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| **Content Area** | Mathematics | | | **Grade Level** | High School | | |
| **Course Name/Course Code** |  | | | | | | |
| **Standard** | **Grade Level Expectations (GLE)** | | | | | | **GLE Code** |
| 1. Number Sense, Properties, and Operations | 1. The complex number system includes real numbers and imaginary numbers | | | | | | MA10-GR.HS-S.1-GLE.1 |
| 1. Quantitative reasoning is used to make sense of quantities and their relationships in problem situations | | | | | | MA10-GR.HS-S.1-GLE.2 |
| 1. Patterns, Functions, and Algebraic Structures | 1. Functions model situations where one quantity determines another and can be represented algebraically, graphically, and using tables | | | | | | MA10-GR.HS-S.2-GLE.1 |
| 1. Quantitative relationships in the real world can be modeled and solved using functions | | | | | | MA10-GR.HS-S.2-GLE.2 |
| 1. Expressions can be represented in multiple, equivalent forms | | | | | | MA10-GR.HS-S.2-GLE.3 |
| 1. Solutions to equations, inequalities and systems of equations are found using a variety of tools | | | | | | MA10-GR.HS-S.2-GLE.4 |
| 1. Data Analysis, Statistics, and Probability | 1. Visual displays and summary statistics condense the information in data sets into usable knowledge | | | | | | MA10-GR.HS-S.3-GLE.1 |
| 1. Statistical methods take variability into account supporting informed decisions making through quantitative studies designed to answer specific questions | | | | | | MA10-GR.HS-S.3-GLE.2 |
| 1. Probability models outcomes for situations in which there is inherent randomness | | | | | | MA10-GR.HS-S.3-GLE.3 |
| 1. Shape, Dimension, and Geometric Relationships | 1. Objects in the plane can be transformed, and those transformations can be described and analyzed mathematically | | | | | | MA10-GR.HS-S.4-GLE.1 |
| 1. Concepts of similarity are foundational to geometry and its applications | | | | | | MA10-GR.HS-S.4-GLE.2 |
| 1. Objects in the plane can be described and analyzed algebraically | | | | | | MA10-GR.HS-S.4-GLE.3 |
| 1. Attributes of two- and three-dimensional objects are measurable and can be quantified | | | | | | MA10-GR.HS-S.4-GLE.4 |
| 1. Objects in the real world can be modeled using geometric concepts | | | | | | MA10-GR.HS-S.4-GLE.5 |
| **Colorado 21st Century Skills**    **Critical Thinking and Reasoning:** *Thinking Deeply, Thinking Differently*  **Information Literacy:** *Untangling the Web*  **Collaboration:** *Working Together, Learning Together*  **Self-Direction:** *Own Your Learning*  **Invention:** *Creating Solutions* | | **Mathematical Practices:**   1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. | | | | | |
| **Unit Titles** | | | **Length of Unit/Contact Hours** | | | **Unit Number/Sequence** | |
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| **Unit Title** |  | | | **Length of Unit** |  |
| **Focusing Lens(es)** |  | **Standards and Grade Level Expectations Addressed in this Unit** |  | | |
| **Inquiry Questions (Engaging- Debatable):** |  | | | | |
| **Unit Strands** |  | | | | |
| **Concepts** |  | | | | |

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| **Generalizations**  **My students will Understand that…** | **Guiding Questions**  **Factual Conceptual** | |
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| **Key Knowledge and Skills:**  **My students will…** | *What students will know and be able to do are so closely linked in the concept-based discipline of mathematics. Therefore, in the mathematics samples what students should know and do are combined.* |
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| **Critical Language:** includes the Academic and Technical vocabulary, semantics, and discourse which are particular to and necessary for accessing a given discipline.  EXAMPLE: A student in Language Arts can demonstrate the ability to apply and comprehend critical language through the following statement: *“Mark Twain exposes the hypocrisy of slavery through the use of satire.”* | | |
| **A student in \_\_\_\_\_\_\_\_\_\_\_\_\_\_ can demonstrate the ability to apply and comprehend critical language through the following statement(s):** | |  |
| **Academic Vocabulary:** |  | |
| **Technical Vocabulary:** |  | |