	840	230	796	0.912	18.26
	Hispanic	15733	495.39	58.72	230	840	230	796	0.905	18.11
	White	35023	541.36	59.17	230	840	230	840	0.902	18.56
	Free Lunch Elig.	16585	490.85	58.29	230	840	230	777	0.904	18.08
	Reduced Lunch Elig.	4266	512.09	56.41	230	840	278	796	0.902	17.63
	Not FRL Elig.	36030	543.62	59.00	230	840	230	840	0.899	18.76
	Female	27847	537.58	62.09	230	840	230	840	0.908	18.81
	Male	29050	514.63	62.36	230	840	230	840	0.918	17.90
	Lang. Prof. NA	47530	533.97	60.80	230	840	230	840	0.908	18.41
	Lang. Prof. NEP	1178	411.71	61.02	230	840	230	577	0.854	23.30
	Lang. Prof. LEP	3909	469.94	42.19	230	840	230	657	0.837	17.02
	Lang. Prof. FEP	4280	518.32	47.96	230	840	302	840	0.860	17.97
	Not Mig. or Immig.	55861	527.16	62.35	230	840	230	840	0.913	18.37
	Mig. or Immig.	1025	455.63	73.30	230	840	230	739	0.915	21.37



**Table 223. Subgroup Reliability for the CSAP Writing Tests (Continued)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
7	No Disability	51351	558.62	66.10	240	890	240	890	0.899	21.04
	Disability	5462	474.85	63.67	240	890	240	803	0.878	22.26
	No IEP	51344	558.62	66.10	240	890	240	890	0.899	21.03
	IEP	5454	474.79	63.62	240	890	240	803	0.877	22.27
	No Accommodation	50959	558.26	66.03	240	890	240	890	0.899	20.98
	Accommodation	5854	483.54	71.15	240	890	240	849	0.897	22.87
	Am. Indian/AK Nat.	649	528.94	69.63	240	890	279	787	0.904	21.62
	Asian/Pac. Isl.	2039	573.49	75.14	240	890	240	849	0.914	22.06
	Black	3385	523.24	67.83	240	890	240	787	0.902	21.24
	Hispanic	15338	514.72	64.91	240	890	240	755	0.895	21.03
	White	35398	567.79	65.57	240	890	240	890	0.898	20.96
	Free Lunch Elig.	15713	509.38	64.65	240	890	240	867	0.892	21.27
	Reduced Lunch Elig.	4152	535.07	62.37	240	890	240	761	0.890	20.69
	Not FRL Elig.	36923	569.85	65.38	240	890	240	890	0.897	20.97
	Female	27604	566.51	68.19	240	890	240	890	0.904	21.08
	Male	29203	535.50	69.02	240	890	240	890	0.909	20.78
	Lang. Prof. NA	48099	559.46	67.11	240	890	240	890	0.903	20.94
	Lang. Prof. NEP	1091	416.56	66.78	240	890	240	657	0.819	28.40
	Lang. Prof. LEP	3322	482.72	46.68	240	890	240	695	0.813	20.17
	Lang. Prof. FEP	4297	537.43	55.02	240	890	261	849	0.862	20.45
	Not Mig. or Immig.	55763	552.10	69.19	240	890	240	890	0.908	21.00
	Mig. or Immig.	1032	468.09	82.10	240	890	240	699	0.911	24.44
8	No Disability	51547	568.35	71.15	250	910	250	910	0.905	21.94
	Disability	5111	473.91	66.90	250	910	250	798	0.871	24.00
	No IEP	51543	568.34	71.18	250	910	250	910	0.905	21.94
	IEP	5099	473.95	66.75	250	910	250	798	0.871	23.98
	No Accommodation	51893	566.95	71.50	250	910	250	910	0.907	21.85
	Accommodation	4765	482.29	77.63	250	910	250	910	0.897	24.93
	Am. Indian/AK Nat.	738	535.61	71.50	250	910	250	769	0.903	22.31
	Asian/Pac. Isl.	1881	586.36	82.14	250	910	258	910	0.917	23.61
	Black	3462	532.60	71.34	250	910	250	910	0.904	22.05
	Hispanic	15113	521.66	69.64	250	910	250	910	0.898	22.21
	White	35458	577.87	71.25	250	910	250	910	0.907	21.76
	Free Lunch Elig.	15324	516.13	69.69	250	910	250	910	0.896	22.47
	Reduced Lunch Elig.	3987	542.64	67.81	250	910	250	788	0.898	21.67
	Not FRL Elig.	37323	579.64	70.84	250	910	250	910	0.905	21.80
	Female	27716	576.85	73.77	250	910	250	910	0.911	21.96
	Male	28933	543.54	74.06	250	910	250	910	0.913	21.87
	Lang. Prof. NA	48246	568.76	72.87	250	910	250	910	0.911	21.79
	Lang. Prof. NEP	862	410.46	69.85	250	910	250	621	0.792	31.86
	Lang. Prof. LEP	2854	483.10	50.22	250	910	250	677	0.816	21.54
	Lang. Prof. FEP	4689	542.20	59.00	250	910	298	910	0.866	21.57
	Not Mig. or Immig.	55699	561.36	74.68	250	910	250	910	0.914	21.94
	Mig. or Immig.	940	470.05	85.05	250	910	250	708	0.903	26.51



**Table 223. Subgroup Reliability for the CSAP Writing Tests (Concluded)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
9	No Disability	54196	568.45	75.17	260	930	260	930	0.910	22.53
	Disability	4880	475.04	65.00	260	930	260	878	0.866	23.76
	No IEP	54188	568.45	75.19	260	930	260	930	0.910	22.53
	IEP	4872	475.08	64.95	260	930	260	878	0.866	23.75
	No Accommodation	55520	566.40	75.81	260	930	260	930	0.911	22.56
	Accommodation	3556	472.31	69.63	260	930	260	878	0.877	24.42
	Am. Indian/AK Nat.	736	535.64	72.25	260	930	260	795	0.908	21.90
	Asian/Pac. Isl.	1810	576.77	84.24	260	930	260	930	0.920	23.86
	Black	3621	523.89	72.99	260	930	260	821	0.903	22.78
	Hispanic	15700	520.06	72.01	260	930	260	897	0.901	22.68
	White	37208	581.21	73.52	260	930	260	930	0.906	22.54
	Free Lunch Elig.	14365	514.40	70.28	260	930	260	930	0.895	22.72
	Reduced Lunch Elig.	3681	540.70	66.77	260	930	260	797	0.893	21.87
	Not FRL Elig.	41010	578.79	75.34	260	930	260	930	0.911	22.54
	Female	28742	577.45	76.68	260	930	260	930	0.913	22.64
	Male	30328	544.91	77.31	260	930	260	930	0.917	22.27
	Lang. Prof. NA	50924	569.82	75.52	260	930	260	930	0.911	22.49
	Lang. Prof. NEP	1080	409.35	70.52	260	930	260	635	0.802	31.35
	Lang. Prof. LEP	2574	483.86	52.18	260	930	260	821	0.813	22.54
	Lang. Prof. FEP	4493	538.29	60.83	260	930	260	915	0.872	21.75
	Not Mig. or Immig.	57974	562.68	77.21	260	930	260	930	0.915	22.52
	Mig. or Immig.	1080	457.60	88.40	260	930	260	730	0.908	26.86
10	No Disability	51028	580.32	83.12	270	950	270	950	0.913	24.56
	Disability	4278	472.13	73.53	270	950	270	837	0.875	26.05
	No IEP	51017	580.33	83.12	270	950	270	950	0.913	24.56
	IEP	4264	471.89	73.41	270	950	270	837	0.874	26.07
	No Accommodation	52504	577.18	84.68	270	950	270	950	0.916	24.54
	Accommodation	2802	474.01	78.16	270	950	270	861	0.883	26.78
	Am. Indian/AK Nat.	635	544.82	83.69	270	950	270	877	0.911	24.98
	Asian/Pac. Isl.	1821	589.03	89.25	270	950	270	935	0.914	26.11
	Black	3363	532.72	81.55	270	950	270	935	0.909	24.56
	Hispanic	13154	525.74	78.32	270	950	270	866	0.900	24.75
	White	36324	591.94	83.14	270	950	270	950	0.914	24.40
	Free Lunch Elig.	11063	517.69	78.31	270	950	270	878	0.898	24.97
	Reduced Lunch Elig.	3096	547.89	77.06	270	950	270	932	0.902	24.14
	Not FRL Elig.	41113	588.40	83.97	270	950	270	950	0.915	24.46
	Female	27359	590.12	83.34	270	950	270	950	0.913	24.55
	Male	27931	554.18	87.52	270	950	270	950	0.922	24.43
	Lang. Prof. NA	48662	580.45	84.87	270	950	270	950	0.917	24.43
	Lang. Prof. NEP	836	416.04	72.77	270	950	270	694	0.812	31.51
	Lang. Prof. LEP	2117	486.90	57.35	270	950	270	766	0.824	24.04
	Lang. Prof. FEP	3682	544.01	69.81	270	950	270	950	0.880	24.16
	Not Mig. or Immig.	54413	573.72	86.16	270	950	270	950	0.919	24.53
	Mig. or Immig.	865	462.04	90.77	270	950	270	715	0.899	28.78



**Table 224. Subgroup Reliability for the CSAP Science Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
5	No Disability	51205	499.25	60.21	300	900	300	900	0.917	17.34
	Disability	5848	440.17	67.31	300	900	300	649	0.923	18.68
	No IEP	51211	499.25	60.21	300	900	300	900	0.917	17.34
	IEP	5829	440.06	67.33	300	900	300	649	0.923	18.69
	No Accommodation	49061	502.55	58.79	300	900	300	900	0.914	17.23
	Accommodation	7992	435.74	61.45	300	900	300	653	0.907	18.77
	Am. Indian/AK Nat.	664	474.38	63.79	300	900	300	667	0.926	17.40
	Asian/Pac. Isl.	2090	506.93	61.11	300	900	300	694	0.919	17.39
	Black	3257	459.20	60.96	300	900	300	635	0.916	17.68
	Hispanic	16296	454.58	60.56	300	900	300	726	0.911	18.06
	White	34743	514.03	54.79	300	900	300	900	0.902	17.12
	Free Lunch Elig.	17227	453.12	60.40	300	900	300	704	0.911	18.04
	Reduced Lunch Elig.	4342	479.29	55.84	300	900	300	696	0.904	17.31
	Not FRL Elig.	35462	514.37	55.58	300	900	300	900	0.905	17.13
	Female	27964	489.61	61.73	300	900	300	748	0.922	17.29
	Male	29086	496.64	65.07	300	900	300	900	0.927	17.56
	Lang. Prof. NA	47114	504.04	58.51	300	900	300	900	0.914	17.20
	Lang. Prof. NEP	1503	377.22	55.15	300	900	300	567	0.867	20.08
	Lang. Prof. LEP	4635	432.24	48.34	300	900	300	634	0.858	18.22
	Lang. Prof. FEP	3795	478.89	51.32	300	900	300	726	0.890	17.03
	Not Mig. or Immig.	55928	494.53	62.79	300	900	300	900	0.923	17.41
	Mig. or Immig.	1111	426.20	65.97	300	900	300	662	0.916	19.12
8	No Disability	51583	501.28	59.15	300	900	300	704	0.919	16.86
	Disability	5122	430.89	70.01	300	900	300	649	0.907	21.32
	No IEP	51586	501.26	59.17	300	900	300	704	0.919	16.86
	IEP	5105	430.86	69.99	300	900	300	649	0.907	21.32
	No Accommodation	52118	501.20	59.13	300	900	300	704	0.919	16.87
	Accommodation	4587	423.56	67.71	300	900	300	649	0.895	21.91
	Am. Indian/AK Nat.	740	476.80	62.81	300	900	300	656	0.915	18.27
	Asian/Pac. Isl.	1885	510.36	60.25	300	900	300	678	0.922	16.83
	Black	3460	459.40	63.57	300	900	300	631	0.904	19.74
	Hispanic	15130	456.75	62.31	300	900	300	698	0.899	19.81
	White	35488	514.22	54.61	300	900	300	704	0.912	16.23
	Free Lunch Elig.	15338	453.92	63.30	300	900	300	679	0.899	20.09
	Reduced Lunch Elig.	3997	480.78	57.73	300	900	300	638	0.902	18.11
	Not FRL Elig.	37344	513.29	55.39	300	900	300	704	0.914	16.27
	Female	27743	491.68	60.57	300	900	300	685	0.917	17.43
	Male	28961	498.03	66.04	300	900	300	704	0.929	17.61
	Lang. Prof. NA	48304	503.54	59.28	300	900	300	704	0.919	16.92
	Lang. Prof. NEP	873	371.17	59.37	300	900	300	551	0.806	26.12
	Lang. Prof. LEP	2847	422.89	54.07	300	900	300	590	0.820	22.96
	Lang. Prof. FEP	4676	472.85	53.70	300	900	300	654	0.892	17.65
	Not Mig. or Immig.	55750	496.16	62.66	300	900	300	704	0.923	17.41
	Mig. or Immig.	937	421.58	70.27	300	900	300	607	0.895	22.82



**Table 224. Subgroup Reliability for the CSAP Science Tests (Concluded)**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
10	No Disability	51261	502.72	57.91	300	900	300	716	0.922	16.17
	Disability	4324	429.37	68.23	300	900	300	650	0.908	20.70
	No IEP	51258	502.72	57.91	300	900	300	716	0.922	16.17
	IEP	4314	429.33	68.26	300	900	300	650	0.908	20.70
	No Accommodation	52687	501.17	58.91	300	900	300	716	0.923	16.31
	Accommodation	2898	421.45	67.44	300	900	300	629	0.902	21.14
	Am. Indian/AK Nat.	633	477.72	61.59	300	900	300	610	0.915	17.93
	Asian/Pac. Isl.	1828	507.37	63.41	300	900	300	669	0.933	16.39
	Black	3398	462.13	63.81	300	900	300	654	0.908	19.31
	Hispanic	13290	458.85	61.99	300	900	300	643	0.904	19.22
	White	36434	514.01	53.53	300	900	300	716	0.916	15.49
	Free Lunch Elig.	11163	455.26	62.50	300	900	300	651	0.902	19.58
	Reduced Lunch Elig.	3117	481.14	57.21	300	900	300	639	0.906	17.57
	Not FRL Elig.	41276	509.53	56.74	300	900	300	716	0.922	15.89
	Female	27470	495.60	58.23	300	900	300	716	0.919	16.56
	Male	28107	498.42	65.40	300	900	300	695	0.934	16.77
	Lang. Prof. NA	48903	504.01	58.17	300	900	300	716	0.923	16.15
	Lang. Prof. NEP	854	370.10	57.37	300	900	300	531	0.784	26.64
	Lang. Prof. LEP	2119	427.49	53.23	300	900	300	577	0.832	21.82
	Lang. Prof. FEP	3705	473.77	54.10	300	900	300	650	0.897	17.32
	Not Mig. or Immig.	54698	498.38	60.85	300	900	300	716	0.926	16.53
	Mig. or Immig.	872	412.42	72.20	300	900	300	625	0.900	22.81



**Table 225. Subgroup Reliability for the CSAP Spanish Reading Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
3	No Disability	1380	522.73	42.49	300	740	300	719	0.866	15.53
	Disability	110	465.98	52.71	300	740	300	578	0.842	20.92
	No IEP	1380	522.73	42.49	300	740	300	719	0.866	15.53
	IEP	110	465.98	52.71	300	740	300	578	0.842	20.92
	No Accommodation	1153	523.31	44.83	300	740	300	719	0.872	16.05
	Accommodation	337	502.21	45.29	300	740	300	618	0.876	15.97
	Black	2*	.	.	.	.	.	.	.	.
	Hispanic	1482	518.51	45.71	300	740	300	719	0.878	15.96
	White	6*	.	.	.	.	.	.	.	.
	Free Lunch Elig.	1278	518.21	45.67	300	740	300	719	0.878	15.97
	Reduced Lunch Elig.	92	522.40	41.16	300	740	419	681	0.876	14.48
	Not FRL Elig.	120	519.08	50.30	300	740	300	625	0.888	16.87
	Female	713	526.23	41.21	300	740	300	719	0.865	15.12
	Male	777	511.48	48.57	300	740	300	681	0.883	16.60
	Lang. Prof. NA	8*	.	.	.	.	.	.	.	.
	Lang. Prof. NEP	928	505.97	44.90	300	740	300	655	0.868	16.32
	Lang. Prof. LEP	515	539.13	37.67	300	740	300	719	0.834	15.36
	Lang. Prof. FEP	39	554.38	32.18	300	740	485	642	0.741	16.37
	Not Mig. or Immig.	1254	517.25	45.66	300	740	300	719	0.877	15.99
	Mig. or Immig.	236	525.38	45.91	300	740	300	655	0.882	15.75
4	No Disability	170	520.16	42.77	300	790	356	607	0.918	12.28
	Disability	6*	.	.	.	.	.	.	.	.
	No IEP	170	520.16	42.77	300	790	356	607	0.918	12.28
	IEP	6*	.	.	.	.	.	.	.	.
	No Accommodation	137	522.33	39.27	300	790	415	606	0.915	11.43
	Accommodation	39	506.72	53.31	300	790	356	607	0.928	14.34
	Hispanic	173	517.95	42.73	300	790	356	606	0.917	12.31
	White	3*	.	.	.	.	.	.	.	.
	Free Lunch Elig.	145	516.61	44.15	300	790	356	607	0.922	12.34
	Reduced Lunch Elig.	8*	.	.	.	.	.	.	.	.
	Not FRL Elig.	23	530.87	32.87	300	790	453	582	0.891	10.86
	Female	90	524.93	39.42	300	790	433	607	0.913	11.62
	Male	86	512.52	46.02	300	790	356	601	0.923	12.77
	Lang. Prof. NA	1*	.	.	.	.	.	.	.	.
	Lang. Prof. NEP	159	518.42	42.14	300	790	356	607	0.912	12.47
	Lang. Prof. LEP	14*	.	.	.	.	.	.	.	.
	Lang. Prof. FEP	2*	.	.	.	.	.	.	.	.
	Not Mig. or Immig.	85	519.36	43.81	300	790	414	606	0.929	11.69
	Mig. or Immig.	91	518.41	42.68	300	790	356	607	0.908	12.93

\*Statistics are not provided for groups consisting of fewer than 16 students.



**Table 226. Subgroup Reliability for the CSAP Spanish Writing Tests**

Grade	Subgroup	N	Mean	STD	Loss	Hoss	Min.	Max.	Alpha	SEM
3	No Disability	1370	508.06	68.12	250	750	250	750	0.908	20.61
	Disability	111	420.13	71.65	250	750	250	612	0.895	23.21
	No IEP	1370	508.06	68.12	250	750	250	750	0.908	20.61
	IEP	111	420.13	71.65	250	750	250	612	0.895	23.21
	No Accommodation	1170	509.27	69.56	250	750	250	750	0.913	20.57
	Accommodation	311	472.14	74.39	250	750	250	672	0.920	20.98
	Black	2*	.	.	.	.	.	.	.	.
	Hispanic	1473	501.50	72.02	250	750	250	750	0.919	20.56
	White	6*	.	.	.	.	.	.	.	.
	Free Lunch Elig.	1275	501.18	71.54	250	750	250	750	0.918	20.45
	Reduced Lunch Elig.	91	514.52	71.16	250	750	295	710	0.919	20.20
	Not FRL Elig.	115	494.41	79.12	250	750	250	675	0.923	21.89
	Female	712	517.05	70.78	250	750	250	750	0.913	20.89
	Male	769	487.05	70.49	250	750	250	675	0.917	20.25
	Lang. Prof. NA	9*	.	.	.	.	.	.	.	.
	Lang. Prof. NEP	922	479.91	68.62	250	750	250	715	0.912	20.38
	Lang. Prof. LEP	511	536.96	61.63	250	750	250	750	0.877	21.58
	Lang. Prof. FEP	39	558.49	54.49	250	750	464	673	.	.
	Not Mig. or Immig.	1245	499.17	71.46	250	750	250	715	0.919	20.38
	Mig. or Immig.	236	513.63	74.86	250	750	250	750	0.917	21.54
4	No Disability	169	501.10	37.55	300	790	405	600	0.848	14.65
	Disability	5*	.	.	.	.	.	.	.	.
	No IEP	169	501.10	37.55	300	790	405	600	0.848	14.65
	IEP	5*	.	.	.	.	.	.	.	.
	No Accommodation	130	501.65	36.14	300	790	420	599	0.838	14.53
	Accommodation	44	493.14	44.87	300	790	404	600	0.878	15.65
	Hispanic	171	498.64	38.03	300	790	404	599	0.845	14.96
	White	3*	.	.	.	.	.	.	.	.
	Free Lunch Elig.	142	496.89	40.07	300	790	404	600	0.858	15.08
	Reduced Lunch Elig.	8*	.	.	.	.	.	.	.	.
	Not FRL Elig.	24	515.17	28.57	300	790	458	568	0.774	13.59
	Female	89	508.44	36.27	300	790	414	600	0.844	14.32
	Male	85	490.14	38.91	300	790	404	568	0.845	15.33
	Lang. Prof. NA	2*	.	.	.	.	.	.	.	.
	Lang. Prof. NEP	158	498.01	38.30	300	790	404	600	0.847	15.01
	Lang. Prof. LEP	13*	.	.	.	.	.	.	.	.
	Lang. Prof. FEP	1*	.	.	.	.	.	.	.	.
	Not Mig. or Immig.	84	499.64	38.54	300	790	404	599	0.846	15.11
	Mig. or Immig.	90	499.37	38.83	300	790	405	600	0.856	14.73

\*Statistics are not provided for groups consisting of fewer than 16 students.



**Table 227. Scale Scores by Accommodation and Disability Classification**

Content Area	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	SD	N	Mean	SD
Reading	3	No Disability	45452	571.99	66.70	6510	501.21	84.13
			2010	518.15	99.62	3708	440.72	114.03
		Disability						
		No IEP	45437	572.00	66.70	6514	501.20	84.11
			1982	517.15	99.53	3697	440.64	114.01
		IEP						
	4	No Disability	45359	599.72	48.92	6689	553.12	61.21
			1826	551.83	76.31	4129	503.54	86.72
		Disability						
		No IEP	45355	599.72	48.92	6694	553.10	61.20
			1817	551.66	76.36	4122	503.46	86.76
		IEP						
	5	No Disability	45993	628.41	56.79	5202	569.66	68.18
			1896	565.52	85.12	3918	518.81	88.42
		Disability						
		No IEP	45989	628.41	56.79	5206	569.64	68.15
			1890	565.38	85.20	3911	518.75	88.48
		IEP						
	6	No Disability	47131	640.41	54.39	4085	584.58	68.52
			1946	577.09	71.60	3688	537.89	77.06
		Disability						
		No IEP	47122	640.41	54.39	4088	584.54	68.51
			1941	577.06	71.64	3685	537.89	77.09
		IEP						
	7	No Disability	48707	649.13	55.63	2632	590.84	69.96
			2418	582.92	68.94	3023	548.39	72.34
		Disability						
		No IEP	48699	649.13	55.64	2633	590.88	69.94
			2412	582.85	68.92	3021	548.35	72.33
		IEP						
	8	No Disability	49442	661.48	54.38	2067	603.62	69.36
			2497	589.15	72.75	2589	562.12	72.54
		Disability						
		No IEP	49434	661.48	54.38	2071	603.50	69.74
			2489	589.14	72.75	2585	562.15	72.29
		IEP						
	9	No Disability	53003	668.08	52.38	1141	603.98	60.49
			2700	600.77	62.25	2153	584.69	62.87
		Disability						
		No IEP	52996	668.07	52.42	1140	603.92	60.53
			2692	600.94	62.05	2153	584.71	62.87
		IEP						
	10	No Disability	50075	688.79	55.88	922	631.08	65.38
			2504	614.86	69.09	1782	601.98	62.56
		Disability						
		No IEP	50063	688.80	55.88	923	631.05	65.36
			2492	614.65	69.11	1780	601.96	62.59
		IEP						



**Table 227. Scale Scores by Accommodation and Disability Classification (Continued)**

Content Area	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	SD	N	Mean	SD
Writing	3	No Disability	46115	475.74	49.07	5933	434.78	42.66
		Disability	2000	437.11	53.56	3715	410.30	43.21
		No IEP	46108	475.74	49.08	5937	434.78	42.65
		IEP	1984	436.95	53.45	3710	410.28	43.23
	4	No Disability	45136	497.98	48.28	6867	460.65	44.94
		Disability	1789	453.91	51.10	4165	433.50	41.11
		No IEP	45131	497.97	48.28	6873	460.64	44.93
		IEP	1780	453.86	51.12	4158	433.47	41.12
	5	No Disability	45605	521.10	54.05	5585	477.04	52.77
		Disability	1794	470.43	56.76	4035	446.59	47.59
		No IEP	45602	521.10	54.05	5588	477.03	52.76
		IEP	1788	470.32	56.81	4028	446.58	47.62
	6	No Disability	47275	537.07	57.57	3955	488.11	63.58
		Disability	1892	475.84	60.10	3779	450.19	52.47
		No IEP	47266	537.08	57.57	3958	488.07	63.57
		IEP	1887	475.79	60.15	3776	450.20	52.49
	7	No Disability	48622	561.56	64.19	2729	506.14	76.77
		Disability	2337	489.63	66.43	3125	463.80	59.18
		No IEP	48614	561.57	64.19	2730	506.14	76.75
		IEP	2331	489.52	66.32	3123	463.79	59.19
	8	No Disability	49449	570.95	69.25	2098	507.24	86.43
		Disability	2444	486.19	68.46	2667	462.66	63.39
		No IEP	49441	570.95	69.25	2102	507.08	86.66
		IEP	2436	486.23	68.41	2663	462.73	63.16
	9	No Disability	52845	570.69	73.74	1351	480.88	78.30
		Disability	2675	481.62	65.74	2205	467.06	63.19
		No IEP	52840	570.68	73.76	1348	480.91	78.37
		IEP	2665	481.72	65.67	2207	467.05	63.16
	10	No Disability	49961	582.22	81.99	1067	491.37	87.20
		Disability	2543	478.13	75.30	1735	463.34	69.96
		No IEP	49949	582.23	81.98	1068	491.38	87.14
		IEP	2532	477.75	75.10	1732	463.32	70.00



**Table 227. Scale Scores by Accommodation and Disability Classification (Continued)**

Content Area	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	SD	N	Mean	SD
Mathematics	3	No Disability	46834	481.47	85.80	6530	403.81	77.47
		Disability	1980	429.96	93.49	3884	367.29	80.94
		No IEP	46831	481.47	85.80	6533	403.85	77.43
		IEP	1960	429.84	93.67	3880	367.24	80.92
	4	No Disability	46542	504.23	71.29	5687	437.58	68.33
		Disability	1876	454.31	83.76	4111	398.76	74.01
		No IEP	46540	504.23	71.29	5690	437.59	68.34
		IEP	1865	454.16	83.82	4107	398.70	73.98
	5	No Disability	46249	533.81	66.23	4990	476.95	62.51
		Disability	1795	483.80	75.93	4062	435.66	66.15
		No IEP	46244	533.81	66.23	4996	476.93	62.51
		IEP	1789	483.70	75.93	4055	435.62	66.16
	6	No Disability	47762	550.29	67.44	3521	488.89	70.01
		Disability	1906	484.47	81.17	3786	441.23	73.79
		No IEP	47755	550.29	67.45	3529	488.77	70.05
		IEP	1899	484.55	80.98	3777	441.21	73.79
	7	No Disability	48887	559.51	65.79	2515	505.48	75.25
		Disability	2293	490.76	79.01	3185	450.45	74.60
		No IEP	48878	559.51	65.79	2515	505.48	75.25
		IEP	2285	490.47	78.97	3184	450.48	74.61
	8	No Disability	49230	578.86	66.17	2381	527.29	77.91
		Disability	2373	500.46	80.33	2734	466.69	79.15
		No IEP	49217	578.87	66.17	2385	527.24	77.96
		IEP	2369	500.50	80.31	2730	466.64	79.11
	9	No Disability	52990	585.65	65.25	1381	518.86	76.07
		Disability	2584	506.32	74.40	2341	486.62	73.88
		No IEP	52985	585.65	65.26	1381	518.88	76.01
		IEP	2572	506.30	74.33	2339	486.58	73.90
	10	No Disability	50125	594.76	67.84	1145	527.00	78.13
		Disability	2361	506.62	76.93	1937	485.86	73.62
		No IEP	50108	594.77	67.84	1145	527.10	77.99
		IEP	2358	506.55	76.98	1936	485.87	73.64



**Table 227. Scale Scores by Accommodation and Disability Classification (Concluded)**

Content Area	Grade	Disability Classification	Accommodation					
			No Accommodation			Accommodation		
			N	Mean	SD	N	Mean	SD
Science	5	No Disability	47142	504.10	57.80	4063	442.93	59.00
		Disability	1919	464.48	69.23	3929	428.30	63.04
		No IEP	47142	504.10	57.80	4069	442.99	58.99
	8	IEP	1908	464.33	69.34	3921	428.25	63.05
		No Disability	49686	503.84	57.21	1897	434.16	68.90
		Disability	2432	447.27	70.83	2690	416.08	65.86
	10	No IEP	49685	503.83	57.23	1901	434.23	68.91
		IEP	2419	447.36	70.79	2686	416.01	65.83
		No Disability	50192	504.33	56.54	1069	426.97	69.93
Spanish Reading	3	Disability	2495	437.54	68.88	1829	418.22	65.74
		No IEP	50187	504.34	56.53	1071	427.02	69.83
		IEP	2489	437.51	68.89	1825	418.18	65.79
	4	No Disability	1112	525.29	42.63	268	512.10	40.27
		Disability	41	469.63	65.88	69	463.81	43.44
		No IEP	1112	525.29	42.63	268	512.10	40.27
	4	IEP	41	469.63	65.88	69	463.81	43.44
		No Disability	136	522.68	39.20	34	510.09	54.35
		Disability	1*	.	.	5*	.	.
Spanish Writing	3	No IEP	136	522.68	39.20	34	510.09	54.35
		IEP	1*	.	.	5*	.	.
	4	No Disability	1131	512.08	67.27	239	489.06	69.01
		Disability	39	427.85	85.08	72	415.94	63.47
		No IEP	1131	512.08	67.27	239	489.06	69.01
	4	IEP	39	427.85	85.08	72	415.94	63.47
		No Disability	130	501.65	36.14	39	499.26	42.34
		Disability	.	.	.	5*	.	.
		No IEP	130	501.65	36.14	39	499.26	42.34
		IEP	.	.	.	5*	.	.

\*Statistics are not provided for groups consisting of fewer than 16 students.



**Table 228. Overall Estimates of Standard Error of Measurement**

<b>Content Area</b>	<b>Grade</b>	<b>Standard Error of Measurement</b>
Reading	3	26.18
Reading	4	16.05
Reading	5	19.14
Reading	6	17.88
Reading	7	18.12
Reading	8	16.71
Reading	9	14.85
Reading	10	16.90
Spanish Reading	3	16.32
Spanish Reading	4	12.15
Writing	3	16.46
Writing	4	15.04
Writing	5	17.42
Writing	6	18.72
Writing	7	21.19
Writing	8	22.38
Writing	9	22.67
Writing	10	25.29
Spanish Writing	3	20.84
Spanish Writing	4	14.89
Mathematics	3	28.04
Mathematics	4	19.14
Mathematics	5	17.23
Mathematics	6	18.81
Mathematics	7	19.55
Mathematics	8	18.85
Mathematics	9	18.49
Mathematics	10	20.30
Science	5	17.35
Science	8	17.33
Science	10	16.97



**Table 229. Reading Scale Scores and Associated Standard Errors**

RD 3		RD 4		RD 5		RD 6		RD 7		RD 8		RD 9		RD 10	
SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE
150	250														
175	225	180	208												
200	200	200	188	220	173										
225	175	225	163	225	169										
250	150	250	138	250	148	260	164								
275	126	275	116	275	128	275	149								
300	105	300	97	300	111	300	124	300	110						
325	86	325	80	325	94	325	103	325	93	330	114				
350	68	350	66	350	79	350	85	350	79	350	99	350	99	370	119
375	54	375	53	375	65	375	68	375	66	375	82	375	82	375	115
400	42	400	43	400	52	400	54	400	54	400	68	400	68	400	93
425	32	425	33	425	40	425	42	425	43	425	56	425	56	425	75
450	25	450	26	450	30	450	31	450	34	450	45	450	46	450	60
475	21	475	20	475	23	475	24	475	27	475	35	475	37	475	48
500	18	500	16	500	18	500	19	500	22	500	27	500	30	500	38
525	17	525	13	525	15	525	16	525	18	525	21	525	24	525	29
550	17	550	11	550	14	550	14	550	16	550	17	550	19	550	22
575	18	575	11	575	13	575	14	575	15	575	14	575	15	575	17
600	21	600	11	600	13	600	14	600	15	600	13	600	11	600	14
625	24	625	13	625	14	625	14	625	15	625	13	625	10	625	13
650	28	650	15	650	16	650	15	650	15	650	13	650	11	650	13
675	34	675	19	675	19	675	16	675	16	675	14	675	12	675	13
700	40	700	23	700	22	700	18	700	17	700	15	700	14	700	13
725	48	725	29	725	27	725	20	725	19	725	15	725	15	725	14
750	57	750	35	750	31	750	23	750	21	750	17	750	17	750	16
775	68	775	42	775	36	775	25	775	24	775	20	775	20	775	19
795	78	800	50	800	42	800	29	800	27	800	25	800	24	800	22
		825	58	825	48	825	35	825	32	825	32	825	30	825	27
		850	68	850	55	850	43	850	39	850	40	850	37	850	32
		875	79	875	62	875	52	875	46	875	49	875	46	875	39
		900	91	900	71	900	63	900	55	900	60	900	56	900	47
		925	106	925	80	925	75	925	65	925	73	925	67	925	56
		940	116	950	91	950	88	950	77	950	89	950	81	950	66
				955	93	970	101	975	90	975	108	975	97	975	78
								980	93	990	121	995	111	999	91



**Table 230. Writing Scale Scores and Associated Standard Errors**

WR 3		WR 4		WR 5		WR 6		WR 7		WR 8		WR 9		WR 10	
SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE
150	122														
175	97	190	88												
200	73	200	80	220	51										
225	54	225	60	225	49	230	44	240	49						
250	39	250	44	250	40	250	38	250	45	250	40	260	40	270	40
275	29	275	33	275	34	275	32	275	37	275	35	275	37	275	39
300	22	300	26	300	29	300	29	300	32	300	32	300	32	300	35
325	17	325	22	325	26	325	26	325	28	325	30	325	29	325	33
350	15	350	18	350	23	350	23	350	26	350	29	350	26	350	31
375	13	375	15	375	20	375	21	375	24	375	28	375	25	375	29
400	12	400	13	400	17	400	20	400	24	400	26	400	24	400	27
425	12	425	12	425	15	425	17	425	22	425	24	425	23	425	24
450	14	450	11	450	13	450	16	450	20	450	21	450	21	450	21
475	16	475	12	475	13	475	14	475	18	475	19	475	19	475	19
500	20	500	14	500	14	500	14	500	17	500	18	500	18	500	18
525	25	525	16	525	17	525	15	525	17	525	18	525	17	525	19
550	29	550	19	550	19	550	17	550	17	550	18	550	18	550	21
575	33	575	24	575	22	575	20	575	18	575	20	575	19	575	22
600	38	600	29	600	26	600	23	600	20	600	21	600	20	600	24
625	46	625	34	625	29	625	27	625	23	625	23	625	22	625	25
650	58	650	41	650	33	650	32	650	25	650	24	650	25	650	27
675	75	675	48	675	38	675	37	675	28	675	26	675	28	675	28
680	79	700	57	700	44	700	44	700	31	700	29	700	31	700	30
		725	69	725	52	725	51	725	34	725	34	725	33	725	33
		730	72	750	61	750	60	750	39	750	39	750	37	750	36
				775	72	775	70	775	47	775	44	775	41	775	40
				780	75	800	82	800	56	800	51	800	46	800	45
						825	97	825	66	825	59	825	52	825	51
						840	108	850	78	850	68	850	59	850	58
								875	91	875	79	875	69	875	66
								890	100	900	93	900	81	900	75
										910	99	925	95	925	85
												930	99	950	96



**Table 231. Spanish Reading and Writing Scale Scores and Associated Standard Errors**

SP RD 3		SP RD 4			Sp WR 3		SP WR 4	
SS	SE	SS	SE		SS	SE	SS	SE
					250 64			
					275 50			
300 124		300 101			300 39		300 62	
325 99		325 80			325 30		325 47	
350 74		350 62			350 24		350 36	
375 54		375 48			375 20		375 28	
400 38		400 35			400 18		400 22	
425 25		425 25			425 17		425 19	
450 17		450 18			450 17		450 17	
475 13		475 13			475 17		475 15	
500 12		500 10			500 18		500 13	
525 12		525 9			525 20		525 11	
550 13		550 9			550 22		550 11	
575 15		575 10			575 24		575 12	
600 19		600 12			600 26		600 15	
625 25		625 15			625 29		625 20	
650 34		650 22			650 33		650 26	
675 45		675 30			675 40		675 32	
700 60		700 38			700 50		700 41	
725 77		725 48			725 64		725 51	
740 90		750 58			750 81		750 63	
		775 69					775 78	
		790 76					790 88	



**Table 232. Mathematics Scale Scores and Associated Standard Errors**

MA 3		MA 4		MA 5		MA 6		MA 7		MA 8		MA 9		MA 10	
SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE	SS	SE
150	70														
175	59	180	53												
200	50	200	47	220	64										
225	42	225	40	225	61	240	55								
250	37	250	34	250	51	250	52								
275	32	275	29	275	42	275	46	280	76						
300	29	300	25	300	34	300	40	300	66	310	68				
325	26	325	22	325	28	325	34	325	55	325	62	340	78		
350	25	350	19	350	23	350	30	350	46	350	53	350	71	370	61
375	23	375	17	375	19	375	25	375	38	375	45	375	56	375	59
400	23	400	15	400	17	400	22	400	31	400	39	400	45	400	50
425	22	425	14	425	15	425	19	425	26	425	33	425	37	425	43
450	23	450	14	450	14	450	18	450	23	450	28	450	30	450	37
475	24	475	15	475	14	475	16	475	20	475	24	475	26	475	31
500	26	500	16	500	13	500	15	500	18	500	20	500	22	500	27
525	29	525	18	525	14	525	14	525	16	525	17	525	19	525	22
550	33	550	20	550	15	550	14	550	15	550	15	550	17	550	18
575	39	575	24	575	16	575	15	575	14	575	13	575	14	575	16
600	47	600	28	600	19	600	17	600	14	600	13	600	13	600	14
625	56	625	34	625	23	625	19	625	14	625	12	625	12	625	13
650	67	650	41	650	29	650	23	650	15	650	13	650	11	650	12
675	81	675	50	675	36	675	28	675	17	675	15	675	11	675	11
700	97	700	60	700	46	700	35	700	21	700	17	700	13	700	12
		725	72	725	57	725	43	725	26	725	22	725	17	725	15
		750	87	750	69	750	53	750	33	750	27	750	22	750	19
		775	103	775	84	775	64	775	42	775	35	775	29	775	25
		780	107	800	101	800	77	800	53	800	43	800	37	800	31
						825	92	825	64	825	53	825	47	825	38
						830	95	850	78	850	66	850	60	850	46
								860	84	875	80	875	75	875	55
										890	90	900	94	900	66
												920	112	925	79
														950	96



**Table 233. Science Scale Scores and Associated Standard Errors**

SC 5		SC 8		SC 10	
SS	SE	SS	SE	SS	SE
300	30	300	55	300	53
325	26	325	45	325	43
350	23	350	37	350	34
375	20	375	30	375	27
400	18	400	25	400	22
425	16	425	20	425	18
450	15	450	16	450	15
475	14	475	14	475	14
500	15	500	13	500	13
525	15	525	12	525	12
550	17	550	13	550	12
575	19	575	13	575	12
600	22	600	15	600	13
625	26	625	17	625	16
650	31	650	20	650	20
675	36	675	24	675	25
700	43	700	28	700	32
725	53	725	33	725	39
750	65	750	39	750	48
775	79	775	46	775	58
800	97	800	54	800	69
825	119	825	64	825	82
850	144	850	75	850	96
875	169	875	89	875	112
900	194	900	104	900	131



**Table 234. Cut Scores for the 2008 CSAP Tests**

<b>Language</b>	<b>Content Area</b>	<b>Grade</b>	<b>Unsatisfactory</b>	<b>Partially Proficient</b>	<b>Proficient</b>	<b>Advanced</b>
English	Reading	3	150-465	466-525	526-655	656-795
English	Reading	4	180-516	517-571	572-670	671-940
English	Reading	5	220-537	538-587	588-690	691-955
English	Reading	6	260-542	543-599	600-695	696-970
English	Reading	7	300-566	567-619	620-715	716-980
English	Reading	8	330-577	578-631	632-723	724-990
English	Reading	9	350-584	585-641	642-738	739-995
English	Reading	10	370-606	607-662	663-746	747-999
Spanish	Reading	3	300-481	482-512	513-575	576-740
Spanish	Reading	4	300-505	506-536	537-591	592-790
English	Writing	3	150-392	393-464	465-532	533-680
English	Writing	4	190-413	414-484	485-553	554-730
English	Writing	5	220-417	418-497	498-575	576-780
English	Writing	6	230-422	423-512	513-599	600-840
English	Writing	7	240-429	430-538	539-628	629-890
English	Writing	8	250-433	434-555	556-650	651-910
English	Writing	9	260-435	436-562	563-671	672-930
English	Writing	10	270-458	459-577	578-689	690-950
Spanish	Writing	3	250-447	448-498	499-574	575-750
Spanish	Writing	4	300-495	496-531	532-595	596-790
English	Mathematics	3	150-334	335-418	419-509	510-700
English	Mathematics	4	180-382	383-454	455-537	538-780
English	Mathematics	5	220-421	422-493	494-561	562-800
English	Mathematics	6	240-453	454-519	520-588	589-830
English	Mathematics	7	280-486	487-558	559-613	614-860
English	Mathematics	8	310-520	521-576	577-627	628-890
English	Mathematics	9	340-547	548-601	602-651	652-920
English	Mathematics	10	370-561	562-626	627-691	692-950
English	Science	5	300-428	429-507	508-568	569-900
English	Science	8	300-458	459-506	507-578	579-900
English	Science	10	300-468	469-506	507-580	581-900



**Table 235. Alignment Summary, Reading and Writing**

<b>Grade</b>	<b>Score Reporting Category (SRC)</b>	<b>Number of items in the SRC</b>	<b>Number of PI</b>	<b>Number of PI Assessed</b>	<b>% of PI Assessed</b>
3	1	40	7	6	86%
	2	21	4	2	50%
	3	32	5	5	100%
4	1	31	8	7	88%
	2	21	5	4	80%
	3	32	5	5	100%
	4	15	5	5	100%
	5	15	6	5	83%
	6	9	4	4	100%
5	1	25	7	6	86%
	2	21	7	6	86%
	3	32	5	5	100%
	4	15	5	4	80%
	5	17	7	5	71%
	6	13	4	3	75%
6	1	27	7	6	86%
	2	21	7	6	86%
	3	32	5	5	100%
	4	14	5	4	80%
	5	16	7	4	57%
	6	13	4	3	75%
7	1	20	9	8	89%
	2	21	8	6	75%
	3	32	6	6	100%
	4	17	5	4	80%
	5	17	7	4	57%
	6	15*	4	4	100%
8	1	22	7	5	71%
	2	21	7	6	86%
	3	32	6	5	83%
	4	19	5	5	100%
	5	15	6	4	67%
	6	14	4	3	75%
9	1	25	7	6	86%
	2	21	8	6	75%
	3	32	6	5	83%
	4	16	5	5	100%
	5	16*	6	5	83%
	6	12	5	3	60%
10	1	22*	7	6	86%
	2	21	9	6	67%
	3	32	5	5	100%
	4	14	6	4	67%
	5	19*	6	5	83%
	6	12	4	3	75%

\* Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.



**Table 236. Alignment Summary, Mathematics**

<b>Grade</b>	<b>Score Reporting Category (SRC)</b>	<b>Number of items in the SRC</b>	<b>Number of PI</b>	<b>Number of PI Assessed</b>	<b>% of PI Assessed</b>
3	1	7*	13	7	54%
	2/3	11	10	7	70%
	4/5	14	15	12	80%
	6	7	9	6	67%
4	1	13*	11	9	82%
	2	9	6	6	100%
	3	11	6	5	83%
	4/5	21	15	13	87%
	6	14	10	6	60%
5	1	16	13	9	69%
	2	12	7	5	71%
	3	11	15	8	53%
	4/5	14	22	12	55%
	6	16	12	8	67%
6	1	12	8	7	88%
	2	11	6	5	83%
	3	10	9	8	89%
	4/5	16	17	13	76%
	6	11	8	5	63%
7	1/6	19	18	11	61%
	2	12	5	5	100%
	3	12	9	7	78%
	4/5	17	14	11	79%
8	1/6	15	10	9	90%
	2	15	6	6	100%
	3	12	9	6	67%
	4/5	18	11	9	82%
9	1/6	13	9	6	67%
	2	16*	12	10	83%
	3	15	14	11	79%
	4/5	15	9	9	100%
10	1/6	13	11	10	91%
	2	17	14	13	93%
	3	15	22	13	59%
	4/5	15	17	12	71%

\* Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.



**Table 237. Alignment Summary, Science**

<b>Grade</b>	<b>Score Reporting Category (SRC)</b>	<b>Number of items in the SRC</b>	<b>Number of PI</b>	<b>Number of PI Assessed</b>	<b>% of PI Assessed</b>
5	1/5	30	11	9	82%
	2	15	16	12	75%
	3	13*	13	8	62%
	4	15	13	11	85%
8	1/5	32	22	14	64%
	2	17	27	12	44%
	3	17	24	12	50%
	4	17	24	16	67%
10	1/5	30	24	12	50%
	2	16*	14	11	79%
	3	18	28	16	57%
	4	17*	19	13	68%

\* Content area in which item(s) were removed from calibration. Count shown in this table does not include removed items.

**Table 238. Alignment Summary, Spanish Reading and Writing**

<b>Grade</b>	<b>Score Reporting Category (SRC)</b>	<b>Number of items in the SRC</b>	<b>Number of PI</b>	<b>Number of PI Assessed</b>	<b>% of PI Assessed</b>
3	1	40	7	5	71%
	2	21	4	1	25%
	3	32	5	5	100%
4	1	31	8	6	75%
	2	19	5	4	80%
	3	34	5	4	80%
	4	14	5	5	100%
	5	13	6	3	50%
	6	12	4	3	75%



**Table 239. Items Flagged for DIF by Ethnicity Focal Group**

Content Area	Grade	Item #	Item Type	Ethnicity Focal Group <sup>1</sup>								
				Asian			Black			Hispanic		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	4	40	CR	*	2127	-0.113	.	.	.	.	.	.
	5	20	CR	.	.	.	*	3261	-0.102	.	.	.
		46	CR	.	.	.	*	3261	-0.109	.	.	.
	9	32	CR	*	1792	-0.104	.	.	.	.	.	.
	10	13	MC	.	.	.	.	.	.	*	12971	-0.102
		40	CR	+	1801	0.121	.	.	.	.	.	.
		48	CR	*	1801	-0.166	.	.	.	.	.	.
Reading	3	24	CR	+	2142	0.134	.	.	.	.	.	.
	4	11	CR	+	2122	0.115	.	.	.	.	.	.
	5	11	CR	+	2083	0.109	.	.	.	.	.	.
	6	11	CR	+	2021	0.142	.	.	.	.	.	.
		102	MC	*	2021	-0.115	.	.	.	.	.	.
	7	21	CR	+	2038	0.111	.	.	.	.	.	.
		36	CR	+	2038	0.104	.	.	.	.	.	.
	8	16	MC	*	1877	-0.111	.	.	.	.	.	.
		29	CR	+	1877	0.224	+	3454	0.107	+	15072	0.147
		30	CR	+	1877	0.149	.	.	.	.	.	.
		39	CR	+	1877	0.162	.	.	.	.	.	.
	9	6	MC	*	1809	-0.127	.	.	.	.	.	.
		11	CR	+	1809	0.166	.	.	.	.	.	.
		12	CR	+	1809	0.175	.	.	.	.	.	.
		98	CR	+	1809	0.197	.	.	.	.	.	.
	10	5	CR	+	1823	0.127	.	.	.	.	.	.
		37	CR	.	.	.	*	3366	-0.132	.	.	.
		46	CR	.	.	.	+	3366	0.121	+	13116	0.125
		47	CR	+	1823	0.164	.	.	.	+	13116	0.128
		97	CR	+	1823	0.131	.	.	.	.	.	.
Science	8	24	CR	+	1876	0.217	.	.	.	+	14877	0.115
		64	CR	+	1876	0.142	.	.	.	.	.	.
	10	21	CR	+	1803	0.175	.	.	.	+	12962	0.100
		22	CR	+	1803	0.116	+	3387	0.102	.	.	.
		24	CR	.	.	.	.	.	.	+	12962	0.117

1. Flag + = favoring and \* = disfavoring



**Table 239. Items Flagged for DIF by Ethnicity Focal Group (Concluded)**

Content Area	Grade	Item #	Item Type	Ethnicity Focal Group <sup>1</sup>								
				Asian			Black			Hispanic		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing	3	1C	CR	+	2140	0.108	.	.	.	.	.	.
		18	MC	.	.	.	.	.	.	*	16315	-0.100
	4	56	MC	*	2124	-0.160	.	.	.	.	.	.
	5	2B	CR	*	2075	-0.132	.	.	.	.	.	.
		2C	CR	+	2075	0.127	.	.	.	.	.	.
		54	MC	*	2075	-0.141	.	.	.	.	.	.
	7	68	CR	.	.	.	.	.	.	+	15126	0.108
	8	88	CR	.	.	.	.	.	.	+	14912	0.104
	9	2A	CR	*	1786	-0.219	.	.	.	.	.	.
		2C	CR	*	1786	-0.109	.	.	.	.	.	.
		52	MC	*	1786	-0.108	*	3618	-0.110	.	.	.
		69	CR	+	1786	0.117	.	.	.	.	.	.
		90	CR	+	1786	0.102	.	.	.	.	.	.
	10	64	MC	*	1804	-0.119	.	.	.	.	.	.
		87	MC	*	1804	-0.108	.	.	.	.	.	.
		96	CR	+	1804	0.100	.	.	.	.	.	.
		116	CR	+	1804	0.117	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 240. Items Flagged for DIF by Gender Focal Group**

Content Area	Grade	Item #	Item Type	Gender Focal Group <sup>1</sup>					
				Female			Male		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	7	60	CR	+	27538	0.127	*	29137	-0.119
	10	20	CR	*	27308	-0.134	.	.	.
		40	CR	.	.	.	*	27909	-0.109
Reading	7	99	CR	.	.	.	*	29166	-0.114
	8	29	CR	+	27674	0.134	*	28898	-0.124
	9	98	CR	+	28701	0.134	*	30257	-0.128
		114	CR	+	28701	0.101	.	.	.
	10	97	CR	.	.	.	*	27907	-0.103
Science	8	24	CR	+	27612	0.162	*	28811	-0.178
	10	21	CR	+	27307	0.115	*	27892	-0.104
Writing	4	75	CR	.	.	.	*	29379	-0.107
	5	67	CR	+	27889	0.100	.	.	.
		116	CR	.	.	.	*	28984	-0.104
	6	77	CR	+	27709	0.112	*	28914	-0.116
		92	CR	.	.	.	*	28914	-0.106
	7	47	CR	+	27506	0.111	*	29070	-0.115
		68	CR	.	.	.	*	29070	-0.104
		89	CR	.	.	.	*	29070	-0.103
	8	88	CR	+	27613	0.105	*	28808	-0.101
	9	90	CR	+	28552	0.102	*	30115	-0.103
	10	96	CR	+	27233	0.103	.	.	.
		116	CR	.	.	.	*	27776	-0.105

1. Flag + = favoring and \* = disfavoring



**Table 241. Items Flagged for DIF by Accommodations Focal Group**

Content Area	Grade	Item #	Item Type	Accommodations Focal Group <sup>1</sup>											
				Extended Timing			Oral Test			Scribe			Teacher Read Directions		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	3	1	MC	.	.	.	.	.	.	*	623	-0.112	.	.	.
		4	CR	.	.	.	.	.	.	+	623	0.183	.	.	.
		20	CR	.	.	.	+	5477	0.119	+	623	0.243	.	.	.
		26	CR	.	.	.	+	5477	0.190	+	623	0.179	.	.	.
		39	MC	.	.	.	.	.	.	*	623	-0.116	.	.	.
		40	CR	.	.	.	.	.	.	+	623	0.112	.	.	.
	4	5	CR	.	.	.	+	4847	0.125	.	.	.	.	.	.
		8	MC	.	.	.	.	.	.	*	661	-0.110	.	.	.
		18	CR	.	.	.	+	4847	0.154	+	661	0.134	.	.	.
		23	CR	.	.	.	.	.	.	+	661	0.114	.	.	.
		34	MC	.	.	.	.	.	.	*	661	-0.109	.	.	.
		46	CR	.	.	.	+	4847	0.117	+	661	0.247	+	1247	0.110
	5	65	CR	.	.	.	.	.	.	+	661	0.188	.	.	.
		14	CR	.	.	.	.	.	.	*	609	-0.112	.	.	.
		23	CR	.	.	.	.	.	.	+	609	0.213	.	.	.
		26	MC	.	.	.	.	.	.	*	609	-0.106	.	.	.
		34	CR	.	.	.	+	4377	0.142	.	.	.	.	.	.
		57	CR	.	.	.	.	.	.	+	609	0.189	.	.	.
	6	68	MC	.	.	.	.	.	.	*	609	-0.101	.	.	.
		69	CR	.	.	.	+	4377	0.131	+	609	0.203	.	.	.
		2	MC	.	.	.	.	.	.	*	339	-0.113	.	.	.
		7	CR	.	.	.	.	.	.	*	339	-0.135	.	.	.
		16	CR	.	.	.	.	.	.	*	339	-0.110	.	.	.
		20	CR	.	.	.	.	.	.	+	339	0.170	.	.	.
	7	25	MC	.	.	.	.	.	.	+	339	0.106	.	.	.
		43	CR	.	.	.	.	.	.	+	339	0.110	.	.	.
		48	CR	.	.	.	.	.	.	+	339	0.128	.	.	.
		50	MC	.	.	.	.	.	.	*	339	-0.135	.	.	.
		57	CR	.	.	.	.	.	.	+	339	0.116	.	.	.
		60	CR	.	.	.	.	.	.	+	339	0.152	.	.	.
	8	20	CR	.	.	.	+	2195	0.108	.	.	.	.	.	.
		26	MC	.	.	.	.	.	.	*	258	-0.164	.	.	.
		33	CR	.	.	.	*	2195	-0.103	.	.	.	.	.	.
		40	CR	.	.	.	+	2195	0.106	+	258	0.189	.	.	.
		60	CR	.	.	.	.	.	.	*	258	-0.192	.	.	.
	9	3	CR	.	.	.	*	1748	-0.235	*	242	-0.259	.	.	.
		20	CR	.	.	.	+	1748	0.110	+	242	0.157	.	.	.
		26	CR	.	.	.	.	.	.	+	242	0.126	.	.	.
		34	CR	.	.	.	*	1748	-0.122	.	.	.	.	.	.
		44	CR	.	.	.	.	.	.	*	242	-0.101	.	.	.
Reading	10	60	CR	.	.	.	*	917	-0.105	.	.	.	.	.	.
	10	4	CR	.	.	.	.	.	.	.	.	.	+	554	0.107
		9	MC	.	.	.	+	605	0.111	.	.	.	.	.	.
		12	MC	.	.	.	+	605	0.104	+	87	0.156	.	.	.
		13	MC	*	1435	-0.111	*	605	-0.127	.	.	.	*	554	-0.116
		40	CR	.	.	.	.	.	.	.	.	.	*	554	-0.104
		41	MC	.	.	.	.	.	.	+	87	0.106	.	.	.
	3	13	CR	.	.	.	.	.	.	+	1042	0.123	.	.	.
		26	CR	.	.	.	.	.	.	+	1042	0.216	.	.	.
		35	CR	.	.	.	.	.	.	+	1042	0.127	.	.	.

1. Flag + = favoring and \* = disfavoring



Table 241. Items Flagged for DIF by Accommodations Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Accommodations Focal Group <sup>1</sup>									Teacher Read Directions		
				Extended Timing			Oral Test			Scribe					
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading (cont.)	4	18	CR	.	.	.	.	.	.	+	1092	0.114	.	.	.
		40	CR	.	.	.	.	.	.	+	1092	0.109	.	.	.
		45	CR	.	.	.	.	.	.	+	1092	0.115	.	.	.
		116	CR	.	.	.	.	.	.	+	1092	0.143	.	.	.
	5	22	CR	.	.	.	.	.	.	+	945	0.136	.	.	.
		35	CR	.	.	.	.	.	.	+	945	0.232	.	.	.
		52	CR	.	.	.	.	.	.	+	945	0.154	.	.	.
	6	19	CR	.	.	.	.	.	.	+	529	0.109	.	.	.
		111	CR	.	.	.	.	.	.	+	529	0.102	.	.	.
	7	11	CR	.	.	.	.	.	.	+	401	0.132	.	.	.
	8	29	CR	.	.	.	.	.	.	*	340	-0.200	.	.	.
		30	CR	.	.	.	.	.	.	+	340	0.107	.	.	.
		116	CR	.	.	.	.	.	.	+	340	0.139	.	.	.
	9	6	MC	.	.	.	.	.	.	+	163	0.113	.	.	.
		8	MC	.	.	.	.	.	.	+	163	0.127	.	.	.
		11	CR	.	.	.	.	.	.	.	.	.	+	910	0.110
		43	MC	.	.	.	.	.	.	+	163	0.104	.	.	.
		105	CR	.	.	.	.	.	.	.	.	.	+	910	0.145
	10	5	CR	.	.	.	.	.	.	.	.	.	+	813	0.120
		13	CR	.	.	.	.	.	.	.	.	.	+	813	0.140
		15	MC	.	.	.	.	.	.	.	.	.	*	813	-0.116
		37	CR	.	.	.	.	.	.	.	.	.	+	813	0.135
		46	CR	.	.	.	.	.	.	.	.	.	+	813	0.136
		47	CR	.	.	.	.	.	.	.	.	.	+	813	0.103
		100	MC	.	.	.	.	.	.	.	.	.	*	813	-0.116
		105	MC	.	.	.	.	.	.	.	.	.	*	813	-0.106
		107	CR	.	.	.	.	.	.	.	.	.	+	813	0.131
Science	5	24	CR	.	.	.	*	4306	-0.147	.	.	.	.	.	.
		38	CR	.	.	.	.	.	.	+	665	0.119	.	.	.
		42	CR	.	.	.	*	4306	-0.147	*	665	-0.145	.	.	.
		46	CR	.	.	.	.	.	.	+	665	0.102	.	.	.
		53	CR	.	.	.	.	.	.	+	665	0.126	.	.	.
		64	MC	.	.	.	+	4306	0.117	.	.	.	.	.	.
		71	CR	.	.	.	.	.	.	+	665	0.133	.	.	.
		74	MC	.	.	.	.	.	.	*	665	-0.132	.	.	.
	8	10	MC	.	.	.	.	.	.	+	256	0.144	.	.	.
		12	MC	.	.	.	.	.	.	+	256	0.142	.	.	.
		13	CR	.	.	.	.	.	.	+	256	0.103	.	.	.
		24	CR	.	.	.	*	1837	-0.183	*	256	-0.609	.	.	.
		81	MC	.	.	.	.	.	.	+	256	0.103	.	.	.
	10	9	MC	.	.	.	.	.	.	*	95	-0.217	.	.	.
		21	CR	*	1207	-0.125	*	603	-0.197	*	95	-0.449	.	.	.
		31	CR	.	.	.	*	603	-0.106	.	.	.	.	.	.
		65	MC	.	.	.	.	.	.	+	95	0.139	.	.	.
		66	CR	.	.	.	*	603	-0.102	*	95	-0.130	.	.	.
		71	MC	.	.	.	.	.	.	*	95	-0.142	.	.	.
		79	MC	.	.	.	.	.	.	+	95	0.152	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 241. Items Flagged for DIF by Accommodations Focal Group (Concluded)**

Content Area	Grade	Item #	Item Type	Accommodations Focal Group <sup>1</sup>											
				Extended Timing			Oral Test			Scribe			Teacher Read Directions		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing	3	1A	CR	.	.	.	*	4451	-0.113	.	.	.	.	.	.
		1C	CR	.	.	.	*	4451	-0.116	*	967	-0.234	.	.	.
		9	MC	.	.	.	.	.	.	*	967	-0.116	.	.	.
		13D	CR	.	.	.	.	.	.	+	967	0.176	.	.	.
		19	MC	.	.	.	+	4451	0.100	.	.	.	.	.	.
		22	MC	.	.	.	+	4451	0.104	.	.	.	.	.	.
		23	MC	.	.	.	+	4451	0.107	.	.	.	.	.	.
		30D	CR	.	.	.	.	.	.	+	967	0.247	.	.	.
		39D	CR	.	.	.	.	.	.	+	967	0.145	.	.	.
	4	2A	CR	.	.	.	.	.	.	*	977	-0.173	.	.	.
		3A	CR	.	.	.	.	.	.	+	977	0.166	.	.	.
		3B	CR	.	.	.	.	.	.	+	977	0.161	.	.	.
		3C	CR	.	.	.	.	.	.	+	977	0.122	.	.	.
		24	CR	.	.	.	.	.	.	+	977	0.260	.	.	.
		67	MC	.	.	.	.	.	.	*	977	-0.103	.	.	.
		71	MC	.	.	.	.	.	.	*	977	-0.112	.	.	.
		90	MC	.	.	.	+	4081	0.176	.	.	.	.	.	.
		95	CR	.	.	.	.	.	.	+	977	0.215	.	.	.
	5	2A	CR	.	.	.	*	3614	-0.115	.	.	.	.	.	.
		2E	CR	.	.	.	*	.	.	*	841	-0.135	.	.	.
		80	MC	.	.	.	+	3614	0.114	.	.	.	.	.	.
		94	CR	.	.	.	.	.	.	+	841	0.187	.	.	.
	6	2A	CR	.	.	.	.	.	.	*	496	-0.117	.	.	.
		2D	CR	.	.	.	*	2624	-0.108	*	496	-0.221	.	.	.
		3A	CR	.	.	.	.	.	.	*	496	-0.121	.	.	.
		3B	CR	.	.	.	*	2624	-0.107	.	.	.	.	.	.
		27	CR	.	.	.	+	2624	0.121	+	496	0.208	.	.	.
		51	MC	.	.	.	.	.	.	*	496	-0.154	.	.	.
	7	56	MC	.	.	.	.	.	.	*	403	-0.138	.	.	.
		63	MC	.	.	.	.	.	.	*	403	-0.121	.	.	.
		69	MC	.	.	.	.	.	.	+	403	0.111	.	.	.
	8	3A	CR	.	.	.	.	.	.	*	332	-0.111	.	.	.
		60	MC	.	.	.	+	.	.	+	332	0.119	.	.	.
		88	CR	+	1779	0.112	+	1464	0.112	.	.	.	.	.	.
	9	2E	CR	.	.	.	*	733	-0.103	.	.	.	.	.	.
		26	CR	.	.	.	+	733	0.189	.	.	.	+	621	0.135
		52	MC	.	.	.	.	.	.	+	182	0.151	.	.	.
		56	MC	.	.	.	.	.	.	*	182	-0.101	.	.	.
		59	MC	.	.	.	.	.	.	*	182	-0.121	.	.	.
		72	MC	.	.	.	+	733	0.114	.	.	.	.	.	.
		73	MC	.	.	.	+	733	0.102	.	.	.	.	.	.
		78	MC	.	.	.	.	.	.	*	182	-0.147	.	.	.
		90	CR	.	.	.	+	733	0.111	.	.	.	+	621	0.138
	10	3A	CR	.	.	.	*	515	-0.106	*	118	-0.202	.	.	.
		3B	CR	.	.	.	*	515	-0.115	*	118	-0.181	.	.	.
		74	CR	.	.	.	+	515	0.116	.	.	.	+	518	0.157
		96	CR	+	1324	0.114	.	.	.	.	.	.	+	518	0.212
		116	CR	.	.	.	+	515	0.122	.	.	.	+	518	0.134
Spanish Writing	3	16A	CR	.	.	.	.	.	.	.	.	.	+	56	0.187

1. Flag + = favoring and \* = disfavoring



**Table 242. Items Flagged for DIF by Primary Disability State Focal Group**

Content Area	Grade	Item #	Item Type	Primary Disability State Focal Group <sup>1</sup>											
				Emotional			Specific Learning Disability			Physical			Speech/Language		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	3	4	CR	.	.	.	+	2433	0.110	.	.	.	.	.	.
		9	CR	.	.	.	.	.	.	*	561	-0.112	.	.	.
		20	CR	.	.	.	+	2433	0.150	.	.	.	.	.	.
		26	CR	.	.	.	+	2433	0.173	+	561	0.139	.	.	.
		38	MC	*	369	-0.116	.	.	.	.	.	.	.	.	.
		39	MC	.	.	.	*	2433	-0.114	.	.	.	.	.	.
	4	15	CR	*	438	-0.149	.	.	.	.	.	.	.	.	.
		18	CR	.	.	.	+	2850	0.108	+	693	0.126	.	.	.
		46	CR	.	.	.	+	2850	0.118	+	693	0.102	.	.	.
		65	CR	.	.	.	.	.	.	+	693	0.126	.	.	.
	5	14	CR	*	486	-0.243	.	.	.	*	752	-0.118	.	.	.
		16	CR	+	486	0.104	.	.	.	.	.	.	.	.	.
		23	CR	+	486	0.114	.	.	.	.	.	.	.	.	.
		49	CR	+	486	0.101	.	.	.	.	.	.	.	.	.
		69	CR	+	486	0.105	+	3063	0.129	+	752	0.137	.	.	.
	6	7	CR	*	537	-0.215	.	.	.	.	.	.	.	.	.
		33	CR	.	.	.	.	.	.	*	758	-0.100	.	.	.
		40	CR	*	537	-0.151	.	.	.	.	.	.	.	.	.
		48	CR	.	.	.	.	.	.	+	758	0.108	.	.	.
	7	12	CR	*	675	-0.108	.	.	.	.	.	.	.	.	.
		17	MC	+	675	0.100	.	.	.	.	.	.	.	.	.
		33	CR	*	675	-0.109	*	2952	-0.102	.	.	.	.	.	.
		40	CR	.	.	.	.	.	.	+	794	0.136	.	.	.
		45	MC	+	675	0.106	.	.	.	.	.	.	.	.	.
		60	CR	*	675	-0.336	.	.	.	*	794	-0.235	.	.	.
	8	3	CR	*	697	-0.224	*	2747	-0.163	*	776	-0.170	.	.	.
		20	CR	.	.	.	.	.	.	+	776	0.128	.	.	.
		21	MC	+	697	0.104	.	.	.	.	.	.	.	.	.
		30	CR	*	697	-0.152	.	.	.	.	.	.	*	552	-0.124
		34	CR	*	697	-0.174	*	2747	-0.128	*	776	-0.165	.	.	.
		40	CR	.	.	.	.	.	.	.	.	.	+	552	0.114
		55	CR	*	697	-0.137	.	.	.	.	.	.	.	.	.
	9	54	CR	*	756	-0.122	.	.	.	.	.	.	.	.	.
		60	CR	*	756	-0.211	.	.	.	*	725	-0.109	.	.	.
	10	1	MC	+	663	0.103	.	.	.	+	694	0.102	+	349	0.113
		13	MC	*	663	-0.122	*	2263	-0.120	.	.	.	*	349	-0.156
		40	CR	*	663	-0.147	.	.	.	*	694	-0.170	.	.	.
		60	CR	*	663	-0.119	.	.	.	.	.	.	.	.	.
Reading	3	1	CR	*	357	-0.157	*	2383	-0.105	.	.	.	.	.	.
		24	CR	*	357	-0.169	.	.	.	.	.	.	.	.	.
	4	14	CR	*	443	-0.212	.	.	.	.	.	.	.	.	.
		23	MC	+	443	0.108	.	.	.	.	.	.	.	.	.
		25	CR	*	443	-0.171	.	.	.	*	690	-0.109	.	.	.
		40	CR	*	443	-0.150	.	.	.	.	.	.	.	.	.
		103	CR	*	443	-0.111	.	.	.	.	.	.	.	.	.
	5	10	CR	*	485	-0.142	.	.	.	.	.	.	.	.	.
		11	CR	*	485	-0.121	.	.	.	.	.	.	.	.	.
		22	CR	*	485	-0.207	.	.	.	*	750	-0.111	.	.	.
		47	CR	*	485	-0.140	.	.	.	*	750	-0.155	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 242. Items Flagged for DIF by Primary Disability State Focal Group (Continued)**

Content Area	Grade	Item #	Item Type	Primary Disability State Focal Group <sup>1</sup>											
				Emotional			Specific Learning Disability			Physical			Speech/Language		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading (cont.)	6	11	CR	*	528	-0.155	.	.	.	*	748	-0.113	.	.	.
		18	CR	*	528	-0.103	.	.	.	.	.	.	.	.	.
		19	CR	*	528	-0.113	.	.	.	.	.	.	.	.	.
		93	CR	*	528	-0.165	.	.	.	*	748	-0.115	.	.	.
		106	CR	*	528	-0.166	.	.	.	.	.	.	.	.	.
	7	6	CR	*	664	-0.132	.	.	.	.	.	.	.	.	.
		21	CR	*	664	-0.141	.	.	.	.	.	.	.	.	.
		36	CR	*	664	-0.185	.	.	.	.	.	.	.	.	.
		90	CR	*	664	-0.118	.	.	.	.	.	.	.	.	.
		99	CR	*	664	-0.213	.	.	.	.	.	.	.	.	.
		103	CR	*	664	-0.187	.	.	.	.	.	.	.	.	.
	8	13	CR	*	694	-0.149	.	.	.	*	772	-0.130	.	.	.
		29	CR	*	694	-0.349	.	.	.	*	772	-0.267	.	.	.
		39	CR	*	694	-0.189	.	.	.	.	.	.	+	551	0.108
		89	CR	*	694	-0.107	.	.	.	.	.	.	.	.	.
		108	CR	*	694	-0.126	.	.	.	.	.	.	.	.	.
		116	CR	*	694	-0.134	.	.	.	.	.	.	.	.	.
	9	4	CR	*	736	-0.157	.	.	.	*	712	-0.133	.	.	.
		11	CR	*	736	-0.240	.	.	.	*	712	-0.150	.	.	.
		12	CR	*	736	-0.138	.	.	.	.	.	.	.	.	.
		19	CR	*	736	-0.108	.	.	.	.	.	.	.	.	.
		42	CR	*	736	-0.139	.	.	.	.	.	.	.	.	.
		92	CR	*	736	-0.103	.	.	.	.	.	.	.	.	.
		98	CR	*	736	-0.267	.	.	.	*	712	-0.177	.	.	.
		102	CR	*	736	-0.107	.	.	.	.	.	.	.	.	.
		105	CR	*	736	-0.116	.	.	.	.	.	.	+	451	0.141
		114	CR	*	736	-0.272	.	.	.	*	712	-0.177	+	451	0.152
	10	5	CR	.	.	.	.	.	.	*	694	-0.102	.	.	.
		13	CR	.	.	.	.	.	.	.	.	.	+	355	0.120
		24	CR	*	654	-0.151	.	.	.	*	694	-0.109	.	.	.
		34	MC	+	654	0.103	.	.	.	.	.	.	.	.	.
		37	CR	.	.	.	+	2243	0.131	+	694	0.112	.	.	.
		39	CR	*	654	-0.126	.	.	.	*	694	-0.102	.	.	.
		46	CR	*	654	-0.113	+	2243	0.115	.	.	.	.	.	.
		47	CR	*	654	-0.173	.	.	.	*	694	-0.117	+	355	0.177
		97	CR	*	654	-0.150	.	.	.	*	694	-0.128	+	355	0.178
		107	CR	*	654	-0.108	.	.	.	.	.	.	.	.	.
Science	5	24	CR	*	492	-0.132	*	3038	-0.132	*	751	-0.140	.	.	.
		42	CR	*	492	-0.179	*	3038	-0.186	*	751	-0.120	*	1220	-0.103
		48	CR	.	.	.	.	.	.	+	751	0.114	.	.	.
		74	MC	*	492	-0.137	*	3038	-0.106	.	.	.	.	.	.
		75	CR	*	492	-0.145	.	.	.	*	751	-0.171	.	.	.
	8	10	MC	+	699	0.134	.	.	.	+	780	0.116	.	.	.
		12	MC	+	699	0.121	.	.	.	+	780	0.104	.	.	.
		13	CR	.	.	.	.	.	.	+	780	0.110	.	.	.
		23	CR	*	699	-0.126	.	.	.	.	.	.	.	.	.
		24	CR	*	699	-0.465	*	2740	-0.238	*	780	-0.476	.	.	.
		25	CR	*	699	-0.119	.	.	.	*	780	-0.132	.	.	.
		37	MC	.	.	.	.	.	.	.	.	.	+	561	0.110
		64	CR	*	699	-0.141	.	.	.	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 242. Items Flagged for DIF by Primary Disability State Focal Group (Concluded)**

Content Area	Grade	Item #	Item Type	Primary Disability State Focal Group <sup>1</sup>											
				Emotional			Specific Learning Disability			Physical			Speech/Language		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Science (cont.)	10	21	CR	*	658	-0.412	*	2269	-0.116	*	697	-0.323	.	.	.
		24	CR	*	658	-0.175	.	.	.	*	697	-0.150	.	.	.
		66	CR	*	658	-0.124	.	.	.	*	697	-0.119	.	.	.
		67	MC	.	.	.	.	.	.	.	.	.	+	354	0.101
Writing	3	1C	CR	.	.	.	*	2394	-0.157	.	.	.	.	.	.
		18	MC	+	365	0.100	.	.	.	.	.	.	.	.	.
	4	2A	CR	.	.	.	*	2828	-0.153	.	.	.	.	.	.
		3A	CR	*	439	-0.101	.	.	.	.	.	.	.	.	.
		3B	CR	*	439	-0.136	.	.	.	.	.	.	.	.	.
		24	CR	*	439	-0.160	.	.	.	.	.	.	.	.	.
		75	CR	*	439	-0.252	.	.	.	*	690	-0.112	.	.	.
		85	MC	+	439	0.156	.	.	.	.	.	.	.	.	.
		87	MC	+	439	0.119	.	.	.	.	.	.	.	.	.
		90	MC	.	.	.	+	2828	0.111	.	.	.	.	.	.
		95	CR	*	439	-0.264	.	.	.	.	.	.	.	.	.
	5	2A	CR	.	.	.	*	3046	-0.115	.	.	.	.	.	.
		3A	CR	*	485	-0.274	.	.	.	*	751	-0.157	.	.	.
		3B	CR	*	485	-0.293	*	3046	-0.105	*	751	-0.178	.	.	.
		67	CR	*	485	-0.299	.	.	.	*	751	-0.120	.	.	.
		94	CR	*	485	-0.220	.	.	.	.	.	.	.	.	.
		116	CR	*	485	-0.308	.	.	.	*	751	-0.147	.	.	.
	6	2D	CR	.	.	.	*	3066	-0.172	.	.	.	.	.	.
		3A	CR	*	534	-0.234	.	.	.	*	753	-0.180	.	.	.
		3B	CR	*	534	-0.221	.	.	.	*	753	-0.180	.	.	.
		27	CR	*	534	-0.185	+	3066	0.104	*	753	-0.108	.	.	.
		53	MC	.	.	.	.	.	.	+	753	0.102	.	.	.
		77	CR	*	534	-0.265	.	.	.	*	753	-0.122	.	.	.
		92	CR	*	534	-0.200	.	.	.	*	753	-0.115	.	.	.
	7	3A	CR	*	670	-0.120	.	.	.	.	.	.	.	.	.
		3B	CR	*	670	-0.128	.	.	.	.	.	.	.	.	.
		47	CR	*	670	-0.246	.	.	.	*	795	-0.167	.	.	.
		68	CR	*	670	-0.286	.	.	.	*	795	-0.111	.	.	.
		89	CR	*	670	-0.278	.	.	.	*	795	-0.124	.	.	.
	8	3A	CR	*	693	-0.203	.	.	.	*	769	-0.126	.	.	.
		3B	CR	*	693	-0.183	.	.	.	*	769	-0.134	.	.	.
		21	CR	*	693	-0.168	.	.	.	*	769	-0.109	.	.	.
		71	MC	.	.	.	.	.	.	+	769	0.128	.	.	.
		73	CR	*	693	-0.113	.	.	.	*	769	-0.132	.	.	.
		88	CR	*	693	-0.194	.	.	.	*	769	-0.122	+	553	0.121
	9	2A	CR	.	.	.	.	.	.	.	.	.	*	452	-0.136
		2E	CR	.	.	.	*	2618	-0.130	.	.	.	.	.	.
		3A	CR	*	735	-0.128	.	.	.	.	.	.	.	.	.
		26	CR	*	735	-0.210	.	.	.	*	715	-0.117	+	452	0.134
		69	CR	*	735	-0.185	.	.	.	.	.	.	+	452	0.113
		90	CR	*	735	-0.225	.	.	.	*	715	-0.104	+	452	0.109
	10	3A	CR	*	650	-0.168	.	.	.	*	692	-0.136	.	.	.
		3B	CR	*	650	-0.153	.	.	.	*	692	-0.116	.	.	.
		74	CR	*	650	-0.131	+	2239	0.128	.	.	.	+	354	0.177
		96	CR	*	650	-0.180	+	2239	0.158	.	.	.	+	354	0.223
		116	CR	*	650	-0.201	.	.	.	.	.	.	+	354	0.158

1. Flag + = favoring and \* = disfavoring



**Table 243. Items Flagged for DIF by Enrollment Focal Group**

Content Area	Grade	Item #	Item Type	Enrollment Focal Group <sup>1</sup>								
				Cont. Enroll. in CO						Cont. Enroll. in ELL		
				No			Yes			Flag	N	Obs-Prd
				Flag	N	Obs-Prd	Flag	N	Obs-Prd			
Mathematics	3	9	CR	.	.	.	.	.	.	+	415	0.104
	4	18	CR	.	.	.	.	.	.	+	6064	0.128
		69	CR	.	.	.	.	.	.	+	6064	0.156
	5	14	CR	.	.	.	.	.	.	+	5853	0.106
		53	CR	.	.	.	.	.	.	+	5853	0.151
	6	16	CR	.	.	.	.	.	.	+	5213	0.110
	8	40	CR	.	.	.	.	.	.	+	4424	0.162
		46	CR	.	.	.	.	.	.	*	4424	-0.109
	9	7	CR	.	.	.	.	.	.	*	4009	-0.112
		20	CR	.	.	.	.	.	.	+	4009	0.119
	10	13	MC	.	.	.	.	.	.	*	3272	-0.103
Reading	3	4	MC	.	.	.	.	.	.	*	434	-0.112
	4	104	CR	.	.	.	.	.	.	+	6097	0.128
	5	11	CR	.	.	.	.	.	.	+	5873	0.109
		22	CR	.	.	.	.	.	.	+	5873	0.143
		47	CR	.	.	.	.	.	.	+	5873	0.139
	6	11	CR	.	.	.	.	.	.	+	5250	0.155
		99	MC	.	.	.	.	.	.	*	5250	-0.101
	7	4	CR	.	.	.	.	.	.	*	4833	-0.123
		21	CR	.	.	.	.	.	.	+	4833	0.124
		99	CR	.	.	.	.	.	.	+	4833	0.122
	8	16	MC	.	.	.	.	.	.	*	4474	-0.101
		29	CR	.	.	.	.	.	.	+	4474	0.229
		30	CR	.	.	.	.	.	.	+	4474	0.140
		39	CR	.	.	.	.	.	.	+	4474	0.118
		94	MC	.	.	.	.	.	.	*	4474	-0.111
		102	CR	.	.	.	.	.	.	+	4474	0.100
	9	6	MC	.	.	.	.	.	.	*	4090	-0.118
		11	CR	.	.	.	.	.	.	+	4090	0.141
		27	CR	.	.	.	.	.	.	+	4090	0.106
		98	CR	.	.	.	.	.	.	+	4090	0.215
		105	CR	.	.	.	.	.	.	+	4090	0.109
		114	CR	.	.	.	.	.	.	+	4090	0.165
	10	5	CR	.	.	.	.	.	.	+	3341	0.162
		8	MC	.	.	.	.	.	.	*	3341	-0.116
		13	CR	.	.	.	.	.	.	+	3341	0.103
		34	MC	.	.	.	.	.	.	*	3341	-0.159
		39	CR	.	.	.	.	.	.	+	3341	0.175
		46	CR	.	.	.	.	.	.	+	3341	0.208
		47	CR	.	.	.	.	.	.	+	3341	0.249
		97	CR	.	.	.	.	.	.	+	3341	0.175
		105	MC	.	.	.	.	.	.	*	3341	-0.135
		107	CR	.	.	.	.	.	.	+	3341	0.175
Science	8	24	CR	*	974	-0.105	.	.	.	+	4412	0.245
	10	21	CR	*	944	-0.108	.	.	.	+	3256	0.309
		22	CR	.	.	.	.	.	.	+	3256	0.103
		24	CR	.	.	.	.	.	.	+	3256	0.194

1. Flag + = favoring and \* = disfavoring



**Table 243. Items Flagged for DIF by Enrollment Focal Group (Concluded)**

Content Area	Grade	Item #	Item Type	Enrollment Focal Group <sup>1</sup>								
				Cont. Enroll. in CO						Cont. Enroll. in ELL		
				No			Yes					
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing	3	16	MC	.	.	.	.	.	.	*	410	-0.123
		18	MC	.	.	.	.	.	.	*	410	-0.253
	4	3A	CR	.	.	.	.	.	.	+	6051	0.138
		24	CR	.	.	.	.	.	.	+	6051	0.113
		75	CR	.	.	.	.	.	.	+	6051	0.129
		79	MC	.	.	.	.	.	.	*	6051	-0.115
		80	MC	.	.	.	.	.	.	*	6051	-0.134
		87	MC	.	.	.	.	.	.	*	6051	-0.132
		95	CR	.	.	.	.	.	.	+	6051	0.165
	5	2B	CR	.	.	.	.	.	.	*	5837	-0.190
		3A	CR	.	.	.	.	.	.	+	5837	0.146
		3B	CR	.	.	.	.	.	.	+	5837	0.106
		71	MC	.	.	.	.	.	.	*	5837	-0.105
		72	MC	.	.	.	.	.	.	*	5837	-0.138
		94	CR	.	.	.	.	.	.	+	5837	0.131
		116	CR	.	.	.	.	.	.	+	5837	0.127
	6	3A	CR	.	.	.	.	.	.	+	5163	0.120
		27	CR	.	.	.	.	.	.	+	5163	0.120
		53	MC	.	.	.	.	.	.	*	5163	-0.139
		60	MC	.	.	.	.	.	.	*	5163	-0.108
		77	CR	.	.	.	.	.	.	+	5163	0.135
		92	CR	.	.	.	.	.	.	+	5163	0.130
	7	47	CR	.	.	.	.	.	.	+	4760	0.134
		68	CR	.	.	.	.	.	.	+	4760	0.178
		88	MC	.	.	.	.	.	.	*	4760	-0.166
		89	CR	.	.	.	.	.	.	+	4760	0.155
	8	3A	CR	.	.	.	.	.	.	+	4424	0.113
		3B	CR	.	.	.	.	.	.	+	4424	0.106
		21	CR	.	.	.	.	.	.	+	4424	0.134
		62	MC	.	.	.	.	.	.	+	4424	0.108
		71	MC	.	.	.	.	.	.	*	4424	-0.216
		73	CR	.	.	.	.	.	.	+	4424	0.153
		88	CR	.	.	.	.	.	.	+	4424	0.171
	9	2A	CR	.	.	.	.	.	.	*	3987	-0.124
		3A	CR	.	.	.	.	.	.	+	3987	0.104
		51	MC	.	.	.	.	.	.	*	3987	-0.187
		52	MC	.	.	.	.	.	.	*	3987	-0.163
		53	MC	.	.	.	.	.	.	*	3987	-0.148
		69	CR	.	.	.	.	.	.	+	3987	0.166
		90	CR	.	.	.	.	.	.	+	3987	0.148
	10	3A	CR	.	.	.	.	.	.	+	3271	0.115
		74	CR	.	.	.	.	.	.	+	3271	0.173
		89	MC	.	.	.	.	.	.	*	3271	-0.125
		96	CR	.	.	.	.	.	.	+	3271	0.201
		116	CR	.	.	.	.	.	.	+	3271	0.185

1. Flag + = favoring and \* = disfavoring



**Table 244. Items Flagged for DIF by Language Proficiency Focal Group**

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>															
				Bilingual			ESL			FEP			LEP			NEP			
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	
Mathematics	4	15	CR	.	.	.	.	.	.	.	.	.	.	.	.	.	*	2189	-0.199
		18	CR	+	1565	0.184	.	.	.	+	3275	0.109	.	.	.	+	2189	0.119	
		31	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	2189	0.107	
		35	CR	+	1565	0.113	.	.	.	.	.	.	.	.	.	.	.	.	
		46	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	2189	0.153	
		69	CR	+	1565	0.220	+	8854	0.109	+	3275	0.116	+	4910	0.139	+	2189	0.113	
	5	14	CR	+	1285	0.125	.	.	.	.	.	.	.	.	.	.	.	.	.
		16	CR	.	.	.	.	.	.	.	.	.	+	4602	0.110	.	.	.	
		53	CR	+	1285	0.233	+	8557	0.106	+	3791	0.131	+	4602	0.134	.	.	.	
		66	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	1414	-0.187	
		67	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1414	-0.106	
	6	2	MC	.	.	.	.	.	.	.	.	.	.	.	.	.	+	1048	0.123
		7	CR	+	402	0.115	.	.	.	.	.	.	.	.	.	.	.	.	.
		16	CR	+	402	0.159	.	.	.	+	4276	0.122	.	.	.	.	.	.	.
		30	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1048	-0.106	
		43	CR	*	402	-0.112	.	.	.	.	.	.	*	3854	-0.129	*	1048	-0.167	
		50	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	1048	0.139	
		60	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	1048	-0.133	
	7	7	MC	.	.	.	.	.	.	.	.	.	.	.	.	.	*	964	-0.151
		12	CR	.	.	.	.	.	.	.	.	.	*	3276	-0.120	*	964	-0.120	
		14	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	964	0.163	
		18	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	964	-0.107	
		20	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	964	0.102	
		25	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	964	-0.123	
		33	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	964	-0.169	
		60	CR	.	.	.	.	.	.	+	4293	0.105	.	.	.	*	964	-0.144	

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics (cont.)	8	3	CR	.	.	.	.	.	.	+	4666	0.118	.	.	.	*	703	-0.191
		5	CR	.	.	.	.	.	.	.	.	.	*	2789	-0.110	*	703	-0.160
		15	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	703	-0.128
		24	CR	+	263	0.114	.	.	.	.	.	.	.	.	.	+	703	0.167
		30	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	703	-0.221
		33	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	703	0.103
		40	CR	+	263	0.125	+	7906	0.145	+	4666	0.109	+	2789	0.161	+	703	0.303
		46	CR	*	263	-0.169	*	7906	-0.119	.	.	.	*	2789	-0.177	*	703	-0.377
		47	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	703	-0.118
		49	CR	+	263	0.112	.	.	.	.	.	.	.	.	.	.	.	.
		60	CR	.	.	.	.	.	.	.	.	.	+	2789	0.115	.	.	.
	9	2	MC	*	221	-0.105	.	.	.	.	.	.	.	.	.	.	.	.
		7	CR	.	.	.	*	7594	-0.106	*	4503	-0.138	.	.	.	.	.	.
		8	MC	*	221	-0.113	.	.	.	.	.	.	.	.	.	.	.	.
		23	CR	.	.	.	.	.	.	.	.	.	+	2411	0.101	+	893	0.178
		30	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	893	0.103
		32	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	893	-0.104
		50	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	893	-0.107
		54	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	893	-0.137
		60	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	893	-0.119
	10	4	CR	.	.	.	.	.	.	.	.	.	+	1980	0.139	.	.	.
		13	MC	.	.	.	.	.	.	.	.	.	*	1980	-0.124	.	.	.
		19	MC	*	152	-0.113	.	.	.	.	.	.	.	.	.	*	670	-0.175
		20	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	670	0.108
		28	CR	+	152	0.141	.	.	.	.	.	.	.	.	.	.	.	.
		38	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	670	0.109

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading	3	4	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	2343	-0.101
		24	CR	+	797	0.101	.	.	.	.	.	.	.	.	.	.	.	.
		28	MC	*	797	-0.103	*	8694	-0.131	*	2274	-0.129	*	4781	-0.137	*	2343	-0.121
		35	CR	+	797	0.149	+	8694	0.106	+	2274	0.122	+	4781	0.136	.	.	.
	4	10	CR	*	1592	-0.109	.	.	.	.	.	.	.	.	.	.	.	.
		14	CR	+	1592	0.108	.	.	.	+	3294	0.188	+	4929	0.114	.	.	.
		23	MC	*	1592	-0.121	.	.	.	.	.	.	.	.	.	.	.	.
		25	CR	.	.	.	.	.	.	+	3294	0.103	.	.	.	.	.	.
		28	MC	*	1592	-0.104	.	.	.	.	.	.	.	.	.	*	2151	-0.114
		30	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	2151	-0.141
		40	CR	.	.	.	.	.	.	+	3294	0.102	.	.	.	.	.	.
		101	MC	*	1592	-0.126	.	.	.	.	.	.	.	.	.	*	2151	-0.114
		104	CR	+	1592	0.188	+	8819	0.117	.	.	.	+	4929	0.151	+	2151	0.188
		115	CR	.	.	.	.	.	.	+	3294	0.111	.	.	.	.	.	.
	5	9	CR	.	.	.	.	.	.	+	3795	0.112	.	.	.	.	.	.
		11	CR	+	1327	0.107	.	.	.	+	3795	0.145	+	4627	0.100	.	.	.
		22	CR	+	1327	0.139	+	8618	0.103	+	3795	0.155	+	4627	0.120	.	.	.
		34	MC	*	1327	-0.138	.	.	.	.	.	.	.	.	.	.	.	.
		39	MC	*	1327	-0.125	.	.	.	.	.	.	*	4627	-0.100	.	.	.
		47	CR	+	1327	0.161	+	8618	0.135	+	3795	0.130	+	4627	0.148	+	1483	0.130
		95	CR	+	1327	0.103	.	.	.	.	.	.	.	.	.	+	1483	0.114
	6	9	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1164	-0.131
		10	CR	.	.	.	.	.	.	+	4284	0.124	.	.	.	.	.	.
		11	CR	+	439	0.150	+	8946	0.139	+	4284	0.116	+	3910	0.163	+	1164	0.159
		18	CR	.	.	.	.	.	.	+	4284	0.102	.	.	.	.	.	.
		34	MC	*	439	-0.139	.	.	.	.	.	.	.	.	.	.	.	.
		36	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	1164	0.179
		39	MC	+	439	0.117	.	.	.	.	.	.	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading (cont.)	6	93	CR	.	.	.	.	.	.	+	4284	0.103	.	.	.	.	.	.
		98	MC	*	439	-0.102	.	.	.	.	.	.	.	.	.	.	.	.
		99	MC	*	439	-0.185	.	.	.	.	.	.	*	3910	-0.129	.	.	.
	7	4	CR	+	322	0.136	*	8398	-0.111	.	.	.	*	3324	-0.181	+	1080	0.103
		5	CR	*	322	-0.148	.	.	.	.	.	.	*	3324	-0.103	*	1080	-0.283
		6	CR	.	.	.	.	.	.	+	4301	0.108	.	.	.	.	.	.
		12	CR	.	.	.	.	.	.	+	4301	0.116	.	.	.	.	.	.
		21	CR	.	.	.	+	8398	0.116	+	4301	0.144	+	3324	0.106	.	.	.
		36	CR	.	.	.	.	.	.	.	.	.	+	3324	0.107	.	.	.
		40	MC	.	.	.	.	.	.	+	4301	0.104	.	.	.	.	.	.
		99	CR	.	.	.	+	8398	0.108	+	4301	0.132	.	.	.	.	.	.
		103	CR	.	.	.	.	.	.	.	.	.	+	3324	0.117	.	.	.
		106	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	1080	0.104
	8	9	CR	.	.	.	.	.	.	.	.	.	*	2843	-0.121	.	.	.
		13	CR	+	303	0.153	.	.	.	.	.	.	.	.	.	+	850	0.145
		14	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	850	-0.213
		15	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	850	-0.109
		16	MC	.	.	.	.	.	.	*	4679	-0.132	.	.	.	.	.	.
		25	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	850	-0.112
		29	CR	+	303	0.250	+	8083	0.237	+	4679	0.250	+	2843	0.249	+	850	0.137
		30	CR	.	.	.	+	8083	0.147	+	4679	0.137	+	2843	0.157	+	850	0.154
		39	CR	.	.	.	+	8083	0.121	+	4679	0.110	+	2843	0.148	.	.	.
		44	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	850	-0.135
		94	MC	*	303	-0.145	.	.	.	.	.	.	*	2843	-0.120	.	.	.
		101	CR	+	303	0.129	.	.	.	.	.	.	.	.	.	.	.	.
		102	CR	+	303	0.156	.	.	.	.	.	.	.	.	.	+	850	0.178
		108	CR	.	.	.	.	.	.	+	4679	0.101	.	.	.	*	850	-0.118

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading (cont.)	9	4	CR	+	249	0.199	.	.	.	.	.	.	.	.	.	+	1064	0.196
		5	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	1064	-0.294
		6	MC	.	.	.	*	7862	-0.113	*	4490	-0.149	.	.	.	.	.	.
		7	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1064	-0.119
		11	CR	+	249	0.287	+	7862	0.163	+	4490	0.140	+	2549	0.138	+	1064	0.348
		14	MC	*	249	-0.109	.	.	.	.	.	.	*	2549	-0.113	.	.	.
		18	MC	*	249	-0.110	.	.	.	.	.	.	.	.	.	.	.	.
		25	MC	*	249	-0.113	.	.	.	.	.	.	.	.	.	.	.	.
		27	CR	.	.	.	+	7862	0.119	+	4490	0.105	+	2549	0.129	+	1064	0.151
		31	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1064	-0.117
		43	MC	*	249	-0.102	.	.	.	.	.	.	.	.	.	.	.	.
		92	CR	+	249	0.123	.	.	.	.	.	.	.	.	.	+	1064	0.167
		93	MC	.	.	.	.	.	.	.	.	.	+	2549	0.111	.	.	.
		98	CR	+	249	0.186	+	7862	0.184	+	4490	0.165	+	2549	0.205	+	1064	0.219
		100	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1064	-0.216
		102	CR	+	249	0.178	.	.	.	.	.	.	.	.	.	.	.	.
		105	CR	.	.	.	.	.	.	.	.	.	+	2549	0.111	+	1064	0.113
		114	CR	+	249	0.154	+	7862	0.132	+	4490	0.126	+	2549	0.193	.	.	.
		115	MC	*	249	-0.110	.	.	.	.	.	.	*	2549	-0.111	.	.	.
	10	5	CR	.	.	.	+	6476	0.164	+	3679	0.144	+	2105	0.211	+	825	0.124
		8	MC	*	170	-0.121	*	6476	-0.113	*	3679	-0.105	*	2105	-0.110	*	825	-0.163
		10	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	825	-0.142
		11	MC	*	170	-0.113	.	.	.	.	.	.	.	.	.	*	825	-0.135

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading (cont.)	10	12	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	825	-0.113
		13	CR	.	.	.	.	.	.	.	.	.	+	2105	0.101	.	.	.
		14	MC	.	.	.	.	.	.	.	.	.	*	2105	-0.107	.	.	.
		15	MC	.	.	.	.	.	.	.	.	.	*	2105	-0.102	*	825	-0.152
		24	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	825	0.130
		27	MC	*	170	-0.101	.	.	.	.	.	.	.	.	.	.	.	.
		34	MC	.	.	.	*	6476	-0.147	*	3679	-0.116	*	2105	-0.187	*	825	-0.177
		39	CR	+	170	0.187	+	6476	0.157	+	3679	0.131	+	2105	0.203	+	825	0.178
		46	CR	.	.	.	+	6476	0.167	+	3679	0.164	+	2105	0.224	.	.	.
		47	CR	+	170	0.286	+	6476	0.236	+	3679	0.201	+	2105	0.281	+	825	0.309
		97	CR	.	.	.	+	6476	0.171	+	3679	0.136	+	2105	0.205	+	825	0.241
		100	MC	*	170	-0.127	.	.	.	.	.	.	*	2105	-0.141	*	825	-0.173
		101	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	825	-0.200
		105	MC	.	.	.	*	6476	-0.115	.	.	.	*	2105	-0.194	*	825	-0.205
		107	CR	+	170	0.199	+	6476	0.183	+	3679	0.116	+	2105	0.230	+	825	0.374
		111	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	825	0.123
Science	5	28	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	1399	-0.111
		48	CR	*	1255	-0.157	.	.	.	.	.	.	.	.	.	*	1399	-0.242
		53	CR	+	1255	0.100	.	.	.	.	.	.	.	.	.	+	1399	0.117
		72	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1399	-0.106
	8	8	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	693	0.108
		9	CR	*	249	-0.112	.	.	.	.	.	.	.	.	.	.	.	.
		17	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	693	-0.142
		24	CR	+	249	0.161	+	7902	0.244	+	4667	0.251	+	2772	0.230	+	693	0.238
		30	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	693	-0.119
		42	CR	+	249	0.102	.	.	.	.	.	.	.	.	.	.	.	.
		45	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	693	-0.191

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Science (cont.)	8	66	CR	*	249	-0.143	.	.	.	.	.	.	.	.	.	.	.	.
		76	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	693	-0.136
	10	21	CR	.	.	.	+	6182	0.240	+	3689	0.233	+	1968	0.292	.	.	.
		22	CR	.	.	.	.	.	.	+	3689	0.113	.	.	.	.	.	.
		24	CR	.	.	.	+	6182	0.143	+	3689	0.177	+	1968	0.206	*	658	-0.245
		31	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	658	-0.149
		39	MC	*	157	-0.110	.	.	.	.	.	.	.	.	.	.	.	.
		44	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	658	-0.131
		54	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	658	0.111
		75	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	658	0.115
		81	MC	+	157	0.134	.	.	.	.	.	.	.	.	.	.	.	.
Writing	3	11	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	2342	-0.122
		16	MC	*	751	-0.116	*	8679	-0.108	.	.	.	*	4760	-0.135	.	.	.
		18	MC	*	751	-0.256	*	8679	-0.176	*	2285	-0.100	*	4760	-0.224	*	2342	-0.182
	4	2E	CR	*	1516	-0.149	.	.	.	.	.	.	.	.	.	.	.	.
		3A	CR	+	1516	0.197	+	8799	0.106	.	.	.	+	4898	0.111	+	2099	0.275
		3B	CR	+	1516	0.115	.	.	.	.	.	.	+	4898	0.115	+	2099	0.110
		24	CR	+	1516	0.222	.	.	.	.	.	.	+	4898	0.129	.	.	.
		54	MC	*	1516	-0.131	.	.	.	.	.	.	*	4898	-0.112	*	2099	-0.108
		61	MC	*	1516	-0.111	.	.	.	.	.	.	.	.	.	*	2099	-0.117
		69	MC	+	1516	0.111	.	.	.	.	.	.	.	.	.	.	.	.
		75	CR	+	1516	0.180	+	8799	0.106	.	.	.	+	4898	0.161	.	.	.
		79	MC	*	1516	-0.169	*	8799	-0.105	.	.	.	*	4898	-0.136	*	2099	-0.121
		80	MC	*	1516	-0.208	*	8799	-0.103	.	.	.	*	4898	-0.156	*	2099	-0.125
		85	MC	.	.	.	.	.	.	.	.	.	*	4898	-0.105	.	.	.
		87	MC	*	1516	-0.184	*	8799	-0.104	.	.	.	*	4898	-0.152	*	2099	-0.146
		95	CR	+	1516	0.240	+	8799	0.131	.	.	.	+	4898	0.183	+	2099	0.166

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing (cont.)	5	2A	CR	*	1272	-0.107	.	.	.	.	.	.	.	.	.	*	1394	-0.117
		2B	CR	*	1272	-0.177	*	8546	-0.188	*	3786	-0.212	*	4598	-0.191	*	1394	-0.105
		2F	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	1394	0.107
		3A	CR	+	1272	0.242	+	8546	0.110	.	.	.	+	4598	0.161	+	1394	0.168
		3B	CR	+	1272	0.165	.	.	.	.	.	.	+	4598	0.129	.	.	.
		56	MC	*	1272	-0.118	.	.	.	.	.	.	.	.	.	*	1394	-0.135
		67	CR	+	1272	0.122	.	.	.	.	.	.	+	4598	0.109	.	.	.
		71	MC	*	1272	-0.141	.	.	.	.	.	.	*	4598	-0.121	*	1394	-0.182
		72	MC	*	1272	-0.225	*	8546	-0.109	.	.	.	*	4598	-0.153	*	1394	-0.202
		73	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1394	-0.115
		76	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	1394	0.107
		94	CR	+	1272	0.192	+	8546	0.102	.	.	.	+	4598	0.146	+	1394	0.128
		116	CR	+	1272	0.227	+	8546	0.104	.	.	.	+	4598	0.152	.	.	.
	6	2C	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	1035	-0.118
		3A	CR	+	396	0.107	.	.	.	.	.	.	.	.	.	.	.	.
		3A	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	1035	0.109
		27	CR	+	396	0.207	.	.	.	.	.	.	+	3828	0.155	+	1035	0.210
		53	MC	*	396	-0.179	*	8760	-0.124	.	.	.	*	3828	-0.155	*	1035	-0.156
		54	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	1035	-0.146
		56	MC	*	396	-0.103	.	.	.	.	.	.	*	3828	-0.111	*	1035	-0.103
		60	MC	*	396	-0.111	*	8760	-0.104	.	.	.	*	3828	-0.120	.	.	.
		77	CR	+	396	0.226	+	8760	0.107	.	.	.	+	3828	0.155	.	.	.
		92	CR	+	396	0.235	+	8760	0.110	.	.	.	+	3828	0.153	+	1035	0.176
	7	2F	CR	.	.	.	.	.	.	+	4295	0.127	.	.	.	*	954	-0.143
		3A	CR	.	.	.	.	.	.	.	.	.	+	3240	0.105	.	.	.
		47	CR	+	294	0.108	+	8210	0.131	+	4295	0.107	+	3240	0.158	+	954	0.139
		53	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	954	0.103

1. Flag + = favoring and \* = disfavoring



Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Continued)

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing (cont.)	7	55	MC	.	.	.	.	.	.	.	.	.	*	3240	-0.130	*	954	-0.153
		68	CR	+	294	0.124	+	8210	0.144	+	4295	0.108	+	3240	0.212	.	.	.
		75	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	954	0.135
		87	MC	.	.	.	.	.	.	.	.	.	*	3240	-0.101	*	954	-0.113
		88	MC	*	294	-0.140	*	8210	-0.152	*	4295	-0.128	*	3240	-0.194	*	954	-0.119
		89	CR	+	294	0.194	+	8210	0.125	.	.	.	+	3240	0.176	+	954	0.193
	8	2B	CR	.	.	.	.	.	.	.	.	.	.	.	.	+	740	0.117
		3A	CR	.	.	.	+	7932	0.107	.	.	.	+	2773	0.145	.	.	.
		3B	CR	.	.	.	+	7932	0.101	.	.	.	+	2773	0.132	.	.	.
		21	CR	+	276	0.141	+	7932	0.120	.	.	.	+	2773	0.180	.	.	.
		62	MC	+	276	0.140	.	.	.	.	.	.	+	2773	0.126	+	740	0.127
		70	MC	.	.	.	.	.	.	.	.	.	.	.	.	*	740	-0.156
		71	MC	*	276	-0.244	*	7932	-0.192	*	4681	-0.131	*	2773	-0.284	*	740	-0.265
		73	CR	+	276	0.129	+	7932	0.124	.	.	.	+	2773	0.195	.	.	.
		88	CR	+	276	0.222	+	7932	0.156	.	.	.	+	2773	0.243	+	740	0.217
	9	2A	CR	.	.	.	*	7557	-0.128	.	.	.	*	2382	-0.165	*	902	-0.163
		2B	CR	.	.	.	.	.	.	.	.	.	.	.	.	*	902	-0.178
		26	CR	+	220	0.112	.	.	.	.	.	.	+	2382	0.162	.	.	.
		51	MC	.	.	.	*	7557	-0.164	*	4485	-0.124	*	2382	-0.227	*	902	-0.177
		52	MC	*	220	-0.177	*	7557	-0.145	*	4485	-0.174	*	2382	-0.137	.	.	.
		53	MC	*	220	-0.202	*	7557	-0.134	.	.	.	*	2382	-0.206	*	902	-0.273
		58	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	902	0.106
		69	CR	+	220	0.217	+	7557	0.150	+	4485	0.129	+	2382	0.183	+	902	0.192
		72	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	902	0.106
		84	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	902	0.134
		90	CR	+	220	0.212	+	7557	0.138	+	4485	0.125	+	2382	0.173	+	902	0.132

1. Flag + = favoring and \* = disfavoring



**Table 244. Items Flagged for DIF by Language Proficiency Focal Group (Concluded)**

Content Area	Grade	Item #	Item Type	Language Proficiency Focal Group <sup>1</sup>														
				Bilingual			ESL			FEP			LEP			NEP		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing (cont.)	10	2B	CR	.	.	.	.	.	.	.	.	.	*	2006	-0.141	.	.	.
		2D	CR	.	.	.	.	.	.	.	.	.	*	2006	-0.117	.	.	.
		3A	CR	.	.	.	.	.	.	+	3676	0.109	.	.	.	.	.	.
		63	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	692	0.119
		66	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	692	0.124
		71	MC	.	.	.	.	.	.	.	.	.	*	2006	-0.121	.	.	.
		74	CR	.	.	.	+	6249	0.134	+	3676	0.114	+	2006	0.216	.	.	.
		89	MC	*	166	-0.105	*	6249	-0.114	.	.	.	*	2006	-0.177	*	692	-0.174
		94	MC	.	.	.	.	.	.	.	.	.	.	.	.	+	692	0.154
		96	CR	.	.	.	+	6249	0.159	+	3676	0.122	+	2006	0.233	+	692	0.120
		116	CR	.	.	.	+	6249	0.157	+	3676	0.137	+	2006	0.213	+	692	0.113
Spanish Reading	3	17	CR	.	.	.	*	427	-0.108	.	.	.	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 245. Items Flagged for DIF by Education Plan Focal Group**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				504			GATE			IEP			Title 1		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	3	26	CR	.	.	.	.	.	.	+	5762	0.111	.	.	.
	4	35	CR	*	295	-0.152	.	.	.	.	.	.	.	.	.
		46	CR	.	.	.	.	.	.	+	5957	0.103	.	.	.
	7	20	CR	.	.	.	+	6616	0.110	.	.	.	.	.	.
		60	CR	.	.	.	.	.	.	*	5462	-0.112	.	.	.
	8	3	CR	.	.	.	.	.	.	*	5072	-0.171	.	.	.
		34	CR	.	.	.	.	.	.	*	5072	-0.130	.	.	.
		40	CR	.	.	.	.	.	.	.	.	.	+	6775	0.109
	9	7	CR	.	.	.	.	.	.	.	.	.	*	2520	-0.143
		46	CR	.	.	.	*	6097	-0.103	.	.	.	.	.	.
Reading	10	13	MC	.	.	.	.	.	.	*	4278	-0.116	*	1960	-0.103
		34	CR	.	.	.	.	.	.	.	.	.	*	1960	-0.128
		40	CR	*	721	-0.192	.	.	.	*	4278	-0.112	.	.	.
	3	24	CR	*	190	-0.166	.	.	.	.	.	.	.	.	.
	4	23	CR	*	298	-0.146	.	.	.	.	.	.	.	.	.
	5	12	CR	.	.	.	*	6170	-0.104	.	.	.	.	.	.
	6	19	CR	*	466	-0.141	.	.	.	.	.	.	.	.	.
		106	CR	*	466	-0.136	.	.	.	.	.	.	.	.	.
	8	29	CR	*	639	-0.154	.	.	.	*	5061	-0.132	+	6860	0.120
		108	CR	*	639	-0.109	.	.	.	.	.	.	.	.	.
Science	9	11	CR	.	.	.	.	.	.	.	.	.	+	2496	0.106
		42	CR	*	770	-0.113	.	.	.	.	.	.	.	.	.
		98	CR	*	770	-0.189	.	.	.	.	.	.	+	2496	0.115
		114	CR	*	770	-0.156	.	.	.	.	.	.	+	2496	0.144
	10	5	CR	.	.	.	.	.	.	.	.	.	+	1920	0.127
		13	CR	*	706	-0.116	.	.	.	.	.	.	.	.	.
		37	CR	.	.	.	.	.	.	+	4264	0.115	.	.	.
		46	CR	.	.	.	.	.	.	.	.	.	+	1920	0.154
		47	CR	*	706	-0.148	.	.	.	.	.	.	+	1920	0.112
		97	CR	*	706	-0.143	.	.	.	.	.	.	+	1920	0.115
Writing		107	CR	.	.	.	.	.	.	.	.	.	+	1920	0.119
		110	CR	*	706	-0.103	.	.	.	.	.	.	.	.	.
	5	24	CR	.	.	.	.	.	.	*	5814	-0.119	.	.	.
		42	CR	.	.	.	.	.	.	*	5814	-0.154	.	.	.
	8	22	CR	.	.	.	.	.	.	.	.	.	+	6343	0.116
Writing		24	CR	*	644	-0.271	.	.	.	*	5084	-0.288	.	.	.
	10	21	CR	*	720	-0.171	.	.	.	*	4293	-0.195	+	1922	0.132
		24	CR	*	720	-0.105	.	.	.	.	.	.	.	.	.
	4	3B	CR	*	297	-0.107	.	.	.	.	.	.	.	.	.
		24	CR	*	297	-0.132	.	.	.	.	.	.	.	.	.
		75	CR	*	297	-0.119	*	4879	-0.138	.	.	.	.	.	.
		95	CR	*	297	-0.160	.	.	.	.	.	.	.	.	.
	5	3A	CR	*	402	-0.113	.	.	.	.	.	.	.	.	.
		3B	CR	*	402	-0.141	.	.	.	*	5803	-0.111	.	.	.
		116	CR	*	402	-0.159	.	.	.	.	.	.	.	.	.
Writing	6	2D	CR	.	.	.	.	.	.	*	5650	-0.104	.	.	.
		3A	CR	*	463	-0.169	.	.	.	.	.	.	.	.	.
		3B	CR	*	463	-0.191	.	.	.	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 245. Items Flagged for DIF by Education Plan Focal Group (Concluded)**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				504			GATE			IEP			Title 1		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing (cont.)	6	27 CR	*	.	463	-0.166	.	.	.	.	.	.	.	.	.
		77 CR	*	.	463	-0.134	.	.	.	.	.	.	.	.	.
		92 CR	*	.	463	-0.132	.	.	.	.	.	.	.	.	.
	7	47 CR	*	.	620	-0.180	.	.	.	.	.	.	.	.	.
		89 CR	*	.	620	-0.188	.	.	.	.	.	.	.	.	.
	8	3A CR	*	.	638	-0.112	.	.	.	.	.	.	.	.	.
		3B CR	*	.	638	-0.105	.	.	.	.	.	.	.	.	.
		73 CR	*	.	638	-0.119	.	.	.	.	.	.	.	.	.
		88 CR	*	.	638	-0.127	.	.	.	.	.	.	.	.	.
	9	3A CR	.	.	.	.	.	.	.	.	.	.	+	2494	0.121
		3B CR	.	.	.	.	.	.	.	.	.	.	+	2494	0.122
		51 MC	.	.	.	.	.	.	.	.	.	.	*	2494	-0.116
		52 MC	.	.	.	.	.	.	.	.	.	.	*	2494	-0.117
	10	74 CR	*	.	710	-0.111	.	.	.	.	.	.	+	1923	0.107
		96 CR	*	.	710	-0.109	.	.	.	.	.	.	.	.	.
Spanish Reading	3	39 MC	.	.	.	.	.	.	.	+	110	0.135	.	.	.
Spanish Writing	3	16A CR	.	.	.	.	.	.	.	+	110	0.131	.	.	.
		19 MC	.	.	.	.	.	.	.	*	110	-0.105	.	.	.
		30 MC	.	.	.	.	.	.	.	*	110	-0.104	.	.	.
		31 MC	.	.	.	.	.	.	.	*	110	-0.130	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 246. Items Flagged for DIF by Homeless, Immigrant, Migrant, and Free Lunch Eligible Focal Groups**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics	4	11	CR	.	.	.	*	671	-0.116	.	.	.	.	.	.
		15	CR	.	.	.	*	671	-0.171	.	.	.	.	.	.
		18	CR	.	.	.	.	.	.	+	473	0.125	.	.	.
		34	MC	.	.	.	+	671	0.104	.	.	.	.	.	.
		46	CR	.	.	.	+	671	0.160	.	.	.	.	.	.
		55	CR	.	.	.	*	671	-0.118	.	.	.	.	.	.
		69	CR	.	.	.	+	671	0.139	.	.	.	.	.	.
	5	14	CR	.	.	.	.	.	.	+	466	0.118	.	.	.
		35	MC	.	.	.	+	648	0.104	.	.	.	.	.	.
	6	2	MC	.	.	.	+	558	0.133	.	.	.	.	.	.
		11	CR	.	.	.	+	558	0.193	.	.	.	.	.	.
		26	CR	+	552	0.101	.	.	.	.	.	.	.	.	.
		30	MC	.	.	.	*	558	-0.113	.	.	.	.	.	.
		31	MC	.	.	.	*	558	-0.103	.	.	.	.	.	.
		40	CR	.	.	.	*	558	-0.101	.	.	.	.	.	.
		43	CR	.	.	.	*	558	-0.229	*	422	-0.167	.	.	.
		44	MC	.	.	.	*	558	-0.100	.	.	.	.	.	.
		50	MC	.	.	.	+	558	0.138	.	.	.	.	.	.
	7	3	CR	.	.	.	+	567	0.124	.	.	.	.	.	.
		7	MC	.	.	.	*	567	-0.126	.	.	.	.	.	.
		8	CR	.	.	.	*	567	-0.157	.	.	.	.	.	.
		12	CR	.	.	.	*	567	-0.186	.	.	.	.	.	.
		14	CR	.	.	.	+	567	0.190	.	.	.	.	.	.
		17	MC	.	.	.	*	567	-0.119	.	.	.	.	.	.
		26	MC	.	.	.	+	567	0.107	.	.	.	.	.	.
		33	CR	.	.	.	*	567	-0.117	.	.	.	.	.	.
		35	CR	.	.	.	.	.	.	+	415	0.127	.	.	.
		48	CR	.	.	.	+	567	0.147	.	.	.	.	.	.
		60	CR	.	.	.	*	567	-0.232	.	.	.	.	.	.
	8	5	CR	.	.	.	*	503	-0.174	.	.	.	.	.	.
		9	MC	.	.	.	*	503	-0.109	.	.	.	.	.	.
		15	MC	.	.	.	*	503	-0.118	.	.	.	.	.	.
		24	CR	.	.	.	+	503	0.179	.	.	.	.	.	.
		27	MC	.	.	.	+	503	0.103	.	.	.	.	.	.
		30	CR	.	.	.	*	503	-0.155	.	.	.	.	.	.
		40	CR	+	513	0.136	+	503	0.286	+	348	0.181	.	.	.
		46	CR	.	.	.	*	503	-0.416	*	348	-0.242	.	.	.
	9	7	CR	*	466	-0.103	.	.	.	.	.	.	.	.	.
		16	MC	.	.	.	*	606	-0.104	.	.	.	.	.	.
		23	CR	.	.	.	+	606	0.231	.	.	.	.	.	.
		30	MC	.	.	.	+	606	0.122	.	.	.	.	.	.
		32	CR	.	.	.	*	606	-0.162	.	.	.	.	.	.
		40	CR	.	.	.	+	606	0.124	.	.	.	.	.	.
		50	CR	.	.	.	*	606	-0.160	.	.	.	.	.	.
		54	CR	.	.	.	*	606	-0.170	.	.	.	.	.	.
		60	CR	.	.	.	*	606	-0.130	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 246. Items Flagged for DIF by Homeless, Immigrant, Migrant, and Free Lunch Eligible Focal Groups (Continued)**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Mathematics (cont.)	10	13 MC		.	.	.	.	.	.	*	250	-0.134	*	1093	-0.107
		19 MC		.	.	.	*	511	-0.136	*	250	-0.148	.	.	.
		20 CR		.	.	.	+	511	0.143	.	.	.	.	.	.
		28 CR		.	.	.	*	511	-0.168	.	.	.	.	.	.
Reading	3	4 MC		.	.	.	*	783	-0.101	.	.	.	.	.	.
		28 MC		.	.	.	*	783	-0.179	*	422	-0.114	.	.	.
		35 CR		.	.	.	+	783	0.186	+	422	0.146	.	.	.
	4	10 CR		.	.	.	.	.	.	*	477	-0.127	.	.	.
		23 MC		.	.	.	*	646	-0.100	*	477	-0.106	.	.	.
		40 CR		.	.	.	+	646	0.107	.	.	.	.	.	.
		101 MC		.	.	.	*	646	-0.150	.	.	.	.	.	.
		104 CR		.	.	.	+	646	0.222	+	477	0.132	.	.	.
	5	34 MC		.	.	.	*	694	-0.179	.	.	.	.	.	.
		39 MC		.	.	.	*	694	-0.120	*	478	-0.113	.	.	.
		47 CR		.	.	.	+	694	0.135	+	478	0.120	.	.	.
		95 CR		.	.	.	+	694	0.163	+	478	0.107	.	.	.
	6	9 MC		.	.	.	*	640	-0.126	.	.	.	.	.	.
		11 CR		.	.	.	+	640	0.245	+	437	0.164	.	.	.
		12 CR		.	.	.	.	.	.	+	437	0.100	.	.	.
		34 MC		.	.	.	*	640	-0.135	.	.	.	.	.	.
		36 CR		.	.	.	+	640	0.185	.	.	.	.	.	.
		98 MC		.	.	.	*	640	-0.112	.	.	.	.	.	.
		99 MC		.	.	.	*	640	-0.139	*	437	-0.120	.	.	.
	7	5 CR		.	.	.	*	655	-0.255	*	428	-0.191	.	.	.
		9 MC		.	.	.	*	655	-0.136	.	.	.	.	.	.
		21 CR		.	.	.	.	.	.	+	428	0.102	.	.	.
		35 MC		.	.	.	+	655	0.100	.	.	.	.	.	.
		36 CR		.	.	.	+	655	0.120	+	428	0.108	.	.	.
	8	9 CR		.	.	.	.	.	.	*	380	-0.117	.	.	.
		13 CR		.	.	.	+	616	0.141	+	380	0.105	.	.	.
		14 CR		.	.	.	*	616	-0.168	.	.	.	.	.	.
		25 MC		.	.	.	*	616	-0.123	.	.	.	.	.	.
		28 MC		.	.	.	*	616	-0.101	.	.	.	.	.	.
		29 CR		.	.	.	+	616	0.302	+	380	0.254	+	1527	0.105
														4	
		30 CR		.	.	.	+	616	0.247	+	380	0.120	.	.	.
		39 CR		.	.	.	+	616	0.124	.	.	.	.	.	.
		44 MC		.	.	.	*	616	-0.105	.	.	.	.	.	.
		94 MC		.	.	.	*	616	-0.135	.	.	.	.	.	.
		102 CR		.	.	.	+	616	0.146	+	380	0.107	.	.	.
		103 MC		.	.	.	.	.	.	+	380	0.100	.	.	.
	9	4 CR		.	.	.	+	723	0.207	.	.	.	.	.	.
		5 CR		.	.	.	*	723	-0.207	.	.	.	.	.	.
		7 MC		.	.	.	*	723	-0.101	.	.	.	.	.	.
		11 CR		.	.	.	+	723	0.328	+	389	0.129	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 246. Items Flagged for DIF by Homeless, Immigrant, Migrant, and Free Lunch Eligible Focal Groups (Continued)**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Reading (cont.)	9	18 MC	.	.	.	.	*	723	-0.120	*	389	-0.103	.	.	.
		19 CR	+	.	479	0.134	.	.	.	.	.	.	.	.	.
		27 CR	.	.	.	.	+	723	0.167	+	389	0.115	.	.	.
		92 CR	.	.	.	.	+	723	0.175	+	389	0.122	.	.	.
		93 MC	.	.	.	.	.	.	.	+	389	0.123	.	.	.
		98 CR	.	.	.	.	+	723	0.220	+	389	0.168	.	.	.
		100 MC	.	.	.	.	*	723	-0.203	.	.	.	.	.	.
		114 CR	.	.	.	.	.	.	.	+	389	0.186	.	.	.
	10	5 CR	.	.	.	.	+	613	0.205	.	.	.	.	.	.
		8 MC	.	.	.	.	*	613	-0.163	*	281	-0.112	.	.	.
		10 MC	.	.	.	.	.	613	-0.109	.	.	.	.	.	.
		11 MC	.	.	.	.	*	613	-0.115	*	281	-0.111	.	.	.
		14 MC	.	.	.	.	*	613	-0.120	*	281	-0.119	.	.	.
		15 MC	.	.	.	.	*	613	-0.108	.	.	.	.	.	.
		34 MC	.	.	.	.	*	613	-0.191	*	281	-0.174	.	.	.
		39 CR	.	.	.	.	+	613	0.190	+	281	0.139	.	.	.
		46 CR	.	.	.	.	.	.	.	.	.	.	+	11029	0.100
		47 CR	.	.	.	.	+	613	0.284	+	281	0.250	.	.	.
		54 CR	.	.	.	.	*	613	-0.114	.	.	.	.	.	.
		97 CR	.	.	.	.	+	613	0.223	+	281	0.125	.	.	.
		100 MC	.	.	.	.	*	613	-0.125	*	281	-0.128	.	.	.
		101 MC	.	.	.	.	*	613	-0.172	.	.	.	.	.	.
		105 MC	.	.	.	.	*	613	-0.196	*	281	-0.154	.	.	.
		107 CR	.	.	.	.	+	613	0.369	+	281	0.280	+	11029	0.103
		111 MC	.	.	.	.	+	613	0.116	.	.	.	.	.	.
Science	5	39 MC	.	.	.	.	+	636	0.139	.	.	.	.	.	.
		48 CR	.	.	.	.	*	636	-0.238	*	468	-0.135	.	.	.
	8	4 MC	.	.	.	.	+	487	0.139	.	.	.	.	.	.
		10 MC	.	.	.	.	.	.	.	*	345	-0.101	.	.	.
		17 MC	.	.	.	.	*	487	-0.117	.	.	.	.	.	.
		24 CR	.	.	.	.	+	487	0.308	+	345	0.279	.	.	.
		45 MC	.	.	.	.	*	487	-0.142	.	.	.	.	.	.
		47 CR	.	.	.	.	*	487	-0.113	.	.	.	.	.	.
		64 CR	.	.	.	.	+	487	0.122	.	.	.	.	.	.
		76 CR	.	.	.	.	*	487	-0.106	.	.	.	.	.	.
	10	19 MC	.	.	.	.	.	.	.	+	245	0.101	.	.	.
	10	21 CR	*	.	382	-0.175	.	.	.	+	245	0.279	.	.	.
	10	24 CR	.	.	.	.	*	496	-0.215	.	.	.	.	.	.
	10	31 CR	.	.	.	.	*	496	-0.104	.	.	.	.	.	.
	10	44 CR	.	.	.	.	*	496	-0.137	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 246. Items Flagged for DIF by Homeless, Immigrant, Migrant, and Free Lunch Eligible Focal Groups (Continued)**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing	3	11 MC		.	.	.	*	781	-0.103	.	.	.	.	.	.
		16 MC		.	.	.	*	781	-0.113	*	422	-0.149	.	.	.
		18 MC		.	.	.	*	781	-0.214	*	422	-0.241	.	.	.
	4	3A CR		+	641	0.111	+	621	0.149	+	468	0.150	.	.	.
		3B CR		.	.	.	+	621	0.115	.	.	.	.	.	.
		24 CR		.	.	.	.	.	.	+	468	0.146	.	.	.
		54 MC		.	.	.	*	621	-0.104	*	468	-0.113	.	.	.
		79 MC		.	.	.	*	621	-0.177	*	468	-0.168	.	.	.
		80 MC		.	.	.	*	621	-0.180	.	.	.	.	.	.
		87 MC		.	.	.	*	621	-0.130	*	468	-0.188	.	.	.
		95 CR		.	.	.	+	621	0.147	+	468	0.162	.	.	.
	5	2B CR		.	.	.	*	640	-0.150	*	465	-0.166	.	.	.
		3A CR		.	.	.	+	640	0.175	+	465	0.123	.	.	.
		56 MC		.	.	.	*	640	-0.138	.	.	.	.	.	.
		71 MC		.	.	.	*	640	-0.197	*	465	-0.188	.	.	.
		72 MC		.	.	.	*	640	-0.251	*	465	-0.155	.	.	.
		73 MC		.	.	.	*	640	-0.104	.	.	.	.	.	.
		76 MC		.	.	.	+	640	0.103	.	.	.	.	.	.
		94 CR		.	.	.	.	.	.	+	465	0.114	.	.	.
	6	116 CR		.	.	.	.	.	.	+	465	0.165	.	.	.
		2B CR		.	.	.	.	.	.	+	416	0.120	.	.	.
		2D CR		.	.	.	+	561	0.138	.	.	.	.	.	.
		27 CR		.	.	.	+	561	0.124	.	.	.	.	.	.
		53 MC		.	.	.	*	561	-0.201	*	416	-0.196	.	.	.
		54 MC		.	.	.	*	561	-0.101	.	.	.	.	.	.
		56 MC		.	.	.	*	561	-0.121	.	.	.	.	.	.
		60 MC		.	.	.	*	561	-0.171	*	416	-0.120	.	.	.
	7	92 CR		.	.	.	.	.	.	+	416	0.132	.	.	.
		47 CR		.	.	.	+	569	0.165	+	405	0.169	.	.	.
		55 MC		.	.	.	*	569	-0.163	*	405	-0.104	.	.	.
		65 MC		.	.	.	*	569	-0.110	.	.	.	.	.	.
		68 CR		.	.	.	.	.	.	+	405	0.157	.	.	.
		75 MC		.	.	.	+	569	0.124	.	.	.	.	.	.
		84 MC		.	.	.	+	569	0.131	.	.	.	.	.	.
		87 MC		.	.	.	*	569	-0.183	.	.	.	.	.	.
	8	88 MC		.	.	.	*	569	-0.184	*	405	-0.166	.	.	.
		89 CR		.	.	.	+	569	0.149	.	.	.	.	.	.
		3A CR		.	.	.	.	.	.	+	354	0.130	.	.	.
		3B CR		.	.	.	.	.	.	+	354	0.120	.	.	.
		21 CR		.	.	.	.	.	.	+	354	0.176	.	.	.
		47 MC		.	.	.	+	530	0.103	.	.	.	.	.	.
		51 MC		.	.	.	+	530	0.118	.	.	.	.	.	.
		62 MC		.	.	.	+	530	0.157	+	354	0.132	.	.	.
		70 MC		.	.	.	*	530	-0.168	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 246. Items Flagged for DIF by Homeless, Immigrant, Migrant, and Free Lunch Eligible Focal Groups (Concluded)**

Content Area	Grade	Item #	Item Type	Education Plan Focal Group											
				Homeless			Immigrant			Migrant			Free Lunch		
				Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd	Flag	N	Obs-Prd
Writing (cont.)	8	71 MC		.	.	.	*	530	-0.322	*	354	-0.256	.	.	.
		75 MC		.	.	.	.	.	.	*	354	-0.127	.	.	.
		84 MC		.	.	.	+	530	0.109	.	.	.	.	.	.
		88 CR		.	.	.	+	530	0.101	+	354	0.202	.	.	.
	9	2A CR		.	.	.	*	622	-0.137	*	356	-0.113	.	.	.
		2B CR		.	.	.	*	622	-0.150	.	.	.	.	.	.
		51 MC		.	.	.	*	622	-0.190	*	356	-0.215	.	.	.
		52 MC		.	.	.	.	.	.	*	356	-0.134	.	.	.
		53 MC		.	.	.	*	622	-0.273	*	356	-0.196	.	.	.
		66 MC		.	.	.	+	622	0.133	.	.	.	.	.	.
		69 CR		.	.	.	+	622	0.114	+	356	0.205	.	.	.
		80 MC		.	.	.	.	.	.	*	356	-0.108	.	.	.
		84 MC		.	.	.	+	622	0.159	.	.	.	.	.	.
		90 CR		.	.	.	.	.	.	+	356	0.190	.	.	.
	10	2B CR		.	.	.	.	.	.	*	256	-0.104	.	.	.
		66 MC		.	.	.	+	531	0.151	.	.	.	.	.	.
		71 MC		.	.	.	.	.	.	*	256	-0.122	.	.	.
		74 CR		.	.	.	.	.	.	+	256	0.146	.	.	.
		89 MC		.	.	.	*	531	-0.205	*	256	-0.120	.	.	.
		94 MC		.	.	.	+	531	0.123	+	256	0.131	.	.	.
		96 CR		.	.	.	.	.	.	+	256	0.171	.	.	.
		116 CR		.	.	.	.	.	.	+	256	0.136	.	.	.
Spanish Reading	3	17 CR		.	.	.	*	199	-0.174	.	.	.	.	.	.
		22 MC		*	62	-0.181	.	.	.	.	.	.	.	.	.
Spanish Writing	3	19 MC		.	.	.	+	197	0.101	.	.	.	.	.	.

1. Flag + = favoring and \* = disfavoring



**Table 247. Inter-correlation among Content Areas  
(Scale Scores)**

<b>Grade</b>	<b>Content Area</b>	<b>Reading</b>	<b>Writing</b>	<b>Mathematics</b>	<b>Science</b>
3	Reading	1.000	0.753	0.722	
	Writing	0.753	1.000	0.743	
	Mathematics	0.722	0.743	1.000	
4	Reading	1.000	0.810	0.754	
	Writing	0.810	1.000	0.764	
	Mathematics	0.754	0.764	1.000	
5	Reading	1.000	0.825	0.767	0.823
	Writing	0.825	1.000	0.773	0.777
	Mathematics	0.767	0.773	1.000	0.811
	Science	0.823	0.777	0.811	1.000
6	Reading	1.000	0.843	0.790	
	Writing	0.843	1.000	0.775	
	Mathematics	0.790	0.775	1.000	
7	Reading	1.000	0.856	0.784	
	Writing	0.856	1.000	0.778	
	Mathematics	0.784	0.778	1.000	
8	Reading	1.000	0.848	0.779	0.827
	Writing	0.848	1.000	0.772	0.763
	Mathematics	0.779	0.772	1.000	0.842
	Science	0.827	0.763	0.842	1.000
9	Reading	1.000	0.864	0.790	
	Writing	0.864	1.000	0.783	
	Mathematics	0.790	0.783	1.000	
10	Reading	1.000	0.861	0.777	0.814
	Writing	0.861	1.000	0.782	0.788
	Mathematics	0.777	0.782	1.000	0.849
	Science	0.814	0.788	0.849	1.000



**Table 248. Inter-correlation among Content Areas  
(Percentile Ranks)**

<b>Grade</b>	<b>Content Area</b>	<b>Reading</b>	<b>Writing</b>	<b>Mathematics</b>	<b>Science</b>
3	Reading	1.000	0.796	0.763	
	Writing	0.796	1.000	0.757	
	Mathematics	0.763	0.757	1.000	
4	Reading	1.000	0.863	0.792	
	Writing	0.863	1.000	0.778	
	Mathematics	0.792	0.778	1.000	
5	Reading	1.000	0.853	0.794	0.853
	Writing	0.853	1.000	0.783	0.781
	Mathematics	0.794	0.783	1.000	0.814
	Science	0.853	0.781	0.814	1.000
6	Reading	1.000	0.861	0.801	
	Writing	0.861	1.000	0.780	
	Mathematics	0.801	0.780	1.000	
7	Reading	1.000	0.863	0.785	
	Writing	0.863	1.000	0.778	
	Mathematics	0.785	0.778	1.000	
8	Reading	1.000	0.861	0.788	0.840
	Writing	0.861	1.000	0.777	0.762
	Mathematics	0.788	0.777	1.000	0.849
	Science	0.840	0.762	0.849	1.000
9	Reading	1.000	0.884	0.806	
	Writing	0.884	1.000	0.789	
	Mathematics	0.806	0.789	1.000	
10	Reading	1.000	0.877	0.790	0.822
	Writing	0.877	1.000	0.787	0.792
	Mathematics	0.790	0.787	1.000	0.859
	Science	0.822	0.792	0.859	1.000



**Table 249. Inter-correlation with Demographic Variables**

<b>Content Area</b>	<b>Grade</b>	<b>Language</b>	<b>Age</b>	<b>Gender</b>	<b>Am. Indian/ AK Nat.</b>	<b>Asian</b>	<b>Black</b>	<b>Hispanic</b>
Mathematics	3	English	-0.058	0.014	-0.037	0.069	-0.136	-0.297
Mathematics	4	English	-0.081	0.022	-0.040	0.081	-0.132	-0.291
Mathematics	5	English	-0.132	0.017	-0.035	0.089	-0.126	-0.295
Mathematics	6	English	-0.147	-0.007	-0.034	0.088	-0.136	-0.284
Mathematics	7	English	-0.172	-0.004	-0.032	0.083	-0.138	-0.303
Mathematics	8	English	-0.178	0.021	-0.042	0.084	-0.140	-0.308
Mathematics	9	English	-0.258	0.020	-0.041	0.067	-0.153	-0.328
Mathematics	10	English	-0.226	0.004	-0.036	0.070	-0.158	-0.311
Reading	3	English	-0.074	-0.085	-0.033	0.037	-0.113	-0.276
Reading	4	English	-0.085	-0.092	-0.037	0.043	-0.105	-0.312
Reading	5	English	-0.129	-0.096	-0.032	0.054	-0.093	-0.315
Reading	6	English	-0.147	-0.125	-0.030	0.046	-0.101	-0.329
Reading	7	English	-0.161	-0.159	-0.029	0.046	-0.101	-0.310
Reading	8	English	-0.172	-0.139	-0.032	0.039	-0.106	-0.317
Reading	9	English	-0.234	-0.147	-0.034	0.032	-0.115	-0.324
Reading	10	English	-0.211	-0.189	-0.024	0.039	-0.111	-0.279
Reading	3	Spanish	-0.035	-0.161			0.044	-0.009
Reading	4	Spanish	-0.144	-0.144				-0.163
Science	5	English	-0.090	0.055	-0.032	0.042	-0.132	-0.384
Science	8	English	-0.153	0.050	-0.033	0.045	-0.143	-0.363
Science	10	English	-0.205	0.023	-0.033	0.031	-0.144	-0.345
Writing	3	English	-0.088	-0.157	-0.040	0.047	-0.106	-0.257
Writing	4	English	-0.089	-0.170	-0.040	0.056	-0.094	-0.322
Writing	5	English	-0.131	-0.150	-0.039	0.068	-0.093	-0.313
Writing	6	English	-0.153	-0.181	-0.037	0.059	-0.103	-0.298
Writing	7	English	-0.169	-0.220	-0.033	0.063	-0.098	-0.310
Writing	8	English	-0.185	-0.220	-0.036	0.065	-0.092	-0.304
Writing	9	English	-0.250	-0.207	-0.036	0.036	-0.120	-0.311
Writing	10	English	-0.226	-0.206	-0.033	0.036	-0.114	-0.296
Writing	3	Spanish	-0.051	-0.208			0.035	0.005
Writing	4	Spanish	-0.140	-0.238				-0.168



**Table 250. Predictive Validity Coefficients**

<b>Content Area</b>	<b>Grade in 2007</b>	<b>Grade in 2008</b>	<b>Number Matched</b>	<b>Reliability 2007</b>	<b>Reliability 2008</b>	<b>Correlation <math>r_{2007-2008}</math></b>	<b>Validity Coefficient</b>
Mathematics	3	4	54381	0.90	0.94	0.82	0.89
Mathematics	4	5	53538	0.94	0.94	0.87	0.92
Mathematics	5	6	53338	0.94	0.94	0.87	0.93
Mathematics	6	7	53018	0.94	0.93	0.89	0.96
Mathematics	7	8	52844	0.93	0.94	0.90	0.96
Mathematics	8	9	53287	0.93	0.93	0.89	0.96
Mathematics	9	10	50941	0.93	0.92	0.89	0.96
Reading	3	4	52600	0.88	0.93	0.81	0.89
Reading	4	5	52945	0.93	0.92	0.85	0.92
Reading	5	6	53176	0.93	0.92	0.86	0.93
Reading	6	7	52783	0.93	0.92	0.85	0.92
Reading	7	8	52728	0.93	0.93	0.87	0.94
Reading	8	9	53409	0.93	0.93	0.86	0.92
Reading	9	10	51271	0.93	0.92	0.83	0.90
Spanish Reading	3	4	73	0.87	0.92	0.76	0.85
Writing	3	4	52674	0.91	0.92	0.74	0.80
Writing	4	5	53330	0.92	0.91	0.77	0.84
Writing	5	6	53314	0.91	0.91	0.79	0.86
Writing	6	7	53177	0.91	0.91	0.78	0.86
Writing	7	8	53199	0.91	0.91	0.80	0.88
Writing	8	9	53687	0.91	0.92	0.81	0.88
Writing	9	10	51524	0.92	0.92	0.80	0.87
Spanish Writing	3	4	70	0.90	0.85	0.77	0.88



**Table 251. Classification Consistency and Classification Accuracy for Mathematics Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0629	0.0217	0.0002	0.0000	0.0849
Partially Proficient	0.0221	0.1465	0.0475	0.0000	0.2161
Proficient	0.0002	0.0478	0.2807	0.0554	0.3841
Advanced	0.0000	0.0000	0.0613	0.2536	0.3149
Sum	0.0852	0.2160	0.3898	0.3090	1.0000
Observed Score Dist.	0.0802	0.2211	0.3997	0.2990	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9558	0.9042	0.8833	0.7437
Chance Probability ( $P_c$ )	0.8444	0.5791	0.5707	0.3009
Kappa	0.7157	0.7724	0.7281	0.6334
Classification Accuracy	0.9686	0.9310	0.9159	0.8155



**Table 252. Classification Consistency and Classification Accuracy for Mathematics Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0742	0.0177	0.0000	0.0000	0.0919
Partially Proficient	0.0161	0.1724	0.0363	0.0000	0.2248
Proficient	0.0000	0.0376	0.3267	0.0475	0.4118
Advanced	0.0000	0.0000	0.0487	0.2227	0.2715
Sum	0.0904	0.2277	0.4117	0.2702	1.0000
Observed Score Dist.	0.0886	0.2257	0.4242	0.2614	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9662	0.9261	0.9038	0.7961
Chance Probability ( $P_c$ )	0.8343	0.5667	0.6050	0.3024
Kappa	0.7961	0.8294	0.7564	0.7077
Classification Accuracy	0.9754	0.9488	0.9310	0.8551



**Table 253. Classification Consistency and Classification Accuracy for Mathematics Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0692	0.0178	0.0000	0.0000	0.0870
Partially Proficient	0.0172	0.2056	0.0367	0.0000	0.2594
Proficient	0.0000	0.0361	0.2907	0.0421	0.3689
Advanced	0.0000	0.0000	0.0412	0.2435	0.2846
Sum	0.0864	0.2595	0.3686	0.2855	1.0000
Observed Score Dist.	0.0840	0.2623	0.3733	0.2804	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9651	0.9272	0.9168	0.8090
Chance Probability ( $P_c$ )	0.8416	0.5473	0.5924	0.2921
Kappa	0.7793	0.8391	0.7958	0.7302
Classification Accuracy	0.9744	0.9474	0.9420	0.8638



**Table 254. Classification Consistency and Classification Accuracy for Mathematics Grade 6****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1047	0.0253	0.0000	0.0000	0.1300
Partially Proficient	0.0232	0.1916	0.0425	0.0000	0.2573
Proficient	0.0002	0.0365	0.2800	0.0431	0.3598
Advanced	0.0000	0.0000	0.0430	0.2099	0.2529
Sum	0.1280	0.2534	0.3656	0.2530	1.0000
Observed Score Dist.	0.1283	0.2591	0.3675	0.2452	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9514	0.9208	0.9139	0.7862
Chance Probability ( $P_c$ )	0.7753	0.5267	0.6221	0.2774
Kappa	0.7835	0.8327	0.7721	0.7042
Classification Accuracy	0.9649	0.9419	0.9414	0.8482



**Table 255. Classification Consistency and Classification Accuracy for Mathematics Grade 7****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1522	0.0370	0.0000	0.0000	0.1892
Partially Proficient	0.0357	0.2644	0.0485	0.0001	0.3487
Proficient	0.0000	0.0440	0.1977	0.0317	0.2734
Advanced	0.0000	0.0004	0.0310	0.1573	0.1887
Sum	0.1879	0.3458	0.2772	0.1891	1.0000
Observed Score Dist.	0.1838	0.3519	0.2796	0.1847	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9274	0.9069	0.9368	0.7716
Chance Probability ( $P_c$ )	0.6940	0.5026	0.6936	0.2676
Kappa	0.7626	0.8129	0.7937	0.6882
Classification Accuracy	0.9482	0.9357	0.9556	0.8395



**Table 256. Classification Consistency and Classification Accuracy for Mathematics Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1943	0.0377	0.0001	0.0000	0.2321
Partially Proficient	0.0388	0.2078	0.0419	0.0003	0.2888
Proficient	0.0001	0.0452	0.1955	0.0281	0.2688
Advanced	0.0000	0.0000	0.0288	0.1814	0.2102
Sum	0.2333	0.2907	0.2663	0.2098	1.0000
Observed Score Dist.	0.2295	0.2974	0.2673	0.2058	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9232	0.9124	0.9429	0.7790
Chance Probability ( $P_c$ )	0.6429	0.5010	0.6682	0.2538
Kappa	0.7849	0.8245	0.8278	0.7039
Classification Accuracy	0.9441	0.9388	0.9580	0.8410



**Table 257. Classification Consistency and Classification Accuracy for Mathematics Grade 9****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2641	0.0443	0.0004	0.0000	0.3088
Partially Proficient	0.0451	0.2097	0.0426	0.0000	0.2975
Proficient	0.0000	0.0399	0.1904	0.0254	0.2557
Advanced	0.0000	0.0000	0.0217	0.1162	0.1379
Sum	0.3093	0.2939	0.2551	0.1417	1.0000
Observed Score Dist.	0.3104	0.3042	0.2496	0.1359	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9102	0.9170	0.9528	0.7805
Chance Probability ( $P_c$ )	0.5729	0.5220	0.7595	0.2677
Kappa	0.7897	0.8265	0.8040	0.7002
Classification Accuracy	0.9343	0.9415	0.9679	0.8437



**Table 258. Classification Consistency and Classification Accuracy for Mathematics Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2869	0.0450	0.0001	0.0000	0.3320
Partially Proficient	0.0442	0.2675	0.0408	0.0000	0.3525
Proficient	0.0003	0.0405	0.2049	0.0132	0.2589
Advanced	0.0000	0.0000	0.0147	0.0419	0.0566
Sum	0.3313	0.3530	0.2606	0.0551	1.0000
Observed Score Dist.	0.3290	0.3587	0.2611	0.0512	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9104	0.9182	0.9721	0.8011
Chance Probability ( $P_c$ )	0.5567	0.5680	0.8945	0.3050
Kappa	0.7979	0.8107	0.7353	0.7138
Classification Accuracy	0.9388	0.9436	0.9803	0.8627



**Table 259. Classification Consistency and Classification Accuracy for Reading Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0904	0.0228	0.0003	0.0000	0.1135
Partially Proficient	0.0240	0.1200	0.0440	0.0000	0.1880
Proficient	0.0003	0.0422	0.5300	0.0380	0.6105
Advanced	0.0000	0.0000	0.0374	0.0506	0.0880
Sum	0.1147	0.1850	0.6117	0.0887	1.0000
Observed Score Dist.	0.1093	0.1846	0.6408	0.0654	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9526	0.9132	0.9246	0.7910
Chance Probability ( $P_c$ )	0.7978	0.5795	0.8389	0.4290
Kappa	0.7658	0.7936	0.5317	0.6340
Classification Accuracy	0.9660	0.9382	0.9499	0.8542



**Table 260. Classification Consistency and Classification Accuracy for Reading Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0877	0.0185	0.0000	0.0000	0.1062
Partially Proficient	0.0187	0.1776	0.0383	0.0000	0.2346
Proficient	0.0000	0.0429	0.5387	0.0230	0.6045
Advanced	0.0000	0.0000	0.0227	0.0320	0.0547
Sum	0.1064	0.2390	0.5996	0.0550	1.0000
Observed Score Dist.	0.1028	0.2361	0.6192	0.0418	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9628	0.9189	0.9543	0.8360
Chance Probability ( $P_c$ )	0.8100	0.5492	0.8963	0.4328
Kappa	0.8041	0.8200	0.5597	0.7108
Classification Accuracy	0.9719	0.9437	0.9692	0.8848



**Table 261. Classification Consistency and Classification Accuracy for Reading Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0996	0.0181	0.0001	0.0000	0.1177
Partially Proficient	0.0207	0.1229	0.0371	0.0000	0.1807
Proficient	0.0000	0.0375	0.5112	0.0408	0.5895
Advanced	0.0000	0.0000	0.0393	0.0728	0.1121
Sum	0.1203	0.1785	0.5877	0.1135	1.0000
Observed Score Dist.	0.1153	0.1798	0.6097	0.0952	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9611	0.9252	0.9200	0.8064
Chance Probability ( $P_c$ )	0.7903	0.5811	0.7999	0.4056
Kappa	0.8147	0.8215	0.6001	0.6743
Classification Accuracy	0.9717	0.9473	0.9431	0.8620



**Table 262. Classification Consistency and Classification Accuracy for Reading Grade 6****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0770	0.0158	0.0000	0.0000	0.0929
Partially Proficient	0.0175	0.1396	0.0409	0.0000	0.1980
Proficient	0.0000	0.0388	0.4965	0.0394	0.5747
Advanced	0.0000	0.0000	0.0375	0.0969	0.1344
Sum	0.0945	0.1943	0.5748	0.1364	1.0000
Observed Score Dist.	0.0915	0.1931	0.5939	0.1215	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9666	0.9203	0.9231	0.8101
Chance Probability ( $P_c$ )	0.8302	0.5883	0.7659	0.3959
Kappa	0.8036	0.8065	0.6716	0.6856
Classification Accuracy	0.9765	0.9425	0.9469	0.8659



**Table 263. Classification Consistency and Classification Accuracy for Reading Grade 7****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1018	0.0215	0.0002	0.0000	0.1234
Partially Proficient	0.0211	0.1542	0.0490	0.0000	0.2243
Proficient	0.0002	0.0439	0.4721	0.0301	0.5463
Advanced	0.0000	0.0000	0.0335	0.0725	0.1060
Sum	0.1230	0.2196	0.5547	0.1026	1.0000
Observed Score Dist.	0.1194	0.2215	0.5655	0.0936	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9571	0.9067	0.9364	0.8005
Chance Probability ( $P_c$ )	0.7840	0.5480	0.8131	0.3784
Kappa	0.8015	0.7937	0.6594	0.6791
Classification Accuracy	0.9682	0.9327	0.9553	0.8563



**Table 264. Classification Consistency and Classification Accuracy for Reading Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0943	0.0187	0.0002	0.0000	0.1132
Partially Proficient	0.0203	0.1514	0.0411	0.0000	0.2128
Proficient	0.0000	0.0400	0.4918	0.0327	0.5645
Advanced	0.0000	0.0000	0.0311	0.0784	0.1096
Sum	0.1146	0.2101	0.5642	0.1112	1.0000
Observed Score Dist.	0.1100	0.2124	0.5802	0.0974	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9608	0.9188	0.9361	0.8159
Chance Probability ( $P_c$ )	0.7982	0.5610	0.8036	0.3883
Kappa	0.8058	0.8150	0.6747	0.6990
Classification Accuracy	0.9719	0.9430	0.9542	0.8690



**Table 265. Classification Consistency and Classification Accuracy for Reading Grade 9****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0751	0.0149	0.0001	0.0000	0.0900
Partially Proficient	0.0173	0.1809	0.0391	0.0000	0.2372
Proficient	0.0000	0.0365	0.5337	0.0280	0.5982
Advanced	0.0000	0.0000	0.0272	0.0473	0.0745
Sum	0.0924	0.2322	0.6000	0.0754	1.0000
Observed Score Dist.	0.0886	0.2344	0.6142	0.0629	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9678	0.9243	0.9448	0.8370
Chance Probability ( $P_c$ )	0.8343	0.5606	0.8613	0.4280
Kappa	0.8055	0.8278	0.6018	0.7150
Classification Accuracy	0.9776	0.9448	0.9635	0.8859



**Table 266. Classification Consistency and Classification Accuracy for Reading Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0868	0.0172	0.0000	0.0000	0.1041
Partially Proficient	0.0185	0.1565	0.0442	0.0000	0.2192
Proficient	0.0002	0.0452	0.4721	0.0373	0.5548
Advanced	0.0000	0.0000	0.0332	0.0888	0.1219
Sum	0.1055	0.2190	0.5495	0.1261	1.0000
Observed Score Dist.	0.1018	0.2155	0.5706	0.1121	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9642	0.9104	0.9295	0.8042
Chance Probability ( $P_c$ )	0.8124	0.5620	0.7827	0.3792
Kappa	0.8089	0.7954	0.6756	0.6847
Classification Accuracy	0.9746	0.9377	0.9500	0.8623



**Table 267. Classification Consistency and Classification Accuracy for Science Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1292	0.0292	0.0000	0.0000	0.1583
Partially Proficient	0.0308	0.3139	0.0560	0.0002	0.4010
Proficient	0.0000	0.0546	0.2307	0.0349	0.3202
Advanced	0.0000	0.0002	0.0359	0.0845	0.1205
Sum	0.1599	0.3979	0.3226	0.1196	1.0000
Observed Score Dist.	0.1548	0.4079	0.3307	0.1066	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9401	0.8889	0.9288	0.7583
Chance Probability ( $P_c$ )	0.7324	0.5069	0.7887	0.3026
Kappa	0.7760	0.7748	0.6630	0.6534
Classification Accuracy	0.9564	0.9198	0.9510	0.8272



**Table 268. Classification Consistency and Classification Accuracy for Science Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1840	0.0350	0.0002	0.0000	0.2192
Partially Proficient	0.0373	0.1919	0.0464	0.0000	0.2755
Proficient	0.0002	0.0466	0.3499	0.0238	0.4205
Advanced	0.0000	0.0000	0.0229	0.0619	0.0848
Sum	0.2216	0.2734	0.4194	0.0857	1.0000
Observed Score Dist.	0.2513	0.2801	0.3967	0.0719	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9273	0.9066	0.9533	0.7876
Chance Probability ( $P_c$ )	0.6564	0.5001	0.8441	0.3075
Kappa	0.7885	0.8131	0.7005	0.6933
Classification Accuracy	0.9438	0.9326	0.9657	0.8421



**Table 269. Classification Consistency and Classification Accuracy for Science Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2334	0.0383	0.0005	0.0000	0.2722
Partially Proficient	0.0382	0.1480	0.0468	0.0000	0.2329
Proficient	0.0007	0.0560	0.3484	0.0197	0.4248
Advanced	0.0000	0.0000	0.0211	0.0491	0.0702
Sum	0.2722	0.2423	0.4167	0.0688	1.0000
Observed Score Dist.	0.2758	0.2377	0.4260	0.0606	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9224	0.8961	0.9592	0.7788
Chance Probability ( $P_c$ )	0.6038	0.5001	0.8707	0.3123
Kappa	0.8041	0.7921	0.6847	0.6784
Classification Accuracy	0.9462	0.9301	0.9731	0.8498



**Table 270. Classification Consistency and Classification Accuracy for Writing Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0540	0.0190	0.0000	0.0000	0.0730
Partially Proficient	0.0173	0.3345	0.0640	0.0009	0.4168
Proficient	0.0000	0.0625	0.2702	0.0533	0.3860
Advanced	0.0000	0.0006	0.0462	0.0775	0.1242
Sum	0.0713	0.4165	0.3805	0.1317	1.0000
Observed Score Dist.	0.0670	0.4305	0.3984	0.1041	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9637	0.8720	0.8990	0.7362
Chance Probability ( $P_c$ )	0.8661	0.5002	0.7768	0.3420
Kappa	0.7287	0.7439	0.5474	0.5990
Classification Accuracy	0.9735	0.9050	0.9269	0.8055



**Table 271. Classification Consistency and Classification Accuracy for Writing Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0525	0.0186	0.0000	0.0000	0.0710
Partially Proficient	0.0172	0.3341	0.0570	0.0000	0.4083
Proficient	0.0000	0.0585	0.3204	0.0348	0.4137
Advanced	0.0000	0.0000	0.0340	0.0730	0.1070
Sum	0.0696	0.4112	0.4114	0.1078	1.0000
Observed Score Dist.	0.0675	0.4124	0.4271	0.0929	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9643	0.8844	0.9312	0.7799
Chance Probability ( $P_c$ )	0.8692	0.5008	0.8083	0.3545
Kappa	0.7268	0.7685	0.6414	0.6591
Classification Accuracy	0.9745	0.9217	0.9530	0.8492



**Table 272. Classification Consistency and Classification Accuracy for Writing Grade 5****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0419	0.0162	0.0000	0.0000	0.0581
Partially Proficient	0.0154	0.2806	0.0541	0.0000	0.3501
Proficient	0.0000	0.0558	0.3553	0.0433	0.4544
Advanced	0.0000	0.0000	0.0440	0.0935	0.1374
Sum	0.0573	0.3525	0.4534	0.1368	1.0000
Observed Score Dist.	0.0552	0.3497	0.4768	0.1183	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9685	0.8901	0.9127	0.7713
Chance Probability ( $P_c$ )	0.8913	0.5166	0.7634	0.3516
Kappa	0.7099	0.7728	0.6311	0.6473
Classification Accuracy	0.9773	0.9254	0.9391	0.8418



**Table 273. Classification Consistency and Classification Accuracy for Writing Grade 6****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0381	0.0153	0.0000	0.0000	0.0535
Partially Proficient	0.0135	0.2846	0.0542	0.0000	0.3522
Proficient	0.0000	0.0528	0.3797	0.0367	0.4692
Advanced	0.0000	0.0000	0.0405	0.0846	0.1251
Sum	0.0516	0.3527	0.4743	0.1213	1.0000
Observed Score Dist.	0.0504	0.3508	0.4943	0.1045	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9712	0.8930	0.9228	0.7870
Chance Probability ( $P_c$ )	0.9004	0.5180	0.7839	0.3647
Kappa	0.7107	0.7780	0.6429	0.6647
Classification Accuracy	0.9793	0.9248	0.9471	0.8512



**Table 274. Classification Consistency and Classification Accuracy for Writing Grade 7****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0350	0.0155	0.0000	0.0000	0.0505
Partially Proficient	0.0127	0.3028	0.0519	0.0000	0.3675
Proficient	0.0000	0.0530	0.3515	0.0393	0.4438
Advanced	0.0000	0.0000	0.0395	0.0987	0.1382
Sum	0.0478	0.3713	0.4430	0.1379	1.0000
Observed Score Dist.	0.0468	0.3711	0.4594	0.1226	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9718	0.8950	0.9212	0.7880
Chance Probability ( $P_c$ )	0.9065	0.5133	0.7620	0.3545
Kappa	0.6981	0.7843	0.6688	0.6715
Classification Accuracy	0.9798	0.9223	0.9454	0.8476



**Table 275. Classification Consistency and Classification Accuracy for Writing Grade 8****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0375	0.0168	0.0000	0.0000	0.0543
Partially Proficient	0.0147	0.3411	0.0560	0.0000	0.4118
Proficient	0.0000	0.0561	0.3215	0.0354	0.4129
Advanced	0.0000	0.0000	0.0354	0.0856	0.1210
Sum	0.0522	0.4140	0.4129	0.1209	1.0000
Observed Score Dist.	0.0500	0.4159	0.4283	0.1058	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9685	0.8879	0.9292	0.7857
Chance Probability ( $P_c$ )	0.8992	0.5023	0.7874	0.3584
Kappa	0.6880	0.7747	0.6673	0.6659
Classification Accuracy	0.9772	0.9228	0.9501	0.8501



**Table 276. Classification Consistency and Classification Accuracy for Writing Grade 9****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0414	0.0170	0.0000	0.0000	0.0584
Partially Proficient	0.0152	0.3694	0.0548	0.0000	0.4394
Proficient	0.0000	0.0530	0.3376	0.0282	0.4188
Advanced	0.0000	0.0000	0.0265	0.0570	0.0835
Sum	0.0566	0.4393	0.4188	0.0852	1.0000
Observed Score Dist.	0.0557	0.4444	0.4281	0.0718	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9678	0.8922	0.9453	0.8054
Chance Probability ( $P_c$ )	0.8916	0.5000	0.8456	0.3788
Kappa	0.7032	0.7844	0.6459	0.6866
Classification Accuracy	0.9766	0.9220	0.9617	0.8603



**Table 277. Classification Consistency and Classification Accuracy for Writing Grade 10****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.0799	0.0219	0.0000	0.0000	0.1018
Partially Proficient	0.0197	0.3300	0.0581	0.0000	0.4078
Proficient	0.0000	0.0581	0.3048	0.0314	0.3943
Advanced	0.0000	0.0001	0.0305	0.0655	0.0961
Sum	0.0997	0.4101	0.3933	0.0969	1.0000
Observed Score Dist.	0.1004	0.4117	0.4066	0.0813	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9584	0.8837	0.9380	0.7802
Chance Probability ( $P_c$ )	0.8188	0.5002	0.8256	0.3418
Kappa	0.7705	0.7673	0.6446	0.6661
Classification Accuracy	0.9699	0.9167	0.9568	0.8434



**Table 278. Classification Consistency and Classification Accuracy for Spanish Reading Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1427	0.0330	0.0010	0.0000	0.1767
Partially Proficient	0.0382	0.1375	0.0516	0.0000	0.2273
Proficient	0.0013	0.0563	0.4104	0.0362	0.5042
Advanced	0.0000	0.0000	0.0334	0.0584	0.0918
Sum	0.1822	0.2268	0.4964	0.0946	1.0000
Observed Score Dist.	0.1698	0.2356	0.5228	0.0718	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9266	0.8898	0.9305	0.7491
Chance Probability ( $P_c$ )	0.7055	0.5175	0.8310	0.3427
Kappa	0.7506	0.7716	0.5888	0.6183
Classification Accuracy	0.9433	0.9174	0.9516	0.8125



**Table 279. Classification Consistency and Classification Accuracy for Spanish Reading  
Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.2899	0.0497	0.0003	0.0000	0.3399
Partially Proficient	0.0493	0.1740	0.0466	0.0000	0.2698
Proficient	0.0005	0.0479	0.3058	0.0105	0.3647
Advanced	0.0000	0.0000	0.0089	0.0166	0.0255
Sum	0.3397	0.2717	0.3617	0.0270	1.0000
Observed Score Dist.	0.3352	0.2670	0.3750	0.0227	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9002	0.9046	0.9806	0.7863
Chance Probability ( $P_c$ )	0.5513	0.5244	0.9489	0.3214
Kappa	0.7775	0.7995	0.6212	0.6851
Classification Accuracy	0.9285	0.9321	0.9876	0.8481



**Table 280. Classification Consistency and Classification Accuracy for Spanish Writing Grade 3****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.1707	0.0398	0.0008	0.0000	0.2113
Partially Proficient	0.0384	0.1785	0.0558	0.0001	0.2728
Proficient	0.0008	0.0543	0.2491	0.0432	0.3476
Advanced	0.0000	0.0001	0.0475	0.1207	0.1683
Sum	0.2099	0.2728	0.3532	0.1641	1.0000
Observed Score Dist.	0.2005	0.2856	0.3660	0.1479	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.9200	0.8880	0.9090	0.7190
Chance Probability ( $P_c$ )	0.6675	0.5005	0.7229	0.2692
Kappa	0.7596	0.7757	0.6718	0.6155
Classification Accuracy	0.9439	0.9193	0.9340	0.7973



**Table 281. Classification Consistency and Classification Accuracy for Spanish Writing  
Grade 4****Contingency Table with All Cut Scores**

	Unsatisfactory	Partially Proficient	Proficient	Advanced	Sum
Unsatisfactory	0.3844	0.0782	0.0010	0.0000	0.4636
Partially Proficient	0.0646	0.1973	0.0445	0.0000	0.3065
Proficient	0.0010	0.0519	0.1642	0.0040	0.2210
Advanced	0.0000	0.0000	0.0036	0.0053	0.0089
Sum	0.4500	0.3274	0.2133	0.0093	1.0000
Observed Score Dist.	0.4713	0.3103	0.2069	0.0115	

**Indexes for Classification Consistency and Classification Accuracy**

	Cut 1	Cut 2	Cut 3	All Cuts
Classification Agreement (P)	0.8552	0.9016	0.9924	0.7512
Chance Probability ( $P_c$ )	0.5036	0.6499	0.9820	0.3562
Kappa	0.7082	0.7191	0.5801	0.6136
Classification Accuracy	0.8995	0.9316	0.9943	0.8254



**Table 282. Mean and Median Scale Scores by Year for Writing Subcontent Areas:  
Paragraph Writing and Extended Writing**

Grade	Year	N	Paragraph Writing (SA5)			Extended Writing (SA6)			Combine SA5 and SA6		
			Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
4	2002	55488	489	491	72.8	504	486	99.3	488	485	60.3
4	2003	55108	486	479	73.5	497	479	91.7	486	486	64.7
4	2004	54546	492	490	65.9	517	505	107.6	492	489	59.5
4	2005	54339	494	486	74.3	504	516	98.6	490	488	64.8
4	2006	55640	486	488	66.1	510	495	109.6	486	484	60.3
4	2007	56278	487	481	64.5	494	479	87.8	485	482	58.9
4	2008	57957	489	487	64.7	517	495	112.7	489	487	59.5
5	2002	56398	503	503	66.0	518	503	105.8	502	501	60.4
5	2003	56822	503	504	72.3	531	500	121.1	504	503	65.3
5	2004	55946	505	500	73.5	525	508	107.7	507	505	66.4
5	2005	55191	512	509	70.5	543	525	130.2	510	506	65.5
5	2006	55800	513	511	72.7	533	484	114.2	514	511	69.4
5	2007	56704	509	507	65.9	531	538	112.9	508	506	62.4
5	2008	57019	512	510	75.2	535	536	120.2	512	510	71.6
6	2002	55632	518	518	76.1	528	529	95.2	518	518	68.4
6	2003	56674	521	521	71.2	549	524	123.8	523	523	67.5
6	2004	56744	523	522	73.7	559	547	134.6	524	521	70.1
6	2005	56200	532	527	82.8	536	496	106.2	529	528	74.0
6	2006	56097	531	526	82.9	542	490	116.2	529	526	76.5
6	2007	56380	530	527	80.0	539	600	104.0	529	528	74.6
6	2008	56901	533	530	83.4	558	538	138.4	531	526	78.1
7	2002	54338	544	541	79.8	558	542	106.0	543	541	70.3
7	2003	56609	544	546	78.9	580	554	141.4	547	548	73.9
7	2004	57016	546	543	94.4	574	557	147.7	545	542	85.5
7	2005	57201	551	546	90.2	552	503	113.6	548	545	82.7
7	2006	57323	550	548	91.5	577	577	145.3	550	549	83.8
7	2007	56769	561	555	88.8	573	648	105.0	560	556	82.5
7	2008	56813	553	550	89.0	580	572	142.7	553	554	83.1
8	2002	53466	554	551	85.9	586	586	124.3	558	557	76.0
8	2003	54894	555	556	82.4	590	592	136.5	558	558	79.4
8	2004	56410	556	555	90.1	576	583	142.1	554	553	84.4
8	2005	56821	559	557	87.4	572	558	127.7	558	555	82.1
8	2006	58095	560	558	87.6	557	552	125.0	556	556	83.1
8	2007	57631	563	559	94.0	577	601	119.5	562	556	86.6
8	2008	56658	564	561	91.9	580	612	131.2	563	562	87.8
9	2002	52972	563	563	92.0	581	637	121.7	564	564	87.2
9	2003	55540	572	570	98.0	611	593	157.0	573	569	90.9
9	2004	56588	571	569	94.8	580	545	94.6	572	572	79.7
9	2005	57703	569	569	96.1	576	524	104.9	568	564	84.8
9	2006	58795	570	570	96.1	568	536	105.2	567	561	88.0
9	2007	59521	569	564	97.3	580	635	124.1	567	563	89.1
9	2008	59076	567	563	98.2	569	498	448.8	565	559	90.0



**Table 282. Mean and Median Scale Scores by Year for Writing Subcontent Areas:  
Paragraph Writing and Extended Writing (Concluded)**

Grade	Year	N	Paragraph Writing (SA5)			Extended Writing (SA6)			Combine SA5 and SA6		
			Mean	Median	SD	Mean	Median	SD	Mean	Median	SD
10	2002	49009	587	588	96.7	606	580	138.4	586	585	88.8
10	2003	49658	591	583	107.6	641	590	185.8	589	583	100.0
10	2004	50756	584	577	96.7	588	537	117.2	581	578	84.8
10	2005	51638	580	576	97.5	582	529	111.0	578	575	88.2
10	2006	53754	584	581	101.2	586	523	112.1	581	578	91.1
10	2007	54683	586	579	104.9	594	649	123.2	583	583	94.0
10	2008	55306	579	572	109.3	590	635	142.5	577	573	100.9