



DESTINATION Math.

Correlation of Destination Math[®] Courseware
to Arizona Standards
June - 2004



Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Kindergarten							
K-Strand 1: Number Sense and Operations							
K-Concept 1: Number Sense: Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
K-PO 1. Make a model to represent a given whole number 0 through 20.	Module: Number Sense. Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100, Session: Counting from 10 to 20						
PO 2. Identify orally a whole number represented by a model with a word name and symbol 0 through 20. (Say 3 and write number 3 when presented with three objects.)	Module: Number Sense. Unit: Numbers from 1 to 5 Session: Counting from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10 Session: Counting from 5 to 10						

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	Module: Number Sense. Unit: Numbers to 100. Session Counting from 10 to 20						
PO 3. Count aloud, forward to 20 or backward from 10, in consecutive order (0 through 20).	Module: Number Sense. Unit: Numbers from 1 to 5 Session: Counting from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10 Session: Counting from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						
PO 4. Identify whole numbers through 20 in or out of order.	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						
PO 5. Write whole numbers through 20 in or out of order.	Module: Number Sense. Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						

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PO 6. Construct equivalent forms of whole numbers, using manipulatives, through 10	Module: Number Sense. Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 5 Session: Creating Representations of the Numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10						
	Module: Number Sense. Unit: Numbers from 1 to 10 Session: Creating Representations of the Numbers from 5 to 10						
PO 7. Compare two whole numbers through 20.	Module: Number Sense. Unit: Numbers from 1 to 10. Session: One More Than						
	Module: Number Sense. Unit: Numbers from 1 to 10. Session: One Fewer Than and Zero						
	Module: Number Sense. Unit: Comparing and Ordering Session: More Than, Less Than, or The Same						
	Module: Number Sense. Unit: Comparing and Ordering Session: Comparing Numbers within 100 (S1)						

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PO 8. Recognize the ordinal numbers through fifth (e.g., first, second, third).	Module: Geometry and Measurement. Unit: Measurement. Session: Clock and Calendar Time (S1)						
PO 9. Order three or more whole numbers through 20 (least to greatest or greatest to least).	Module: Number Sense. Unit: Comparing and Ordering Session: More Than, Less Than, or The Same						
	Module: Number Sense. Unit: Comparing and Ordering Session: Comparing Numbers within 100 (S1)						
PO 10. Identify penny, nickel, dime, quarter, and dollar by using manipulatives or pictures.	Module: Geometry and Measurement. Unit: Measurement Session: Money						
Concept 2: Numerical Operations. Understand and apply numerical operations and their relationship to one another.							
PO 1. Model addition through sums of 10 using manipulatives.	Module: Number Sense. Unit: Numbers from 1 to 10 Session: One More Than						
	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
PO 2. Model subtraction with minuends of 10 using manipulatives.	Module: Number Sense. Unit: Numbers from 1 to 10 Session: One Fewer Than and Zero						

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	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
PO 3. Select the operation to solve word problems using numbers 0 through 9.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
	Module: Number Sense. Unit: Addition Session: Comparing within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
PO 4. Solve word problems presented orally using addition or subtraction with numbers through 9.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
	Module: Number Sense. Unit: Addition Session: Comparing within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
PO 5. Identify the symbols: +, -, =.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						

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	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
PO 6. Use grade-level appropriate mathematical terminology.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
	Module: Number Sense. Unit: Addition Session: Comparing within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
Concept 3: Estimation. Use estimation strategies reasonably and fluently.							
PO 1. Solve problems using a variety of mental computations and reasonable estimations.	Module: Number Sense. Unit: Addition Session: Comparing within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics) Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 2. Interpret a pictograph.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 3. Answer questions about a pictograph.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 4. Formulate questions based on data displayed in graphs, charts, and tables.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 5. Solve problems based on simple graphs, charts, and tables.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						

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Concept 2: Probability-Understand and apply the basic concepts of probability.							
Concept 3: Discrete Mathematics – Systematic Listing and Counting Understand and demonstrate the systematic listing and counting of possible outcomes.							
PO 1. Make arrangements that represent the number of combinations that can be formed by pairing items taken from 2 sets, using manipulatives (e.g., How many outfits can one make with 2 different color shirts and 2 different pairs of pants?).	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						
Concept 4: Vertex-Edge Graphs-Understand and apply vertex-edge graphs.							
PO 1. Color pictures with the least number of colors so that no common edges share the same color (increased complexity throughout grade levels).	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
Strand 3: Patterns, Algebra, and Functions							

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Concept 1: Patterns Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate orally a grade-level appropriate pattern.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						
PO 2. Extend simple repetitive patterns using manipulatives.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						
PO 3. Create grade-level appropriate patterns.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties- Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							

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PO 1. Identify 2-dimensional shapes by attribute (size, shape, number of sides).	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
PO 2. Identify concepts and terms of position and size in contextual situations: - Inside/outside, - Above/below/between, - Smaller/larger, and - Longer/shorter.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
PO 3. Identify shapes in different environments (e.g., nature, buildings, classroom).	Module: Geometry and Measurement. Unit: Geometry. Session: Triangles and Rectangles (S1)						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
Concept 4: Measurement - Units of Measure/Geometric Objects- Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Verbally compare objects according to observable and measurable attributes.	Module: Geometry and Measurement. Unit: Measurement Session: Length						

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	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes (S2)						
PO 2. Communicate orally how different attributes of an object can be measured.	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
PO 3. Order objects according to observable and measurable attributes.	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
Strand 5: Structure and Logic							

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Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof- Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 1. Sort objects according to observable attributes.	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes (S2)						
PO 2. Provide rationale for classifying objects according to observable attributes (color, size, shape, weight, etc.).	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						

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	Module: Geometry and Measurement. Unit: Geometry Session: Three-Dimensional Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
First Grade							
Strand 1: Number Sense and Operations							
Concept 1: Number Sense: Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 1. Make a model to represent a given whole number 0 through 100.	Module: Number Sense. Unit: Numbers from 1 to 5. Session: Creating representations of the numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10. Session: Creating representations of the numbers from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						

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	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
PO 2. Identify a whole number represented by a model with a word name and symbol 0 through 100.	Module: Number Sense. Unit: Numbers from 1 to 5. Session: Creating representations of the numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10. Session: Creating representations of the numbers from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
PO 3. Count aloud, forward or backward, in consecutive order (0 through 100).	Module: Number Sense. Unit: Numbers from 1 to 5. Session: Creating representations of the numbers from 1 to 5						

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	Module: Number Sense. Unit: Numbers from 1 to 10. Session: Creating representations of the numbers from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Twos						
PO 4. Identify whole numbers through 100 in or out of order.	Module: Number Sense. Unit: Numbers from 1 to 5. Session: Creating representations of the numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10. Session: Creating representations of the numbers from 5 to 10						

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	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Twos						
PO 5. Write whole numbers through 100 in or out of order.	Module: Number Sense. Unit: Numbers from 1 to 5. Session: Creating representations of the numbers from 1 to 5						
	Module: Number Sense. Unit: Numbers from 1 to 10. Session: Creating representations of the numbers from 5 to 10						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 10 to 20						

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	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50						
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Twos						
PO 6. Construct equivalent forms of whole numbers, using manipulatives or symbols, through 99 (e.g., $15 + 5 = 10 + 10$).	Module: Number Sense. Unit: Comparing and Ordering Session: Comparing Numbers within 100						
	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
PO 7. State verbally whole numbers, through 100, using correct place value (e.g., A student will read 84 as eight tens and four ones.).	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50	Module: Number Sense. Unit Numbers to 999. Session: Place Value: Tens and Ones					

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	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100	Module: Number Sense. Unit: Numbers to 999. Session: Place Value: Hundreds, Tens and Ones					
	Module: Number Sense. Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip-Counting by Twos						
PO 8. Construct models to represent place value concepts for the one's and ten's places.	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50	Module: Number Sense. Unit: Numbers to 999. Session: Place Value: Tens and Ones					
	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip-Counting by Twos						
PO 9. Apply expanded notation to model place value through 99 (e.g., $37 = 3$ groups of ten + 7 units).	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 20 to 50	Module: Number Sense. Unit: Numbers to 999. Session: Place Value: Tens and Ones					

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	Module: Number Sense. Unit: Numbers to 100 Session: Counting from 50 to 100						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Twos						
PO 10. Identify odd and even whole numbers through 100.	Module: Number Sense. Unit: Numbers to 100 Session: Skip- Counting by Twos						
PO 11. Compare two whole numbers through 100.	Module: Number Sense. Unit: Comparing and Ordering Session: Comparing Numbers within 100						
PO 12. Use ordinal numbers through tenth.	Module: Geometry and Measurement. Unit: Measurement Session: Clock and Calendar Time (S1)						
PO 16. Identify money by name and value: penny, nickel, dime, quarter, and one dollar.	Module: Geometry and Measurement. Unit: Measurement Session: Money						
PO 17. Count money through \$1.00 using coins.	Module: Geometry and Measurement. Unit: Measurement Session: Money						

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PO 18. Identify the value of a collection of coins using the symbols ¢ and \$.	Module: Geometry and Measurement. Unit: Measurement Session: Money						
Concept 2: Numerical Operations- Understand and apply numerical operations and their relationship to one another.							
PO 1. Demonstrate the process of addition through sums of 20 using manipulatives.	Module: Number Sense. Unit: Addition Session: Combining and joining within 10						
	Module: Number Sense. Unit: Addition Session: Comparing within 10						
	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
PO 2. Demonstrate the process of subtraction with minuends of 20 using manipulatives.	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						

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PO 3. State addition facts for sums through 18 and subtraction for differences with minuends through 9 or less.	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
PO 4. Add one- and two-digit whole numbers without regrouping.	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend	Module: Operations with numbers. Unit: Addition and Subtraction. Session: Sums Less than 100					
	Module: Number Sense. Unit: Addition Session: Sums within 20						
PO 5. Subtract one- and two-digit whole numbers without regrouping.	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						
PO 6. Select the grade-level appropriate operation to solve word problems.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						

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	Module: Number Sense. Unit: Addition Session: Sums within 20						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						
PO 7. Solve word problems using addition and subtraction of 2-digit numbers without regrouping.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						

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PO 8. Count by multiples to show the process of multiplication (10s, 5s, or 2s).	Module: Number Sense. Unit: Numbers to 100 Session: Skip-Counting by Tens and Fives						
	Module: Number Sense. Unit: Numbers to 100 Session: Skip-Counting by Twos						
PO 9. Demonstrate families of equations for addition and subtraction through 18.	Module: Number Sense. Unit: Addition Session: Comparing within 10						
	Module: Algebraic thinking. Unit: Patterns and Displays. Session: Number Patterns (S2)						
PO 10. Demonstrate the identity and commutative properties of addition through 18.	Module: Number Sense. Unit: Addition Session: Combining and Joining within 10						
	Module: Number Sense. Unit: Addition Session: Comparing within 10						
PO 11. Identify addition and subtraction as inverse operations.	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						

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PO 12. Apply the symbols: +, -, =.	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						
PO 13. Use grade-level appropriate mathematical terminology.	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						

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PO 16. Add and subtract money without regrouping using manipulatives and paper and pencil, through 99¢.	Module: Geometry and Measurement. Unit: Measurement Session: Money						
Concept 3: Estimation--Use estimation strategies reasonably and fluently.							
PO 1. Solve problems using a variety of mental computations and reasonable estimation.	Module: Number Sense. Unit: Addition Session: Sums within 20, with 10 as One Addend						
	Module: Number Sense. Unit: Addition Session: Sums within 20						
	Module: Number Sense. Unit: Subtraction Session: Differences within 10						
	Module: Number Sense. Unit: Subtraction Session: Differences within 20						
PO 2. Estimate the measurement of an object using U.S. customary standard and non-standard units of measurement.	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						

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Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics)- Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 2. Make a simple pictograph or tally chart with appropriate labels from organized data.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 3. Interpret pictographs using terms such as most, least, equal, more than, less than, and greatest.	Module: Number Sense. Unit: Comparing and Ordering Session: More Than, Less Than, or The Same						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 4. Answer questions about pictographs using terms such as most, least, equal, more than, less than, and greatest.	Module: Number Sense. Unit: Comparing and Ordering Session: More Than, Less Than, or The Same						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						

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PO 5. Formulate questions based on graphs, charts, and tables.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
PO 6. Solve problems using graphs, charts, and tables.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Tables and Graphs						
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns-Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate a grade-level appropriate pattern (e.g., "N,© Repeat this complete pattern.)	Module: Algebraic Thinking. Unit: Patterns and Displays Session:Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						
PO 2. Extend a simple grade-level appropriate repetitive pattern (e.g., -, -, -, -, -, -, -, -, -).	Module: Algebraic Thinking. Unit: Patterns and Displays Session:Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Create grade-level appropriate patterns.	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Number Patterns						
Concept 3: Algebraic Representations- Represent and analyze mathematical situations and structures using algebraic representations.							
PO 1. Use variables in contextual situations.	Module: Number Sense. Unit: Addition Session: Comparing within 10						
PO 2. Find the missing sum or difference in number sentences for sums and minuends through 9 (e.g., $2 + 5 = _$).	Module: Number Sense. Unit: Addition Session: Comparing within 10						
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties- Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Use the words vertex and side when describing simple 2-dimensional geometric shapes.	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						
PO 2. Identify 2-dimensional shapes by attribute (size, shape, number of sides, vertices).	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						
	Module: Geometry and Measurement. Unit: Geometry Session: Three-Dimensional Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
PO 3. Use concepts and terms of position and size in contextual situations: · Inside/outside, · · Above/below/between, Left/right, · Smaller/larger, and · Longer/shorter.	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						
	Module: Geometry and Measurement. Unit: Geometry Session: Three-Dimensional Shapes						
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
PO 4. Name common 2-dimensional shapes (square, rectangle, triangle, circle).	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
	Module: Algebraic Thinking. Unit: Patterns and Displays Session: Shapes						
PO 5. Draw 2-dimensional shapes (square, rectangle, triangle, circle).	Module: Geometry and Measurement. Unit: Geometry Session: Triangles and Rectangles						
Concept 4: Measurement - Units of Measure/Geometric Objects-Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Compare the measurable characteristics of two objects (e.g., length, weight, size).	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
PO 2. Select the appropriate measure of accuracy: - length - inches, feet, - capacity/volume - cups, gallons, and - mass/weight - pounds.	Module: Geometry and Measurement. Unit: Measurement Session: Length	Module: Geometry and Measurement. Unit: Geometry. Session: Volume					
	Module: Geometry and Measurement. Unit: Measurement Session: Weight	Module: Geometry and Measurement. Unit: Measurement. Session: Temperature					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Tell time to the hour using analog and digital clocks.	Module: Geometry and Measurement. Unit: Measurement Session: Clock and Calendar Time (S2)						
PO 4. Name the days of the week for yesterday, today, and tomorrow (e.g., If today is Wednesday, what day will it be tomorrow?).	Module: Geometry and Measurement. Unit: Measurement Session: Clock and Calendar Time (S1)						
PO 6. Name the 7 days of the week in proper order, starting with Sunday.	Module: Geometry and Measurement. Unit: Measurement Session: Clock and Calendar Time (S1)						
PO 7. Measure a given object using the appropriate unit of measure: - length - inches, feet and yards, - capacity/volume - cups, gallons, and- mass/weight - pounds.	Module: Geometry and Measurement. Unit: Measurement Session: Length	Module: Geometry and Measurement. Unit: Geometry. Session: Volume					
	Module: Geometry and Measurement. Unit: Measurement Session: Weight	Module: Geometry and Measurement. Unit: Measurement. Session: Temperature					
Strand 5: Structure and Logic							
Concept 1: Algorithms and Algorithmic Thinking-Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Create problems based on contextual situations (addition facts up to 18 and subtraction from 9).	Module: Addition and Subtraction. Unit: Addition. Session: Sums within 20						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
	Module: Addition and Subtraction. Unit: Subtraction. Session: Differences within 10						
Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof - Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 2. Provide rationale for classifying objects according to observable attributes (color, size, shape, weight, etc.).	Module: Geometry and Measurement. Unit: Measurement Session: Length						
	Module: Geometry and Measurement. Unit: Measurement Session: Weight						
	Module: Algebraic thinking. Unit: Patterns and Displays. Session: Shapes						
Second Grade							
Strand 1: Number Sense and Operations							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Number Sense- Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 1. Make a model to represent a given whole number 0 through 999.		Module: Number Sense. Unit: Numbers to 999 Session: Counting by Grouping					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
PO 2. Identify a whole number represented by a model with a word name and symbol 0 through 999.		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
PO 3. Count aloud, forward or backward, in consecutive order (0 through 999).		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Identify whole numbers through 999 in or out of order.		Module: Number Sense. Unit: Numbers to 999 Session: Comparing and Ordering					
PO 5. Write whole numbers through 999 in or out of order.		Module: Number Sense. Unit: Numbers to 999 Session: Comparing and Ordering					
PO 7. State verbally whole numbers, through 999, using correct place value (e.g., A student will read 528 as five hundreds, two tens, and eight ones.).		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number					
PO 8. Construct models to represent place value concepts for the one's, ten's, and hundred's places.		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
PO 9. Apply expanded notation to model place value through 999 (e.g., $378 = 3$ hundreds + 7 tens + 8 ones).		Module: Number Sense. Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 10. Identify odd and even (including 0) whole numbers through 999.	Module: Number sense. Unit: Numbers to 100. Session: Skip Counting by Two's	Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Tens and Ones					
		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
PO 11. Compare two whole numbers through 999.		Module: Number Sense. Unit: Numbers to 999 Session: Comparing and Ordering					
PO 13. Order three or more whole numbers through 999 (least to greatest or greatest to least).		Module: Number Sense. Unit: Numbers to 999 Session: Comparing and Ordering					
PO 14. Make models that represent given fractions (halves and fourths).		Module: Operations with Numbers. Unit: Division Session: Fractional Parts					
PO 15. Identify in symbols and words a model that is divided into equal fractional parts (halves and fourths).		Module: Operations with Numbers. Unit: Division Session: Fractional Parts					
PO 16. Count money through \$5.00 using manipulatives and pictures of bills and coins.		Module: Geometry and Measurement. Unit: Measurement Session: Money					
PO 17. Identify the value of a collection of money using the symbols ¢ and \$ through \$5.00.		Module: Geometry and Measurement. Unit: Measurement Session: Money					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 18. Use decimals through hundredths in contextual situations with money.		Module: Geometry and Measurement. Unit: Measurement Session: Money					
PO 19. Compare two decimals using money, through hundredths, using models, illustrations, or symbols.		Module: Geometry and Measurement. Unit: Measurement Session: Money					
Concept 2: Numerical Operations- Understand and apply numerical operations and their relationship to one another							
PO 1. Demonstrate the process of addition through two three-digit whole numbers, using manipulatives.		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and finding sums less than 1,000					
PO 2. Demonstrate the process of subtraction using manipulatives with two-digit whole numbers.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
PO 3. State addition and subtraction facts.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
PO 4. Add one- and two-digit whole numbers with regrouping.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 5. Subtract one- and two-digit whole numbers with regrouping.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
PO 6. Add 3 one- or two-digit addends.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
PO 7. Select the grade-level appropriate operation to solve word problems.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 8. Solve word problems using addition and subtraction of two 2-digit numbers, with regrouping AND two 3-digit numbers without regrouping.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
PO 9. Count by multiples of three.		Module: Operations with Numbers. Unit: Multiplication Session: Skip Counting to Show Multiplication					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 10. State multiplication facts: 2s, 5s and 10s.		Module: Operations with Numbers. Unit: Multiplication Session: Skip Counting to Show Multiplication					
PO 11. Demonstrate the associative property of addition [e.g., $(3 + 5) + 4 = 3 + (5 + 4)$].		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 12. Apply grade-level appropriate properties to assist in computation.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
PO 14. Use grade-level appropriate mathematical terminology.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
		Module: Operations with Numbers. Unit: Division Session: Meaning of Division					
PO 17. Add and subtract money without regrouping using manipulatives and paper and pencil, through \$5.00.		Module: Geometry and Measurement. Unit: Measurement Session: Money					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 3: Estimation-Use estimation strategies reasonably and fluently.							
PO 1. Solve problems using a variety of mental computations and reasonable estimation.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					
PO 2. Estimate the measurement of an object using U.S. customary standard and non-standard units of measurement.	Module: Geometry and Measurement. Unit: Measurement. Session: Length	Module: Geometry and Measurement. Unit: Geometry Session: Area					
		Module: Geometry and Measurement. Unit: Geometry Session: Volume					
PO 4. Evaluate the reasonableness of an estimate.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					
Strand 2: Data Analysis, Probability, and Discrete Mathematics							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Data Analysis (Statistics)-- Understand and apply data collection, organization and representation to analyze and sort data.							
PO 2. Make a simple pictograph or tally chart with appropriate labels from organized data.	Module: Algebraic Thinking. Unit: Patterns and Displays. Session: Tables and Graphs						
PO 4. Answer questions about a pictograph using terms such as most, least, equal, more than, less than, and greatest	Module: Algebraic Thinking. Unit: Patterns and Displays. Session: Tables and Graphs						
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns--Identify patterns and apply pattern recognition to reason mathematically.							
PO 2. Extend a grade-level appropriate repetitive pattern (e.g., 12, 22, 32, ____, ____, __).	Module: Algebraic thinking. Unit: Patterns and Displays. Session: Number Patterns	Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 3. Create grade-level appropriate patterns.		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 3: Algebraic Representations- Represent and analyze mathematical situations and structures using algebraic representations.							
PO 2. Find the missing element (addend, subtrahend, minuend, sum, and difference) in addition and subtraction number sentences for sums through 18 and minuends through 9 (e.g., $13 - _ = 8$).		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
Concept 4: Analysis of Change- Analyze change in a variable over time and in various contexts.							
PO 1. Identify the change in a variable over time (e.g., an object gets taller, colder, heavier).		Module: Geometry and Measurement. Unit: Measurement Session: Temperature					
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties- Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Compare attributes of 2-dimensional shapes (square, rectangle, triangle, and circle).	Module: Geometry and Measurement. Unit: Geometry. Session: Triangles and Rectangles (S2)						
Concept 2: Transformation of Shapes- Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							
PO 1. Recognize same shape in different positions (flip/reflection).	Module: Geometry and Measurement. Unit: Geometry. Session: Three Dimensional Shapes						
Concept 4: Measurement - Units of Measure/ Geometric Objects--Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Identify the type of measure (e.g., weight, height, and time) for each attribute of an object.	Module: Geometry and Measurement. Unit: Measurement. Session: Length	Module: Geometry and Measurement. Unit: Geometry Session: Area					
	Module: Geometry and Measurement. Unit: Measurement. Session: Weight	Module: Geometry and Measurement. Unit: Geometry Session: Volume					
		Module: Geometry and Measurement. Unit: Measurement Session: Time					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Geometry and Measurement. Unit: Measurement Session: Temperature					
PO 2. Select the appropriate U.S. customary measure of accuracy: - length - inches, feet, yards, miles,- capacity/volume - pints, quarts, and- mass/weight - ounces.	Module: Geometry and Measurement. Unit: Measurement. Session: Length	Module: Geometry and Measurement. Unit: Geometry Session: Area					
	Module: Geometry and Measurement. Unit: Measurement. Session: Weight	Module: Geometry and Measurement. Unit: Geometry Session: Volume					
		Module: Geometry and Measurement. Unit: Measurement Session: Temperature					
PO 3. Tell time to the quarter hour using analog and digital clocks.		Module: Geometry and Measurement. Unit: Measurement Session: Time (S1)					
Third Grade							
Strand 1: Number Sense and Operations							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Number Sense- Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 4. State whole numbers, through six-digits, with correct place value, by using models, illustrations, symbols, or expanded notation (e.g., $53,941 = 50,000 + 3,000 + 900 + 40 + 1$).		Module: Number Sense. Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number					
PO 5. Construct models to represent place value concepts for the one's, ten's, and hundred's places.		Module: Number Sense. Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones					
PO 6. Apply expanded notation to model place value through 9,999 (e.g., $5,378 = 5,000 + 300 + 70 + 8$).		Module: Number Sense. Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number					
PO 7. Sort whole numbers into sets containing only odd numbers or only even numbers.		Module: Number Sense. Unit: Numbers to 999. Session: Counting by Grouping					
PO 10. Make models that represent proper fractions (halves, thirds, fourths, eighths, and tenths).		Module: Operations with Numbers. Unit: Division Session: Fractional Parts					
PO 11. Identify symbols, words, or models that represent proper fractions (halves, thirds, fourths, eighths and tenths).		Module: Operations with Numbers. Unit: Division Session: Fractional Parts					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 12. Use proper fractions in contextual situations.		Module: Operations with Numbers. Unit: Division Session: Fractional Parts					
PO 16. Use decimals through hundredths in contextual situations.		Module: Geometry and Measurement. Unit: Measurement Session: Money					
PO 21. Determine multiples of a given whole number with products through 24 (skip counting).		Module: Operations with Numbers. Unit: Multiplication Session: Skip Counting to Show Multiplication					
Concept 2: Numerical Operations- Understand and apply numerical operations and their relationship to one another.							
PO 1. Demonstrate the process of subtraction using manipulatives through three-digit whole numbers.		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 9,999					
PO 2. Add two three-digit whole numbers.		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Sums less than 1,000					
PO 5. Select the grade-level appropriate operation to solve word problems.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 9,999					
		Module: Operations with Numbers. Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers. Unit: Division Session: Dividing by a 1-digit Number					
PO 6. Solve word problems using grade-level appropriate operations and numbers.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 9,999					
		Module: Operations with Numbers. Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers. Unit: Division Session: Dividing by a 1-digit Number					
PO 7. Demonstrate the process of multiplication as repeatedly adding the same number, counting by multiples, combining equal sets, and making arrays.		Module: Operations with Numbers. Unit: Multiplication Session: Repeated Addition and Arrays					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers. Unit: Multiplication Session: Skip Counting to Show Multiplication					
PO 8. Demonstrate the process of division with one-digit divisors (separating elements of a set into smaller equal sets, sharing equally, or repeatedly subtracting the same number).		Module: Operations with Numbers. Unit: Division Session: Meaning of Division					
		Module: Operations with Numbers. Unit: Division Session: Dividing by a 1-digit Number					
PO 11. Demonstrate the commutative and identity properties of multiplication.		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 13. Apply grade-level appropriate properties to assist in computation.		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 14. Apply the symbols: $'$, $,$, $/$, $*$, $\%$, and the grouping symbols $()$ and $"$.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 9,999					
		Module: Operations with Numbers. Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers. Unit: Division Session: Dividing by a 1-digit Number					
		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 15. Use grade-level appropriate mathematical terminology.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Sums Less than 100					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Sums less than 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Differences within 100					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Estimating and Finding Differences within 9,999					
		Module: Operations with Numbers. Unit: Multiplication Session: Finding Products Less than 100					
		Module: Operations with Numbers. Unit: Division Session: Dividing by a 1-digit Number					
		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
Concept 3: Estimation- Use estimation strategies reasonably and fluently.							
PO 1. Solve grade-level appropriate problems using estimation.		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Estimating and Finding Sums less than 1,000					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Estimating and Finding Differences within 1,000					
		Module: Operations with Numbers. Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999					
PO 2. Estimate length and weight using U.S. customary units.	Module: Geometry and Measurement. Unit: Measurement. Session: Length						
	Module: Geometry and Measurement. Unit: Measurement. Session: Weight						
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics)- Understand and apply data collection, organization and representation to analyze and sort data.							
PO 3. Interpret data found in line plots, pictographs, and single-bar graphs (horizontal and vertical).	Module: Algebraic Thinking. Unit: Patterns and Displays. Session: Tables and Graphs						
Strand 3: Patterns, Algebra, and Functions							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Patterns-Identify patterns and apply pattern recognition to reason mathematically.							
PO 2. Extend a grade-level appropriate repetitive pattern (e.g., 5, 10, 15, 20, . . . rule: add five or count by five's).		Module: Operations with Numbers. Unit: Multiplication Session: Skip Counting to Show Multiplication					
		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
PO 3. Solve grade-level appropriate pattern problems.		Module: Algebraic Thinking. Unit: Properties and Relationships Session: Number Patterns and Properties					
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties--Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 2. Name concrete objects and pictures of 3-dimensional solids (cones, spheres, and cubes).	Module: geometry and Measurement. Unit: Geometry. Session: Three-Dimensional Shapes						

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Describe relationships between 2-dimensional and 3-dimensional objects (squares/cubes, circles/spheres, triangles/cones).	Module: geometry and Measurement. Unit: Geometry. Session: Three-Dimensional Shapes						
Concept 2: Transformation of Shapes- Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							
PO 1. Recognize same shape in different positions (turn/rotation).	Module: geometry and Measurement. Unit: Geometry. Session: Three-Dimensional Shapes						
Concept 4: Measurement - Units of Measure/Geometric Objects- Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Select the appropriate measure of accuracy: • length – centimeters, meters, kilometers, • capacity/volume – liters, and • mass/weight – grams.	Module: Geometry and Measurement. Unit: Measurement. Session: Length	Module: Geometry and Measurement. Unit: Geometry. Session: Volume					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Tell time with one-minute precision (analog).		Module: Geometry and Measurement. Unit: Measurement Session: Time					
PO 5. Record temperatures to the nearest degree in degrees Fahrenheit and degrees Celsius as shown on a thermometer.		Module: Geometry and Measurement. Unit: Measurement Session: Temperature					
PO 6. Compare units of measure to determine more or less relationships for: • length – inches to feet; centimeters to meters, • time – minutes to hours; hours to days; days to weeks; months to years, and • money – pennies, nickels, dimes, quarters, and dollars.	Module: Geometry and Measurement. Unit: Measurement. Session: Length	Module: Geometry and Measurement. Unit: Measurement Session: Time					
		Module: Geometry and Measurement. Unit: Measurement Session: Money					
PO 7. Determine relationships for: • volume – cups and gallons, • weight – ounces and pounds, and • money – extend to amounts greater than one dollar.		Module: Geometry and Measurement. Unit: Geometry. Session: Volume					
		Module: Geometry and Measurement. Unit: Measurement Session: Money					
PO 9. Determine the perimeter using a rectangular array.			Module: Geometry. Unit: Measurement. Session: Rectangles and Squares (S2)				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 10. Represent area using a rectangular array.		Module: Geometry and Measurement. Unit: Geometry Session: Area	Module: Geometry. Unit: Measurement. Session: Rectangles and Squares (S2)				
Fourth Grade							
Strand 1: Number Sense and Operations							
Concept 1: Number Sense Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 1. Read whole numbers in contextual situations.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Whole Numbers to One Million				
PO 2. Identify whole numbers in or out of order.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
PO 3. Write whole numbers in or out of order.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
PO 4. State place values for whole numbers (e.g., In the number 203,495 what is the value of the 2?).			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Whole Numbers to One Million				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 5. Construct models to represent place value concepts for the one's, ten's, hundred's, and thousand's places.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Whole Numbers to One Million				
PO 6. Apply expanded notation to model place value (e.g., $203,495 = 200,000 + 3,000 + 400 + 90 + 5$).			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Whole Numbers to One Million				
PO 7. Compare two whole numbers.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
PO 8. Order three or more whole numbers.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers				
PO 9. Make models that represent mixed numbers.			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
PO 10. Identify symbols, words, or models that represent mixed numbers.			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
PO 11. Use mixed numbers in contextual situations.			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
PO 12. Compare two unit fractions (e.g., $\frac{1}{2}$ to $\frac{1}{5}$) or proper or mixed numbers with like denominators.			Module: Fractions. Unit: Proper and Improper Fractions Session: Proper Fractions				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
			Module: Fractions. Unit: Proper and Improper Fractions Session: Equivalent Fractions				
PO 13. Order three or more unit fractions or proper or improper fractions with like denominators.			Module: Fractions. Unit: Proper and Improper Fractions Session: Proper Fractions				
			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
			Module: Fractions. Unit: Proper and Improper Fractions Session: Equivalent Fractions				
PO 14. Use decimals in contextual situations.			Module: Decimals. Unit: Introduction Session: tenths, hundredths and thousandths				
			Module: Decimals. Unit: Introduction Session: Ordering and Rounding				
			Module: Decimals. Unit: Introduction Session: Ratios, Decimals, and Percents				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Decimals. Unit: Addition and Subtraction Session: Adding Decimals				
			Module: Decimals. Unit: Addition and Subtraction Session: Subtracting Decimals				
			Module: Decimals. Unit: Multiplication and Division Session: Multiplying Decimals				
			Module: Decimals. Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers				
PO 15. Compare two decimals.			Module: Decimals. Unit: Introduction Session: Ordering and Rounding				
PO 16. Order three or more decimals.			Module: Decimals. Unit: Introduction Session: Ordering and Rounding				
PO 17. Determine the equivalency among decimals, fractions, and percents (e.g., $49/100 = 0.49 = 49\%$).			Module: Decimals. Unit: Introduction Session: Ratios, Decimals, and Percents				
PO 18. Identify all whole number factors and pairs of factors for a given whole number through 144.			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Finding Factors				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Identifying Common Factors				
PO 19. Determine multiples of a given whole number with products through 144.			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Finding Factors				
			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Identifying Common Factors				
Concept 2: Numerical Operations- Understand and apply numerical operations and their relationship to one another.							
PO 1. Add whole numbers.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
PO 2. Subtract whole numbers.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
PO 3. Select the grade-level appropriate operation to solve word problems.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
PO 4. Solve word problems using grade-level appropriate operations and numbers.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
PO 5. Multiply multi-digit numbers by two-digit numbers.			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 6. Divide with one-digit divisors.		Module: Operations with Numbers. Unit: Division. Session: Dividing by a 1-digit divisor	Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
PO 7. State multiplication and division facts through 12s.							
PO 8. Demonstrate the associative property of multiplication.		Module: Algebraic Thinking. Unit: Properties and Relationships. Session: Number Patterns and Properties					
PO 9. Apply grade-level appropriate properties to assist in computation.		Module: Algebraic Thinking. Unit: Properties and Relationships. Session: Number Patterns and Properties	Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
PO 10. Apply the symbol: \cdot and $()$ for multiplication, and $?$, $?$.			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
PO 11. Use grade-level appropriate mathematical terminology.			Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Differences between large numbers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
PO 12. Add or subtract fractions with like denominators, no regrouping.			Module: Fractions. Unit: Addition and Subtraction Session: Sums involving Like Denominators				
			Module: Fractions. Unit: Addition and Subtraction Session: Differences involving Like Denominators				
PO 13. Simplify numerical expressions using the order of operations with grade-appropriate operations on number sets.							
Concept 3: Estimation - Use estimation strategies reasonably and fluently.							
PO 1. Solve grade-level appropriate problems using estimation.			Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction. Session: Differences between large numbers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division				
PO 2. Use estimation to verify the reasonableness of a calculation (e.g., Is $3284 \times 343 = 1200$ reasonable?).							
PO 3. Estimate length and weight using both U.S. customary and metric units.							
PO 4. Estimate and measure for distance.							
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics)- Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.							
PO 2. Construct a single-bar graph, line graph or two-set Venn diagram with appropriate labels and title from organized data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Interpret graphical representations and data displays including single-bar graphs, circle graphs, two-set Venn diagrams, and line graphs that display continuous data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 4. Answer questions based on graphical representations and data displays including single-bar graphs, circle graphs, two-set Venn diagrams, and line graphs that display continuous data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 5. Identify the mode(s) of given data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 7. Solve contextual problems using graphs, charts, and tables.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
Concept 2: Probability-Understand and apply the basic concepts of probability.							
PO 1. Name the possible outcomes for a probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 2. Describe the probability of events as being more likely, less likely, equally likely, unlikely, certain, impossible, fair or unfair.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Predict the outcome of a grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 4. Record the data from performing a grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 5. Compare the outcome of an experiment to predictions made prior to performing the experiment.							
PO 6. Make predictions from the results of student-generated experiments using objects (e.g., coins, spinners, number cubes).			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 7. Compare the results of two repetitions of the same grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
Concept 3: Discrete Mathematics – Systematic Listing and Counting- Understand and demonstrate the systematic listing and counting of possible outcomes.							
PO 1. Find all possible combinations when one item is selected from each of two sets containing up to three objects (e.g., How many outfits can be made with 3 pants and 2 tee shirts?).							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 4: Vertex-Edge Graphs- Understand and apply vertex-edge graphs.							
PO 1. Color maps with the least number of colors so that no common edges share the same color (increased complexity throughout grade levels).							
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns- Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate a grade-level appropriate iterative pattern, using symbols or numbers.							
PO 2. Extend a grade-level appropriate iterative pattern							
PO 3. Create grade-level appropriate iterative patterns.							
Concept 2: Functions and Relationships- Describe and model functions and their relationships.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Describe the rule used in a simple grade-level appropriate function (e.g., T-chart, input/output model).		Module: Algebraic thinking. Unit: properties and Relationships. Session: Number Patterns and Properties					
Concept 3: Algebraic Representations-Represent and analyze mathematical situations and structures using algebraic representations.							
PO 1. Evaluate expressions involving the four basic operations by substituting given whole numbers for the variable.							
PO 2. Use variables in contextual situations.							
PO 3. Solve one-step equations with one variable represented by a letter or symbol using multiplication of whole numbers (e.g., $12 = n \times 4$).							
Concept 4: Analysis of Change-Analyze change in a variable over time and in various contexts.							
PO 1. Identify the change in a variable over time (e.g., an object gets taller, colder, heavier).							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Make simple predictions based on a variable (e.g., increase homework time as you progress through the grades).							
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties-Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 1. Identify the properties of 2-dimensional figures using appropriate terminology.			Module: Geometry. Unit: Measurement Session: Lines, Angles, and Circles				
			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry. Unit: Measurement Session: Triangles				
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 2. Identify models or illustrations of prisms, pyramids, cones, cylinders, and spheres.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Draw points, lines, line segments (open or closed endpoints), rays, or angles.			Module: Geometry. Unit: Measurement Session: Lines, Angles, and Circles				
PO 4. Classify angles (e.g., right, acute, obtuse, straight).			Module: Geometry. Unit: Measurement Session: Lines, Angles, and Circles				
PO 5. Classify triangles as right, acute, or obtuse.			Module: Geometry. Unit: Measurement Session: Triangles				
PO 6. Identify congruent geometric shapes.			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 7. Identify similar shapes.							
PO 8. Draw a 2-dimensional shape that has line symmetry.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations				
Concept 2: Transformation of Shapes- Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							
PO 1. Demonstrate translation using geometric figures.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Identify a tessellation.							
Concept 3: Coordinate Geometry-Specify and describe spatial relationships using coordinate geometry and other representational systems.							
PO 1. Name the coordinates of a point plotted in the first quadrant.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
Concept 4: Measurement - Units of Measure/ Geometric Objects -Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Identify the appropriate measure of accuracy for the area of an object (e.g., sq. feet or sq. miles).			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
PO 2. Compute elapsed time using a clock (e.g., hours and minutes since or until...) or a calendar (e.g., days, weeks, years since or until...).		Module: Geometry and Measurement. Unit: Measurement. Session: Time (S2)					

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Select an appropriate tool to use in a particular measurement situation.							
PO 4. Approximate measurements to the appropriate degree of accuracy.							
PO 5. Compare units of measure to determine more or less relationships including: • length - yards and miles, meters and kilometers, and • weight - pounds and tons, grams and kilograms.							
PO 6. State equivalent relationships (e.g., 3 teaspoons = 1 tablespoon, 16 cups = 1 gallon, 2000 pounds = 1 ton).							
PO 7. Compare the weight of two objects using both U.S. customary and metric units.							
PO 8. Determine the perimeter of simple polygons (e.g., square, rectangle, triangle).			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry. Unit: Measurement Session: Triangles				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 9. Determine the area of squares and rectangles.			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
PO 10. Differentiate between perimeter and area of quadrilaterals.			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
Strand 5: Structure and Logic							
Concept 1: Algorithms and Algorithmic Thinking Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Discriminate necessary information from unnecessary information in a given grade level appropriate word problem.							
PO 2. Develop an algorithm to calculate the perimeter of simple polygons.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof-Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 1. Draw a conclusion from a Venn diagram.							
PO 2. Identify simple valid arguments using if...then statements based on graphic organizers (e.g., 2-set Venn diagrams and pictures).							
Fifth Grade							
Strand 1: Number Sense and Operations							
Concept 1: Number Sense-Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Make models that represent improper fractions.							
PO 2. Identify symbols, words, or models that represent improper fractions.			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
PO 3. Use improper fractions in contextual situations.			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
PO 4. Compare two proper fractions or improper fractions with like denominators.			Module: Fractions. Unit: Proper and Improper Fractions Session: Proper Fractions				
			Module: Fractions. Unit: Proper and Improper Fractions Session: Improper Fractions				
			Module: Fractions. Unit: Proper and Improper Fractions Session: Equivalent Fractions				
			Module: Fractions. Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions				
PO 5. Order three or more unit fractions, proper or improper fractions with like denominators, or mixed numbers with like denominators.			Module: Fractions. Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 6. Compare two whole numbers, fractions, and decimals (e.g., 1/2 to 0.6).			Module: Decimals. Unit: Introduction. Session: Ratios, Decimals and Percents				
PO 7. Order whole numbers, fractions, and decimals.			Module: Decimals. Unit: Introduction. Session: Ratios, Decimals and Percents				
PO 8. Determine the equivalency between and among fractions, decimals, and percents in contextual situations.			Module: Decimals. Unit: Introduction. Session: Ratios, Decimals and Percents				
PO 9. Identify all whole number factors and pairs of factors for a number.			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Finding Factors				
			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Identifying Common Factors				
PO 10. Recognize that 1 is neither a prime nor a composite number.			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Prime and Composite Numbers				
PO 11. Sort whole numbers (through 50) into sets containing only prime numbers or only composite numbers.			Module: Numbers and Number Sense. Unit: Numbers as Factors Session: Prime and Composite Numbers				
Concept 2: Numerical Operations - Understand and apply numerical operations and their relationship to one another.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Select the grade-level appropriate operation to solve word problems.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Negative Whole Numbers				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: The Integers Session: Integer Sums				
			Module: Operations with Numbers. Unit: The Integers Session: Differences Between Integers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
PO 2. Solve word problems using grade-level appropriate operations and numbers.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Negative Whole Numbers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: The Integers Session: Integer Sums				
			Module: Operations with Numbers. Unit: The Integers Session: Differences Between Integers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
PO 3. Multiply whole numbers.		Module: Operations of Numbers. Unit: Multilication. Session: Finding Products less than 100	Module: Operations with Numbers Unit: Multiplication and Division. Session: two-Digit Multipliers				
PO 4. Divide with whole numbers.		Module: Operations of Numbers. Unit: Multilication. Session: Dividing by a 1 digit number	Module:Operations with Numbers Unit: Multiplication and Division. Session:Introduction to Long Division				

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			Module: Operations with Numbers Unit: Multiplication and Division. Session: Two-Digit Divisor				
PO 5. Demonstrate the distributive property of multiplication over addition.			Module: Fractions. Unit: Multiplication and Division Session: Finding Products	Module: Integers and Order of Operations. Unit: Order of Operations. Session: Introducing the Distributive Property			
PO 6. Demonstrate the addition and multiplication properties of equality.				Module: Integers and Order of Operations. Unit: Order of Operations. Session: Introducing the Distributive Property			
PO 7. Apply grade-level appropriate properties to assist in computation.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences between large numbers				
			Module: Operations with Numbers Unit: Multiplication and Division. Session: two-Digit Multipliers				
			Module: Operations with Numbers Unit: Multiplication and Division. Session: Introduction to Long Division				
			Module: Fractions. Unit: Multiplication and Division Session: Finding Products				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 8. Apply the symbol “[]” to represent grouping.				Module: Integers and Order of Operations. Unit: Order of Operations. Session: Using Grouping Symbols			
PO 9. Use grade-level appropriate mathematical terminology.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Negative Whole Numbers				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: The Integers Session: Integer Sums				
			Module: Operations with Numbers. Unit: The Integers Session: Differences Between Integers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 10. Simplify fractions to lowest terms.			Module: Fractions. Unit: Proper and Improper Fractions Session: Equivalent Fractions				
PO 11. Add or subtract proper fractions and mixed numbers with like denominators with regrouping.			Module: Fractions. Unit: Addition and Subtraction Session: Sums Involving Like Denominators				
			Module: Fractions. Unit: Addition and Subtraction Session: Differences Involving Like Denominators				
			Module: Fractions. Unit: Addition and Subtraction Session: Working with Unlike Denominators				
PO 12. Add or subtract decimals.			Module: Decimals. Unit: Addition and Subtraction Session: Adding Decimals				
			Module: Decimals. Unit: Addition and Subtraction Session: Subtracting Decimals				
PO 13. Multiply decimals.			Module: Decimals. Unit: Multiplication and Division Session: Multiplying Decimals				
PO 14. Divide decimals.			Module: Decimals. Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 15. Simplify numerical expressions using the order of operations with grade- appropriate operations on number sets.				Module: Integers and Order of Operations. Unit: Order of Operations. Session: Simplifying Expressions			
Concept 3: Estimation-Use estimation strategies reasonably and fluently.							
PO 1. Solve grade-level appropriate problems using estimation.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers. Session: Whole Number Sums				
			Module: Fractions Unit: Addition and Subtraction of Whole Numbers. Session: Sums involving like Denominators				
			Module: Fractions Unit: Addition and Subtraction of Whole Numbers. Session: Differences involving like Denominators				
			Module: Fractions Unit: Addition and Subtraction of Whole Numbers. Session: Working with Unlike Denominators				
			Module: Fractions. Unit: Multiplication and Division. Session: Finding Products				
			Module: Fractions. Unit: Multiplication and Division. Session: Finding Products				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Decimals Unit: Addition and Subtraction. Session: Adding Decimals				
			Module: Decimals Unit: Addition and Subtraction. Session: Subtracting Decimals				
			Module: Decimals. Unit: Multiplication and Division. Session: Multiplying Decimals				
			Module: Decimals. Unit: Multiplication and Division. Session: Dividing Decimals by Whole Numbers				
PO 2. Use estimation to verify the reasonableness of a calculation (e.g., Is 4.1×2.7 about 12?).							
PO 3. Round to estimate quantities.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers. Session: Whole Number Sums				
			Module: Decimals Unit: Addition and Subtraction. Session: Adding Decimals				
			Module: Decimals Unit: Addition and Subtraction. Session: Subtracting Decimals				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Estimate and measure for area and perimeter.							
PO 5. Compare estimated measurements between U.S. customary and metric systems (e.g., A yard is about a meter.).							
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics)- Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.							
PO 2. Construct a double-bar graph, line plot, frequency table, or three-set Venn diagram with appropriate labels and title from organized data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 3. Interpret graphical representations and data displays including bar graphs (including double-bar), circle graphs, frequency tables, three-set Venn diagrams, and line graphs that display continuous data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Answer questions based on graphical representations, and data displays including bar graphs (including double-bar), circle graphs, frequency tables, three-set Venn diagrams, and line graphs that display continuous data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 5. Identify the mode(s) and mean (average) of given data.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 6. Formulate reasonable predictions from a given set of data.							
PO 7. Compare two sets of data related to the same investigation.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
PO 8. Solve contextual problems using graphs, charts, and tables.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data				
Concept 2: Probability Understand and apply the basic concepts of probability.							
PO 1. Name the possible outcomes for a probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Describe the probability of events as being:- certain (represented by '1'),- impossible, (represented by '0'), or- neither certain nor impossible (represented by a fraction less than 1).			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 3. Predict the outcome of a grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 4. Record the data from performing a grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
PO 5. Compare the outcome of an experiment to predictions made prior to performing the experiment.							
PO 6. Make predictions from the results of student-generated experiments using objects (e.g., coins, spinners, number cubes).							
PO 7. Compare the results of two repetitions of the same grade-level appropriate probability experiment.							
Concept 3: Discrete Mathematics – Systematic Listing and Counting- Understand and demonstrate the systematic listing and counting of possible outcomes.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Find all possible combinations when one item is selected from each of two sets of different items, using a systematic approach. (e.g., shirts: tee shirt, tank top, sweatshirt; pants: shorts, jeans).							
Concept 4: Vertex-Edge Graphs Understand and apply vertex-edge graphs.							
PO 1. Color maps with the least number of colors so that no common edges share the same color (increased complexity throughout grade levels).							
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate a grade-level appropriate iterative pattern, using symbols or numbers.							
PO 2. Extend a grade-level appropriate iterative pattern.							

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PO 3. Solve grade-level appropriate iterative pattern problems.							
Concept 2: Functions and Relationships-Describe and model functions and their relationships.							
PO 1. Describe the rule used in a simple grade-level appropriate function (e.g., T-chart, input/output model).							
Concept 3: Algebraic Representations Represent and analyze mathematical situations and structures using algebraic representations.							
PO 1. Evaluate expressions involving the four basic operations by substituting given decimals for the variable.							
PO 2. Use variables in contextual situations.							
PO 3. Solve one-step equations with one variable represented by a letter or symbol (e.g., $15 = 45 - n$).							
Concept 4: Analysis of Change-Analyze change in a variable over time and in various contexts.							

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PO 1. Describe patterns of change: <ul style="list-style-type: none"> • constant rate (speed of movement of the hands on a clock), and • increasing or decreasing rate (rate of plant growth) 							
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties-Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 1. Recognize regular polygons.			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry. Unit: Measurement Session: Triangles				
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 2. Draw 2-dimensional figures by applying significant properties of each (e.g., Draw a quadrilateral with two sets of parallel sides and four right angles.).			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Geometry. Unit: Measurement Session: Triangles				
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 3. Sketch prisms, pyramids, cones, and cylinders.							
PO 4. Identify the properties of 2- and 3-dimensional geometric figures using appropriate terminology and vocabulary.			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry. Unit: Measurement Session: Triangles				
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 5. Draw points, lines, line segments, rays, and angles with appropriate labels.			Module: Geometry. Unit: Measurement Session: Lines, Angles, and Circles				
PO 6. Recognize that all pairs of vertical angles are congruent.							

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PO 7. Classify triangles as scalene, isosceles, or equilateral.			Module: Geometry. Unit: Measurement Session: Triangles				
PO 8. Recognize that a circle is a 360° rotation about a point.			Module: Geometry. Unit: Measurement Session: Lines, Angles, and Circles				
PO 9. Identify the diameter, radius, and circumference of a circle.			Module: Geometry. Unit: Measurement Session: Lines, Angles, and Circles				
PO 10. Understand that the sum of the angles of a triangle is 180°.			Module: Geometry. Unit: Measurement Session: Triangles				
PO 11. Draw two congruent geometric figures.			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				
PO 12. Draw two similar geometric figures.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations				
PO 13. Identify the lines of symmetry in a 2-dimensional shape.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations				
Concept 2: Transformation of Shapes Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							

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PO 1. Demonstrate reflections using geometric figures.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations				
PO 2. Describe the transformations that created a tessellation.							
Concept 3: Coordinate Geometry Specify and describe spatial relationships using coordinate geometry and other representational systems.							
PO 1. Graph points in the first quadrant on a grid using ordered pairs.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
Concept 4: Measurement - Units of Measure/Geometric Objects-Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. State an appropriate measure of accuracy for a contextual situation (e.g., What unit of measurement would you use to measure the top of your desk?).							

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PO 2. Draw 2-dimensional figures to specifications using the appropriate tools (e.g., Draw a circle with a 2-inch radius.).							
PO 3. Determine relationships including volume (e.g., pints and quarts, milliliters and liters).							
PO 4. Convert measurement units to equivalent units within a given system (U.S. customary and metric) (e.g., 12 inches = 1 foot; 10 decimeters = 1 meter).							
PO 5. Solve problems involving the perimeter of convex polygons.							
PO 6. Determine the area of figures composed of two or more rectangles on a grid.			Module: Geometry. Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane				
PO 7. Solve problems involving the area of simple polygons.			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry. Unit: Measurement Session: Triangles				
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 8. Describe the change in perimeter or area when one attribute (length, width) of a rectangle is altered.							
Strand 5: Structure and Logic							
Concept 1: Algorithms and Algorithmic Thinking-Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Discriminate necessary information from unnecessary information in a given grade level appropriate word problem.							
PO 2. Design simple algorithms using whole numbers.							
PO 3. Develop an algorithm or formula to calculate areas of simple polygons.			Module: Geometry. Unit: Measurement Session: Rectangles and Squares				
			Module: Geometry. Unit: Measurement Session: Triangles				
			Module: Geometry. Unit: Measurement Session: Parallelograms and Trapezoids				

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Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof-Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 1. Construct if...then statements.							
PO 2. Identify simple valid arguments using if ... then statements based on graphic organizers (e.g., 3-set Venn diagrams and pictures).							
GRADE 6							
Strand 1: Number Sense and Operations							
Concept 1: Number Sense - Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							

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PO 1. Express fractions as ratios, comparing two whole numbers (e.g., $\frac{3}{4}$ is equivalent to 3:4 and 3 to 4).					Module: Ratio & Proportion. Unit: Ratio Session: Defining Ratio		
					Module: Ratio & Proportion. Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
PO 2. Compare two proper fractions, improper fractions, or mixed numbers.				Module: Fractions. Unit: Essentials of Fractions Session: Recognizing a Fraction			
				Module: Fractions. Unit: Essentials of Fractions Session: Exploring Proper and Improper Fractions			
				Module: Fractions. Unit: Essentials of Fractions Session: Working with Mixed Numbers			
				Module: Fractions. Unit: Equivalent Fractions Session: Writing and Comparing Equivalent Fractions			
PO 3. Order three or more proper fractions, improper fractions, or mixed numbers.				Module: Fractions. Unit: Equivalent Fractions Session: Writing and Comparing Equivalent Fractions			
PO 4. Determine the equivalency between and among fractions, decimals, and percents in contextual situations.				Module: Percents. Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions			

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				Module: Percents. Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions			
				Module: Percents. Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents			
					Module: Ratio & Proportion. Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
PO 5. Identify the greatest common factor for two whole numbers.				Module: Fractions. Unit: Multiplying Fractions Session: Using the GCF in Finding Products			
PO 6. Determine the least common multiple for two whole numbers.							
PO 7. Express a whole number as a product of its prime factors, using exponents when appropriate.							
Concept 2: Numerical Operations - Understand and apply numerical operations and their relationship to one another.							
PO 1. Select the grade-level appropriate operation to solve word problems.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Negative Whole Numbers				

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			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: The Integers Session: Integer Sums				
			Module: Operations with Numbers. Unit: The Integers Session: Differences Between Integers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
				Module: Fractions. Unit: Adding Fractions Session: Adding with Like Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Like Denominators			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Decimals. Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
				Module: Decimals. Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
				Module: Fractions. Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Decimals. Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 2. Solve word problems using grade-level appropriate operations and numbers.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Negative Whole Numbers				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: The Integers Session: Integer Sums				
			Module: Operations with Numbers. Unit: The Integers Session: Differences Between Integers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
				Module: Fractions. Unit: Adding Fractions Session: Adding with Like Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Like Denominators			
				Module: Decimals. Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Decimals. Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Decimals. Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 3. Apply grade-level appropriate properties to assist in computation.				Module: Fractions. Unit: Adding Fractions Session: Adding with Like Denominators			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Like Denominators			
				Module: Decimals. Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
				Module: Decimals. Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
PO 4. Apply the symbols for '...' or '---' to represent repeating decimals and ':' to represent ratios, superscripts as exponents.				Module: Decimals. Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals			
				Module: Integers and Order of Operations. Unit: Order of Operations Session: Simplifying Expressions			
				Module: Integers and Order of Operations. Unit: Order of Operations Session: Using Grouping Symbols			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Ratio & Proportion. Unit: Ratio Session: Defining Ratio		
					Module: Ratio & Proportion. Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
PO 5. Use grade-level appropriate mathematical terminology.				Module: Fractions. Unit: Adding Fractions Session: Adding with Like Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Like Denominators			
				Module: Decimals. Unit: Essentials of Decimals Session: Investigating Decimal Place Values			
				Module: Decimals. Unit: Essentials of Decimals Session: Rounding Decimals			
				Module: Decimals. Unit: Adding and Subtracting Decimals Session: Using Place Value Grids			
				Module: Decimals. Unit: Adding and Subtracting Decimals Session: Regrouping with Whole Numbers			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Decimals. Unit: Adding and Subtracting Decimals Session: Regrouping to Hundredths			
				Module: Decimals. Unit: Multiplying Decimals Session: Multiplying Decimals by Powers of 10			
				Module: Decimals. Unit: Multiplying Decimals Session: Calculating Products			
				Module: Decimals. Unit: Multiplying Decimals Session: Finding the Volume of a Prism			
				Module: Decimals. Unit: Dividing Decimals Session: Dividing Decimals by Whole Numbers			
				Module: Decimals. Unit: Dividing Decimals Session: Dividing by Powers of 10			
				Module: Percents. Unit: Essentials of Percents Session: Investigating the Meaning of Percent			
					Module: Ratio & Proportion. Unit: Ratio Session: Defining Ratio		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Ratio & Proportion. Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
					Module: Ratio & Proportion. Unit: Ratio Session: Forming Ratios between Unlike Quantities		
PO 6. Simplify fractions to lowest terms.				Module: Fractions. Unit: Equivalent Fractions Session: Identifying the Factors of a Number			
				Module: Fractions. Unit: Equivalent Fractions Session: Expressing Fractions in Lowest Terms			
					Module: Ratio & Proportion. Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals		
PO 7. Add or subtract proper fractions and mixed numbers with unlike denominators with regrouping.				Module: Fractions. Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
PO 8. Demonstrate the process of multiplication of proper fractions using models.				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			

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PO 9. Multiply proper fractions.				Module: Fractions. Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers			
				Module: Fractions. Unit: Multiplying Fractions Session: Using the GCF in Finding Products			
				Module: Fractions. Unit: Multiplying Fractions Session: Representing Multiplication			
PO 10. Multiply mixed numbers.				Module: Fractions. Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers			
				Module: Fractions. Unit: Multiplying Fractions Session: Using the GCF in Finding Products			
PO 11. Demonstrate that division is the inverse of multiplication of proper fractions.				Module: Fractions. Unit: Dividing Fractions Session: Using Multiplicative Inverses			
PO 12. Divide proper fractions.				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Fractions. Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			

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PO 13. Divide mixed numbers.				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Fractions. Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			
PO 14. Solve problems involving fractions or decimals (including money) in contextual situations.							
PO 15. Simplify numerical expressions using the order of operations with grade-appropriate operations on number sets.							
Concept 3: Estimation - Use estimation strategies reasonably and fluently.			Module: Decimals. Unit: Multiplication and Division Session: Multiplying Decimals				
PO 1. Solve grade-level appropriate problems using estimation.							
				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			

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				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			
				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			
PO 2. Use estimation to verify the reasonableness of a calculation (e.g., Is $5/9 \times 3/7$ more than 1?).				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			
PO 3. Round to estimate quantities in contextual situations (e.g., round up or round down).							
PO 4. Estimate and measure for the area and perimeter of polygons using a grid.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 5. Verify the reasonableness of estimates made from calculator results within a contextual situation.							
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics) - Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.							
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
PO 2. Construct a histogram, line graph, scatter plot, or stem-and-leaf plot with appropriate labels and title from organized data.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
PO 3. Interpret simple displays of data including double bar graphs, tally charts, frequency tables, circle graphs, and line graphs.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
PO 4. Answer questions based on simple displays of data including double bar graphs, tally charts, frequency tables, circle graphs, and line graphs.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 5. Find the mean, median (odd number of data points), mode, range, and extreme values of a given numerical data set.					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		
					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Defining the Mode		
					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode		
PO 6. Identify a trend (variable increasing, decreasing, remaining constant) from displayed data.					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
PO 7. Compare trends in data related to the same investigation.							
PO 8. Solve contextual problems using bar graphs, tally charts, and frequency tables.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
Concept 2: Probability - Understand and apply the basic concepts of probability.							
PO 1. Name the possible outcomes for a probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
PO 2. Express probabilities of a single event as a decimal.							
PO 3. Predict the outcome of a grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 4. Record the data from performing a grade-level appropriate probability experiment			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		

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					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 5. Compare the outcome of an experiment to predictions made prior to performing the experiment.					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 6. Make predictions from the results of student-generated experiments using objects (e.g., coins, spinners, number cubes, cards).					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
PO 7. Compare the results of two repetitions of the same grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
Concept 3: Discrete Mathematics - Systematic Listing and Counting - Understand and demonstrate the systematic listing and counting of possible outcomes.							
PO 1. Determine all possible outcomes involving a combination of three sets of three items, using a systematic approach (e.g., 3 different shirts, 3 different pairs of pants, and 3 different belts).							
PO 2. Determine all possible arrangements given a set with four or fewer objects using a systematic list, table or tree diagram when order is not important.							

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Concept 4: Vertex-Edge Graphs - Understand and apply vertex-edge graphs.							
PO 1. Find the shortest route on a map from one site to another (vertex-edge graph).							
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns - Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate a grade-level appropriate recursive pattern, using symbols or numbers.							
PO 2. Extend a grade-level appropriate iterative pattern.							
PO 3. Solve grade-level appropriate iterative pattern problems.							
Concept 2: Functions and Relationships - Describe and model functions and their relationships.							
PO 1. Describe the rule used in a simple grade-level appropriate function (e.g., T-chart, input/output model).							

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Concept 3: Algebraic Representations - Represent and analyze mathematical situations and structures using algebraic representations.							
PO 1. Evaluate expressions involving the four basic operations by substituting given fractions for the variable (e.g., $n+3$, when $n=\frac{1}{2}$).				Module: Fractions. Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			
				Module: Fractions. Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions			
				Module: Fractions. Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions			
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Combining Like Terms		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		

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					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		

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PO 2. Use variables in contextual situations.				Module: Fractions. Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			
				Module: Fractions. Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions			
				Module: Fractions. Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions			
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Combining Like Terms		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		

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					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
PO 3. Translate a written phrase to an algebraic expression (e.g., The quotient of m and 5 is $m/5$)					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Introducing Variables		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 4. Translate a phrase written in context into an algebraic expression (e.g., Write an expression to describe the situation: John has x pieces of candy and buys three more. $x + 3$).					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Introducing Variables		

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					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 5. Solve one-step equations with one variable represented by a letter or symbol, using inverse operations with whole numbers.					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Combining Like Terms		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
Concept 4: Analysis of Change - Analyze change in a variable over time and in various contexts.							

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PO 1. Identify values on a given line graph or scatter plot (e.g., Given a line showing wages earned per hour, what is the wage at five hours?).					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties - Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 1. Classify polygons by their attributes (e.g., number of sides, length of sides, angles, parallelism, perpendicularity).							
PO 2. Draw a geometric figure showing specified properties, such as parallelism and perpendicularity.							
PO 3. Classify prisms, pyramids, cones, and cylinders by base shape and lateral surface shape.							
PO 4. Classify 3-dimensional figures by their attributes.							

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PO 5. Compare attributes of 2-dimensional figures with 3-dimensional figures.							
PO 6. Draw triangles with appropriate labels.					Module: Fundamentals of Geometry. Unit: Triangles Session: Classifying Triangles by Sides		
					Module: Fundamentals of Geometry. Unit: Triangles Session: Classifying Triangles by Angles		
PO 7. Identify supplementary or complementary angles.					Module: Fundamentals of Geometry. Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles		
PO 8. Identify the diameter, radius, and circumference of a circle or sphere.							
PO 9. Draw a 2-dimensional shape with a given number of lines of symmetry.							
Concept 2: Transformation of Shapes - Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							
PO 1. Identify reflections and translations using pictures.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Perform elementary transformations to create a tessellation.							
Concept 3: Coordinate Geometry - Specify and describe spatial relationships using coordinate geometry and other representational systems.							
PO 1. Graph a polygon in the first quadrant using ordered pairs.							
PO 2. State the missing coordinate of a given figure in the first quadrant of a coordinate grid using geometric properties (e.g., Find the coordinates of the missing vertex of a rectangle when two adjacent sides are drawn.).							
Concept 4: Measurement - Units of Measure - Geometric Objects - Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Determine the appropriate measure of accuracy within a system for a given contextual situation (e.g., Would you measure the length of your bedroom wall using inches or feet?).							

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PO 2. Determine the appropriate tool needed to measure to the needed accuracy.							
PO 3. Determine a linear measurement to the appropriate degree of accuracy.							
PO 4. Measure angles using a protractor.					Module: Fundamentals of Geometry. Unit: Geometry Fundamentals Session: Naming and Measuring Angles		
PO 5. Convert within a single measurement system (U.S. customary or metric) (e.g., How many ounces are equivalent to 2 pounds?).							
PO 6. Solve problems involving the perimeter of polygons.							
PO 7. Determine the area of triangles.					Module: Fundamentals of Geometry. Unit: Triangles Session: Exploring the Area of a Triangle		
PO 8. Distinguish between perimeter and area in contextual situation.							
PO 9. Solve problems for the areas of parallelograms (includes rectangles).							

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PO 10. Identify parallelograms having the same perimeter or area.							
PO 11. Determine the actual measure of objects using a scale drawing or map.							
Strand 5: Structure and Logic							
Concept 1: Algorithms and Algorithmic Thinking - Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Discriminate necessary information from unnecessary information in a given grade level appropriate word problem.							
PO 2. Analyze algorithms for computing with decimals.							
Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof - Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Solve a simple logic problem from given information (e.g., Which of three different people live in which of three different colored houses?).							
GRADE 7							
Strand 1: Number Sense and Operations							
Concept 1: Number Sense - Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 1. Express fractions as terminating or repeating decimals.				Module: Decimals. Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals			
PO 2. Identify the greatest common factor for a set of whole numbers.				Module: Fractions. Unit: Multiplying Fractions Session: Using the GCF in Finding Products			
PO 3. Determine the least common multiple for a set of whole numbers.							
PO 4. Choose the appropriate signed real number to represent a contextual situation.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			
PO 5. Recognize the absolute value of a number used in contextual situations.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
PO 6. Locate integers on a number line.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
PO 7. Order integers.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
PO 8. Classify rational numbers as natural, whole, or integers.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 2: Numerical Operations - Understand and apply numerical operations and their relationship to one another.							
PO 1. Add integers.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value			
PO 2. Subtract integers.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value			
PO 3. Select the grade-level appropriate operation to solve word problems.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
				Module: Fractions. Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			
PO 4. Solve word problems using grade-level appropriate operations and numbers.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
				Module: Fractions. Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			
PO 5. Multiply integers.				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers			
PO 6. Divide integers.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 7. Apply grade-level appropriate properties to assist in computation.			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Fractions. Unit: Multiplication and Division Session: Finding Products				
				Module: Fractions. Unit: Adding Fractions Session: Adding with Unlike Denominators			
				Module: Fractions. Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers			
				Module: Integers and Order of Operations. Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals			
PO 8. Apply the symbols + and - to represent positive and negative, and ' ' to represent absolute value.				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value			
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value			
PO 9. Use grade-level appropriate mathematical terminology.			Module: Numbers and Number Sense. Unit: Large and Small Numbers Session: Negative Whole Numbers				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums				
			Module: Operations with Numbers. Unit: Addition and Subtraction of Whole Numbers Session: Differences Between Large Numbers				
			Module: Operations with Numbers. Unit: The Integers Session: Integer Sums				
			Module: Operations with Numbers. Unit: The Integers Session: Differences Between Integers				
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
			Module: Operations with Numbers. Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors				
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Exploring the Number Line and Absolute Value			
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Adding with Absolute Value			
				Module: Integers and Order of Operations. Unit: Adding and Subtracting Signed Numbers Session: Subtracting with Absolute Value			
PO 10. Calculate the percent of a given number.				Module: Percents. Unit: Finding Percents of Quantities Session: Finding Percents of a Whole			
				Module: Percents. Unit: Finding Percents of Quantities Session: Calculating the Whole from a Part and a Percent			
				Module: Percents. Unit: Increasing and Decreasing Percents Session: Calculating Percent Increases			
				Module: Percents. Unit: Increasing and Decreasing Percents Session: Calculating Percent Decreases			

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
				Module: Percents. Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest			
PO 11. Convert numbers expressed in standard notation to scientific notation and vice versa (positive exponents only).					Module: Radicals & Exponents. Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation		
					Module: Radicals & Exponents. Unit: Introduction to Scientific Notation Session: Comparing Numbers in Scientific Notation		
PO 12. Simplify numerical expressions using the order of operations with grade- appropriate operations on number sets.				Module: Integers and Order of Operations. Unit: Order of Operations Session: Using Grouping Symbols			
					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
Concept 3: Estimation - Use estimation strategies reasonably and fluently.			Module: Decimals. Unit: Multiplication and Division Session: Multiplying Decimals				
PO 1. Solve grade-level appropriate problems using estimation.							
				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			

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				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			
				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			
				Module: Fractions. Unit: Dividing Fractions Session: Estimating Quotients of Fractions			
				Module: Decimals. Unit: Dividing Decimals Session: Estimating and Finding Quotients			
PO 2. Use estimation to verify the reasonableness of a calculation (e.g., Is -2.5×18 about -50 ?).							
PO 3. Determine whether an estimation of an area is approximately equal to the actual measure.							
PO 4. Determine whether an estimation of an angle is approximately equal to the actual measure.							

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PO 5. Determine whether an estimation of the circumference of a circle is approximately equal to the actual measure.							
PO 6. Verify the reasonableness of estimates made from calculator results within a contextual situation.							
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics) - Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.							
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 2. Construct a circle graph with appropriate labels and title from organized data.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
PO 3. Determine when it is appropriate to use histograms, line graphs, double bar graphs, and stem-and-leaf plots.							
PO 4. Interpret data displays including histograms, stem-and-leaf plots, circle graphs, and double line graphs.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
PO 5. Answer questions based on data displays including histograms, stem-and-leaf plots, circle graphs, and double line graphs.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 6. Find the mean, median, mode, and range of a given numerical data set.					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		
					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Defining the Mode		
					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode		
PO 7. Interpret trends from displayed data.							
PO 8. Compare trends in data related to the same investigation.							
PO 9. Solve contextual problems using histograms, line graphs of continuous data, double bar graphs, and stem-and-leaf plots.				Module: Integers and Order of Operations. Unit: Order of Operations Session: Simplifying Expressions			
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
Concept 2: Probability - Understand and apply the basic concepts of probability.							
PO 1. Determine the probability that a specific event will occur in a single stage probability experiment (e.g., Find the probability of drawing a red marble from a bag with 3 red, 5 blue, and 9 black marbles.).					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Compare probabilities to determine the fairness of a contextual situation (e.g. If John wins when two or greater shows after a six-sided number cube is rolled and Joaquin wins otherwise, is this a fair game?).					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
PO 3. Predict the outcome of a grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 4. Record the data from performing a grade-level appropriate probability experiment			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 5. Compare the outcome of an experiment to predictions made prior to performing the experiment.					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
PO 6. Make predictions from the results of student-generated experiments using objects (e.g., coins, spinners, number cubes, cards).					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 7. Compare the results of two repetitions of the same grade-level appropriate probability experiment.			Module: Data Analysis and Probability. Unit: Modeling and Displaying Events Session: Looking at Chance				
Concept 3: Discrete Mathematics - Systematic Listing and Counting - Understand and demonstrate the systematic listing and counting of possible outcomes.							
PO 1. Determine all possible outcomes involving the combination of up to three sets of objects (e.g., How many outfits can be made with 3 pants, 2 tee shirts and 2 pairs of shoes?).							
PO 2. Determine all possible arrangements of a given set, using a systematic list, table, tree diagram, or other representation.							
Concept 4: Vertex-Edge Graphs - Understand and apply vertex-edge graphs.							
PO 1. Find the shortest circuit on a map that makes a tour of specified sites (vertex-edge graph).							
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns - Identify patterns and apply pattern recognition to reason mathematically.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Communicate a grade-level appropriate recursive pattern, using symbols or numbers.							
PO 2. Extend a grade-level appropriate recursive pattern.							
PO 3. Solve grade-level appropriate recursive pattern problems.							
Concept 2: Functions and Relationships - Describe and model functions and their relationships.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
PO 1. Describe the rule used in a simple grade-level appropriate function (e.g., T-chart, input/output model).							
Concept 3: Algebraic Representations - Represent and analyze mathematical situations and structures using algebraic representations.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Evaluate an expression containing two variables by substituting integers for the variable (e.g., $7x + m$, when $x = -4$ and $m = 12$).					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
PO 2. Use variables in contextual situations.				Module: Fractions. Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions			
				Module: Fractions. Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions			
				Module: Fractions. Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions			
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Combining Like Terms		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
PO 3. Translate a written sentence into a one-step, one-variable algebraic equation.					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 4. Translate a sentence written in context into an algebraic equation involving one operation.					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 5. Solve one-step equations using inverse operations with positive rational numbers (e.g., $2/3n=6$)							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 4: Analysis of Change - Analyze change in a variable over time and in various contexts.							
PO 1. Analyze change in various linear contextual situations.							
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties - Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 1. Draw a geometric figure showing specified properties (e.g., Draw an obtuse triangle.).					Module: Fundamentals of Geometry. Unit: Triangles Session: Classifying Triangles by Sides		
					Module: Fundamentals of Geometry. Unit: Triangles Session: Classifying Triangles by Angles		
PO 2. Classify 3-dimensional solids by their configuration and properties (e.g., parallelism, perpendicularity and congruency).							
PO 3. Identify the net (2-dimensional representation) that corresponds to a rectangular prism, cone, or cylinder.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Distinguish between length, area, and volume, using 2- and 3-dimensional geometric figures.							
PO 5. Draw polygons with appropriate labels.							
PO 6. Identify the angles created by two lines and a transversal.					Module: Fundamentals of Geometry. Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
PO 7. Recognize the relationship between central angles and intercepted arcs.							
PO 8. Identify arcs and chords of a circle.							
PO 9. Model the triangle inequality theorem using manipulatives.							
PO 10. Identify corresponding parts of congruent polygons as congruent.							
Concept 2: Transformation of Shapes - Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Identify rotations about a point, using pictorial models.							
PO 2. Recognize simple single rotations, translations or reflections on a coordinate grid.							
Concept 3: Coordinate Geometry - Specify and describe spatial relationships using coordinate geometry and other representational systems.							
PO 1. Graph data points in (x, y) form in any quadrant of a coordinate grid.							
PO 2. State the missing coordinate of a given figure in any quadrant of a coordinate grid using geometric properties (e.g., Find the coordinates of the missing vertex of a rectangle when two adjacent sides are drawn.).					Module: Ratio & Proportion. Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
Concept 4: Measurement - Units of Measure - Geometric Objects - Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Identify the appropriate unit of measure for the volume of an object (e.g., cubic inches or cubic cm).							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Measure to the appropriate degree of accuracy.							
PO 3. Convert a measurement from U.S. customary to metric, and vice versa.							
PO 4. Solve problems involving the circumference of a circle.							
PO 5. Solve problems involving the area of a circle.							
PO 6. Solve problems for the areas of parallelograms, triangles, and circles.							
PO 7. Identify polygons having the same perimeter or area.							
PO 8. Compare estimated to actual lengths based on scale drawings or maps.							
Strand 5: Structure and Logic							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Algorithms and Algorithmic Thinking - Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Discriminate necessary information from unnecessary information in a given grade level appropriate word problem.							
PO 2. Analyze algorithms for computing with fractions.							
Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof - Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 1. Solve a logic problem using multiple variables.							
GRADE 8							
Strand 1: Number Sense and Operations							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Number Sense - Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 1. Locate rational numbers on a number line.							
PO 2. Identify irrational numbers.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational Numbers		
PO 3. Classify real numbers as rational or irrational.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational Numbers		
Concept 2: Numerical Operations - Understand and apply numerical operations and their relationship to one another.							
PO 1. Select the grade-level appropriate operation to solve word problems.							
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: Working with Radicals
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: The Square Root Function
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
PO 2. Solve word problems using grade-level appropriate operations and numbers.							
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: Working with Radicals
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: The Square Root Function
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
PO 3. Determine the square of an integer.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Determine the square root of an integer.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		
PO 5. Identify squaring and finding square roots as inverse operations.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		
PO 6. Apply grade-level appropriate properties to assist in computation.							
					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		
PO 7. Apply the symbols “?” to represent square root, “±” to represent roots, and “{}” as grouping symbols.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		
PO 8. Use grade-level appropriate mathematical terminology.							
					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots		
PO 9. Calculate the missing value in a percentage problem.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 10. Convert standard notation to scientific notation, and vice versa.					Module: Radicals & Exponents. Unit: Introduction to Scientific Notation Session: Writing Numbers between 0 & 1 in Scientific Notation		
PO 11. Simplify numerical expressions using the order of operations with grade-appropriate operations on number sets.							
					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
Concept 3: Estimation - Use estimation strategies reasonably and fluently.							
PO 1. Solve grade-level appropriate problems using estimation.							
PO 2. Use estimation to verify the reasonableness of a calculation (e.g., Is 32 the square root of 64?).							
PO 3. Express answers to the appropriate place or degree of precision (e.g., time, money).							
PO 4. Verify the reasonableness of estimates made from calculator results within a contextual situation.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics) - Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.							
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 2. Construct box-and-whisker plots.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Determine the appropriate type of graphical display for a given data set.							
PO 4. Interpret box-and-whisker plots, circle graphs, and scatter plots.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		
PO 5. Answer questions based on box-and-whisker plots, circle graphs, and scatter plots.					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 6. Solve problems in contextual situations using the mean, median, mode, and range of a given data set.					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Defining the Mean & Median		
					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Defining the Mode		
					Module: Fundamentals of Statistics. Unit: The Mean, Median, & Mode Session: Calculating the Mean, Median, & Mode		
PO 7. Formulate reasonable predictions based on a given set of data.							
PO 8. Compare trends in data related to the same investigation.							
PO 9. Solve contextual problems using scatter plots, box-and-whiskers plots, and double line graphs of continuous data.							
PO 10. Evaluate the effects of missing or incorrect data on the results of an investigation (e.g., Susie's teacher recorded a 39 instead of a 93 for her last quiz, what will happen to Susie's average?).							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 11. Identify a line of best fit for a scatter plot.							
PO 12. Distinguish between causation and correlation.							
Concept 2: Probability - Understand and apply the basic concepts of probability.							
PO 1. Determine the probability that a specific event will occur in a 2-stage probability experiment.					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 2. Solve contextual situations using probability (e.g., If the probability of Michelle making a free throw is 0.25, what is the probability that she will make three free throws in a row?).							
PO 3. Predict the outcome of a grade-level appropriate probability experiment.							
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 4. Record the data from performing a grade-level appropriate probability experiment							
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 5. Compare the outcome of an experiment to predictions made prior to performing the experiment.					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
PO 6. Distinguish between independent and dependent events.					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
PO 7. Compare the results of two repetitions of the same grade-level appropriate probability experiment.							
Concept 3: Discrete Mathematics - Systematic Listing and Counting - Understand and demonstrate the systematic listing and counting of possible outcomes.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 1. Determine all possible outcomes involving the combination of two or more sets of objects (e.g., If you roll a six-sided number cube 4 times, how many possible outcomes are possible?).							
PO 2. Determine all possible arrangements given a set (e.g., How many ways can you arrange a set of 7 books on a shelf?).							
Concept 4: Vertex-Edge Graphs - Understand and apply vertex-edge graphs.							
PO 1. Solve contextual problems represented by vertex-edge graphs.							
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns - Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate a grade-level appropriate iterative or recursive pattern, using symbols or numbers.							
PO 2. Extend a grade-level appropriate iterative or recursive pattern.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Solve grade-level appropriate iterative or recursive pattern problems.							
Concept 2: Functions and Relationships - Describe and model functions and their relationships.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
PO 1. Describe the rule used in a simple grade-level appropriate function (e.g., T-chart, input/output model).							
PO 2. Distinguish between linear and nonlinear functions, given graphic examples.							
PO 3. Determine whether a graph or table is related to a given equation of the form $y=ax^2$ where 'a' is a natural number.							
PO 4. Identify independent and dependent variables for a contextual situation.							

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Concept 3: Algebraic Representations - Represent and analyze mathematical situations and structures using algebraic representations.							
PO 1. Evaluate algebraic expressions by substituting rational values for variables [e.g., $2(ab+ac+bc)$, when $a = 2$, $b = 3/5$, and $c = 4$].					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
PO 2. Use variables in contextual situations.							
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Identifying Components of Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Algebra Fundamentals Session: Replacing Variables in a Formula		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Combining Like Terms		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Using Variables to Express Relationships		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Simple Equations Session: Simplifying Algebraic Expressions		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Simplifying Both Sides of an Equation		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Checking the Solution to an Equation		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Identifying the Variables in a Given Formula		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Rewriting a Formula in Terms of a Different Variable		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Simple Equations Session: Solving Simple Equations		
					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
PO 3. Translate a written sentence or phrase into an algebraic equation or expression, and vice versa (e.g., Three less than twice a number is $2n-3$).					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 4. Translate a sentence written in context into an algebraic equation involving two operations.					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
PO 5. Translate a contextual situation into an algebraic inequality (e.g., Joe earns more than \$5.00 an hour; therefore, $x > 5$).							
PO 6. Identify an equation or inequality that represents a contextual situation.							

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PO 7. Solve one-step equations with rational numbers as coefficients or as solutions.							
PO 8. Solve one-step equations that model contextual situations.					Module: Essentials of Algebra. Unit: Solving Literal Equations Session: Substituting Values & Solving an Equation		
PO 9. Solve two-step equations with rational coefficients and integer solutions (e.g., $3x + 5 = 11$, $4x - 20 = 8$).							
PO 10. Graph an inequality on a number line.							
PO 11. Solve a simple algebraic proportion.					Module: Ratio & Proportion. Unit: Proportion Session: Applying the Means/Extremes Property		
					Module: Ratio & Proportion. Unit: Direct & Inverse Variation Session: Exploring & Solving Direct Variation Problems		
					Module: Ratio & Proportion. Unit: Direct & Inverse Variation Session: Exploring Inverse Variation		
					Module: Ratio & Proportion. Unit: Direct & Inverse Variation Session: Solving Inverse Variation Problems		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 12. Solve applied problems using the Pythagorean theorem.					Module: Radicals & Exponents. Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem		
					Module: Ratio & Proportion. Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
Concept 4: Analysis of Change - Analyze change in a variable over time and in various contexts.							
PO 1. Identify the slope of a line as the rate of change (the ratio of rise over run).							
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties - Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 1. Draw a model that demonstrates basic geometric relationships such as parallelism, perpendicularity, similarity/proportionality, and congruence.					Module: Ratio & Proportion. Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
PO 2. Draw 3-dimensional figures by applying properties of each (e.g., parallelism, perpendicularity, congruency).							

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PO 3. Recognize the 3-dimensional figure represented by a net.							
PO 4. Represent the surface area of rectangular prisms and cylinders as the area of their net.					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		
					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
PO 5. Draw regular polygons with appropriate labels.							
PO 6. Identify the properties of angles created by a transversal intersecting two parallel lines (e.g., corresponding angles are congruent).					Module: Fundamentals of Geometry. Unit: Geometry Fundamentals Session: Recognizing Congruent Angles		
PO 7. Recognize the relationship between inscribed angles and intercepted arcs.							
PO 8. Identify tangents and secants of a circle.							
PO 9. Determine whether three given lengths can form a triangle.							

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PO 10. Identify corresponding angles of similar polygons as congruent and sides as proportional.					Module: Ratio & Proportion. Unit: Similar Polygons Session: Defining Similarity		
					Module: Ratio & Proportion. Unit: Similar Polygons Session: Identifying Equivalent Ratios		
Concept 2: Transformation of Shapes - Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							
PO 1. Identify the planar geometric figure that is the result of a given rigid transformation.							
PO 2. Model a simple transformation on a coordinate grid (e.g., Translate right four units and down two units.).							
Concept 3: Coordinate Geometry - Specify and describe spatial relationships using coordinate geometry and other representational systems.							
PO 1. Use a table of values to graph a linear equation.							
PO 2. Determine the midpoint given two points on a number line.							

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PO 3. Determine the distance between two points on a number line.							
Concept 4: Measurement - Units of Measure - Geometric Objects - Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Solve problems for the area of a trapezoid.							
PO 2. Solve problems involving the volume of rectangular prisms and cylinders.							
					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Volume of a Right Triangular Prism		
					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		
					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		

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PO 3. Calculate the surface area of rectangular prisms or cylinders.					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism		
					Module: Fundamentals of Geometry. Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder		
PO 4. Identify rectangular prisms and cylinders having the same volume.							
PO 5. Find the measure of a missing interior angle in a triangle or quadrilateral.					Module: Fundamentals of Geometry. Unit: Triangles Session: Classifying Triangles by Angles		
PO 6. Solve problems using ratios and proportions, given the scale factor.					Module: Ratio & Proportion. Unit: Proportion Session: Defining a Proportion		
					Module: Ratio & Proportion. Unit: Proportion Session: Solving for a Variable in a Proportion		
PO 7. Calculate the length of a side, given two similar triangles.					Module: Ratio & Proportion. Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons		
Strand 5: Structure and Logic							

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Concept 1: Algorithms and Algorithmic Thinking - Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Describe how to use a proportion to solve a problem in context.							
PO 2. Analyze algorithms.							
Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof - Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 1. Solve a logic problem given the necessary information.							
PO 2. Identify simple valid arguments using if...then statements (e.g., All squares are rectangles. If quadrilateral ABCD is a rectangle, is it a square?).							
PO 3. Model a contextual situation using a flow chart.							

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PO 4. Verify the Pythagorean theorem using an area dissection argument.							
HIGH SCHOOL							
Strand 1: Number Sense and Operations							
Concept 1: Number Sense - Understand and apply numbers, ways of representing numbers, the relationships among numbers and different number systems.							
PO 1. Classify real numbers as members of one or more subsets: natural, whole, integers, rational, or irrational numbers.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions	
						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: Defining the Real Numbers

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 2. Identify properties of the real number system: commutative, associative, distributive, identity, inverse, and closure.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Applying Inverse Operations	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
PO 3. Distinguish between finite and infinite sets of numbers.						Module: Linear Inequalities. Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line	
						Module: Linear Inequalities. Unit: Inequalities in One Variable Session: Solving Absolute Value Inequalities	
Concept 2: Numerical Operations - Understand and apply numerical operations and their relationship to one another.							
PO 1. Select the grade-level appropriate operation to solve word problems.							
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		

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					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: Working with Radicals
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: The Square Root Function
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
PO 2. Solve word problems using grade-level appropriate operations and numbers.							

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					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle		
					Module: Essentials of Algebra. Unit: Evaluating an Algebraic Expression Session: Evaluating Expressions Using Substitution		
					Module: Essentials of Algebra. Unit: Variable on Both Sides of the Equation Session: Writing Equations		
						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: Working with Radicals
							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: The Square Root Function
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 3. Simplify numerical expressions including signed numbers and absolute values.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Applying Properties of Real Numbers	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Multiplying Polynomials
PO 4. Apply subscripts to represent ordinal position.						Module: Linear Functions and Equations. Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
PO 5. Use grade level-appropriate mathematical terminology.						Module: Linear Functions and Equations. Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs	

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							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
PO 6. Compute using scientific notation.							
PO 7. Simplify numerical expressions using the order of operations.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Multiplying Polynomials
Concept 3: Estimation - Use estimation strategies reasonably and fluently.							

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PO 1. Solve grade-level appropriate problems using estimation.							
PO 2. Determine if a solution to a problem is reasonable.							
PO 3. Determine rational approximations of irrational numbers.							Module: The Real Number System. Unit: Rational & Irrational Numbers Session: The Square Root Function
Strand 2: Data Analysis, Probability, and Discrete Mathematics							
Concept 1: Data Analysis (Statistics) - Understand and apply data collection, organization and representation to analyze and sort data.							
PO 1. Formulate questions to collect data in contextual situations.							
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Line Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Exploring Bar Graphs		
					Module: Fundamentals of Statistics. Unit: Exploring Line Graphs Session: Interpreting Pie Charts		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Creating & Interpreting a Frequency Table		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Defining a Histogram		
					Module: Fundamentals of Statistics. Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 2. Organize collected data into an appropriate graphical representation.							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 3. Display data as lists, tables, matrices, and plots.							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 4. Construct equivalent displays of the same data.							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
PO 5. Identify graphic misrepresentations and distortions of sets of data.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 6. Identify which of the measures of central tendency is most appropriate in a given situation.							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 7. Make reasonable predictions based upon linear patterns in data sets or scatter plots.							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 8. Make reasonable predictions for a set of data, based on patterns.							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 9. Draw inferences from charts, tables, graphs, plots, or data sets.							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 10. Apply the concepts of mean, median, mode, range, and quartiles to summarize data sets.							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots
PO 11. Evaluate the reasonableness of conclusions drawn from data analysis.							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 12. Recognize and explain the impact of interpreting data (making inferences or drawing conclusions) from a biased sample.							Module: Describing Data. Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 13. Draw a line of best fit for a scatter plot.							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
PO 14. Determine whether displayed data has positive, negative, or no correlation.							
PO 15. Identify a normal distribution.							
PO 16. Identify differences between sampling and census.							
PO 17. Identify differences between biased and unbiased samples.							Module: Describing Data. Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs
Concept 2: Probability - Understand and apply the basic concepts of probability.							
PO 1. Find the probability that a specific event will occur, with or without replacement.							
PO 2. Determine simple probabilities related to geometric figures.							

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PO 3. Predict the outcome of a grade-level appropriate probability experiment.							
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 4. Record the data from performing a grade-level appropriate probability experiment.							

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					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
PO 5. Compare the outcome of an experiment to predictions made prior to performing the experiment.					Module: Fundamentals of Probability. Unit: Simple Probability Session: Defining & Expressing Probability		
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Calculating Probabilities on a Color Wheel		

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
					Module: Fundamentals of Probability. Unit: Simple Probability Session: Determining Probabilities of Complementary Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events		
PO 6. Distinguish between independent and dependent events.					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events		
					Module: Fundamentals of Probability. Unit: Probability of Combined Events Session: Determining the Sample Space of an Experiment		
PO 7. Compare the results of two repetitions of the same grade-level appropriate probability experiment.							

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Concept 3: Discrete Mathematics - Systematic Listing and Counting - Understand and demonstrate the systematic listing and counting of possible outcomes.							
PO 1. Determine the number of possible outcomes for a contextual event using a chart, a tree diagram, or the counting principle.							
PO 2. Determine when to use combinations versus permutations in counting objects.							
PO 3. Use combinations or permutations to solve contextual problems.							
Strand 3: Patterns, Algebra, and Functions							
Concept 1: Patterns - Identify patterns and apply pattern recognition to reason mathematically.							
PO 1. Communicate a grade-level appropriate iterative or recursive pattern, using symbols or numbers.							
PO 2. Find the nth term of an iterative or recursive pattern.							

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PO 3. Evaluate problems using basic recursion formulas.							
Concept 2: Functions and Relationships - Describe and model functions and their relationships.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
PO 1. Determine if a relationship is a function, given a graph, table, or set of ordered pairs.							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas
PO 2. Describe a contextual situation that is depicted by a given graph.							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas

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							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas
PO 3. Identify a graph that models a given real-world situation.							
PO 4. Sketch a graph that models a given contextual situation.							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
PO 5. Determine domain and range for a function.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
PO 6. Determine the solution to a contextual maximum/minimum problem, given the graphical representation.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
PO 7. Express the relationship between two variables using tables/matrices, equations, or graphs.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas

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							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas
							Module: Algebraic Expressions & Functions. Unit: Rational Expressions, Equations & Functions Session: Rational Functions
							Module: Algebraic Expressions & Functions. Unit: Rational Expressions, Equations & Functions Session: Rational Equations
PO 8. Interpret the relationship between data suggested by tables/matrices, equations, or graphs.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas
PO 9. Determine from two linear equations whether the lines are parallel, perpendicular, coincident, or intersecting but not perpendicular.						Module: Systems of Linear Equations. Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	

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						Module: Systems of Linear Equations. Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines	
Concept 3: Algebraic Representations - Represent and analyze mathematical situations and structures using algebraic representations.							
PO 1. Evaluate algebraic expressions, including absolute value and square roots.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
							Module: Algebraic Expressions & Functions. Unit: Radical Equations & Functions Session: Solving Radical Equations
							Module: Algebraic Expressions & Functions. Unit: Radical Equations & Functions Session: The Inverse of the Square Root Function
							Module: Algebraic Expressions & Functions. Unit: Rational Expressions, Equations & Functions Session: Rational Operations

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							Module: Algebraic Expressions & Functions. Unit: Rational Expressions, Equations & Functions Session: Rational Functions
PO 2. Simplify algebraic expressions.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
							Module: Algebraic Expressions & Functions. Unit: Radical Equations & Functions Session: Solving Radical Equations
							Module: Algebraic Expressions & Functions. Unit: Radical Equations & Functions Session: The Inverse of the Square Root Function
							Module: Algebraic Expressions & Functions. Unit: Rational Expressions, Equations & Functions Session: Rational Equations
PO 3. Multiply and divide monomial expressions with integral exponents.							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions

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							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Multiplying Polynomials
							Module: Powers & Polynomials. Unit: Factoring Polynomials Session: Finding Common Factors
PO 4. Translate a written expression or sentence into a mathematical expression or sentence.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Multiplying Polynomials
PO 5. Translate a sentence written in context into an algebraic equation involving multiple operations.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Transforming Equations using Multiple Operations	
						Module: The Language of Algebra. Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations	
PO 6. Write a linear equation for a table of values.						Module: Linear Functions and Equations. Unit: The Rectangular Coordinate Plane Session: Defining Slope	
PO 7. Write a linear algebraic sentence that represents a data set that models a contextual situation.						Module: The Language of Algebra. Unit: Variables, Expressions, and Equations Session: Evaluating and Simplifying Expressions	
PO 8. Solve linear (first degree) equations in one variable (may include absolute value).						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
PO 9. Solve linear inequalities in one variable.						Module: Linear Inequalities. Unit: Inequalities in One Variable Session: Applying Inverse Operations	
PO 10. Write an equation of the line given: two points on the line, the slope and a point on the line, or the graph of the line.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Exploring the Point-Slope Equation of a Line	
						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
PO 11. Solve an algebraic proportion.							
PO 12. Solve systems of linear equations in two variables (integral coefficients and rational solutions).						Module: Systems of Linear Equations. Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
						Module: Systems of Linear Equations. Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	
						Module: Systems of Linear Equations. Unit: Algebraic Solutions of Linear Systems Session: Using Addition or Subtraction to Eliminate a Variable	
PO 13. Add, subtract, and perform scalar multiplication with matrices.							
PO 14. Calculate powers and roots of real numbers, both rational and irrational, using technology when appropriate.							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Working with Powers
							Module: Powers & Polynomials. Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions
PO 15. Simplify square roots and cube roots with monomial radicands (including those with variables) that are perfect squares or perfect cubes.							
PO 16. Solve square root radical equations involving only one radical.							Module: Algebraic Expressions & Functions. Unit: Radical Equations & Functions Session: Solving Radical Equations

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PO 17. Solve quadratic equations.							Module: Powers & Polynomials. Unit: Factoring Polynomials Session: Factoring Quadratic Trinomials
							Module: Powers & Polynomials. Unit: Factoring Polynomials Session: Special Cases
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing
							Module: Quadratic Functions & Equations. Unit: Solving Quadratic Equations Using Algebra Session: Factoring & the Zero Product Theorem
							Module: Quadratic Functions & Equations. Unit: Solving Quadratic Equations Using Algebra Session: The Square Root Method & Completing the Square
							Module: Quadratic Functions & Equations. Unit: Solving Quadratic Equations Using Algebra Session: The Quadratic Formula
PO 18. Identify the sine, cosine, and tangent ratios of the acute angles of a right triangle.							

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Concept 4: Analysis of Change - Analyze change in a variable over time and in various contexts.							
PO 1. Determine slope, x-, and y-intercepts of a linear equation.						Module: Linear Functions and Equations. Unit: The Rectangular Coordinate Plane Session: Defining Slope	
						Module: Linear Functions and Equations. Unit: The Rectangular Coordinate Plane Session: Finding x- and y-Intercepts	
PO 2. Solve formulas for specified variables.						Module: Systems of Linear Equations. Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable	
						Module: Systems of Linear Equations. Unit: Algebraic Solutions of Linear Systems Session: Using Addition or Subtraction to Eliminate a Variable	
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing
							Module: Quadratic Functions & Equations. Unit: Solving Quadratic Equations Using Algebra Session: Factoring & the Zero Product Theorem

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
							Module: Quadratic Functions & Equations. Unit: Solving Quadratic Equations Using Algebra Session: The Square Root Method & Completing the Square
							Module: Quadratic Functions & Equations. Unit: Solving Quadratic Equations Using Algebra Session: The Quadratic Formula
Strand 4: Geometry and Measurement							
Concept 1: Geometric Properties - Analyze the attributes and properties of 2- and 3-dimensional shapes and develop mathematical arguments about their relationships.							
PO 1. Identify the attributes of special triangles (isosceles, equilateral, right).							
PO 2. Identify the hierarchy of quadrilaterals.							
PO 3. Make a net to represent a 3-dimensional object.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Make a 3-dimensional model from a net.							
PO 5. Draw 2-dimensional and 3-dimensional figures with appropriate labels.							
PO 6. Solve problems related to complementary, supplementary, or congruent angle concepts.							
PO 7. Solve problems by applying the relationship between circles, angles, and intercepted arcs.							
PO 8. Solve problems by applying the relationship between radii, diameters, chords, tangents, or secants.							
PO 9. Solve problems using the triangle inequality property.							
PO 10. Solve problems using special case right triangles.							
PO 11. Determine when triangles are congruent by applying SSS, ASA, AAS, or SAS.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 12. Determine when triangles are similar by applying SAS, SSS, or AA similarity postulates.							
PO 13. Construct a triangle congruent to a given triangle.							
PO 14. Solve contextual situations using angle and side length relationships.							
Concept 2: Transformation of Shapes - Apply spatial reasoning to create transformations and use symmetry to analyze mathematical situations.							
PO 1. Sketch the planar figure that is the result of two or more transformations.							
PO 2. Identify the properties of the planar figure that is the result of two or more transformations.							
PO 3. Determine the new coordinates of a point when a single transformation is performed on a planar geometric figure.							
PO 4. Determine whether a given pair of figures on a coordinate plane represents a translation, reflection, rotation, or dilation.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 5. Classify transformations based on whether they produce congruent or similar figures.							
PO 6. Determine the effects of a single transformation on linear or area measurements of a planar geometric figure.							
Concept 3: Coordinate Geometry -Specify and describe spatial relationships using coordinate geometry and other representational systems.							
PO 1. Graph a quadratic equation with lead coefficient equal to one.							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas
							Module: Quadratic Functions & Equations. Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing
PO 2. Graph a linear equation in two variables.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
PO 3. Graph a linear inequality in two variables.						Module: Linear Inequalities. Unit: Inequalities in Two Variables Session: Graphing Solutions on a Rectangular Coordinate Plane	
						Module: Linear Inequalities. Unit: Inequalities in Two Variables Session: Solving Systems by Graphing	

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 4. Determine the solution to a system of equations in two variables from a given graph.						Module: Linear Functions and Equations. Unit: Introduction to Functions Session: Relations and Functions	
						Module: Linear Inequalities. Unit: Inequalities in Two Variables Session: Graphing Solutions on a Rectangular Coordinate Plane	
PO 5. Determine the midpoint between two points in a coordinate system.							
PO 6. Determine changes in the graph of a linear function when constants and coefficients in its equation are varied.							
PO 7. Determine the distance between two points in the coordinate system.							
Concept 4: Measurement - Units of Measure - Geometric Objects - Understand and apply appropriate units of measure, measurement techniques, and formulas to determine measurements.							
PO 1. Calculate the area of geometric shapes composed of two or more geometric figures.							
PO 2. Calculate the volumes of 3-dimensional geometric figures.							

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PO 3. Calculate the surface areas of 3-dimensional geometric figures.							
PO 4. Compare perimeter, area, or volume of figures when dimensions are changed.							
PO 5. Find the length of a circular arc.							
PO 6. Find the area of a sector of a circle.							
PO 7. Solve for missing measures in a pyramid (i.e., slant height, height).							
PO 8. Find the sum of the interior and exterior angles of a polygon.							
PO 9. Solve scale factor problems using ratios and proportions.							
PO 10. Solve applied problems using similar triangles.							
Strand 5: Structure and Logic							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 1: Algorithms and Algorithmic Thinking - Use reasoning to solve mathematical problems in contextual situations.							
PO 1. Determine whether a given procedure for simplifying an expression is valid.							
PO 2. Determine whether a given procedure for solving an equation is valid.							
PO 3. Determine whether a given procedure for solving a linear inequality is valid.							
PO 4. Select an algorithm that explains a particular mathematical process.							
PO 5. Determine the purpose of a simple mathematical algorithm.							
PO 6. Determine whether given simple mathematical algorithms are equivalent.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
Concept 2: Logic, Reasoning, Arguments, and Mathematical Proof - Evaluate situations, select problem-solving strategies, draw logical conclusions, develop and describe solutions and recognize their applications.							
PO 1. Draw a simple valid conclusion from a given if...then statement and a minor premise.							
PO 2. List related if... then statements in logical order.							
PO 3. Write an appropriate conjecture given a certain set of circumstances.							
PO 4. Analyze assertions related to a contextual situation by using principles of logic.							
PO 5. Identify a valid conjecture using inductive reasoning.							
PO 6. Distinguish valid arguments from invalid arguments.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 7. Create inductive and deductive arguments concerning geometric ideas and relationships, such as congruence, similarity, and the Pythagorean relationship.							
PO 8. Critique inductive and deductive arguments concerning geometric ideas and relationships, such as congruence, similarity, and the Pythagorean relationship.							
PO 9. Identify a counterexample for a given conjecture.							
PO 10. Construct a counterexample to show that a given conjecture is false.							
PO 11. State the inverse, converse, or contrapositive of a given statement.							
PO 12. Determine if the inverse, converse, or contrapositive of a given statement is true or false.							
PO 13. Construct a simple formal or informal deductive proof.							

Standards	Mastering Skills & Concepts: Course I	Mastering Skills & Concepts: Course II	Mastering Skills & Concepts: Course III: Intermediate Mathematics	Mastering Skills & Concepts: Course IV: Basic Mathematics	Mastering Skills & Concepts: Course V: Pre-Algebra	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
PO 14. Verify characteristics of a given geometric figure using coordinate formulas such as distance, mid-point, and slope to confirm parallelism, perpendicularity, and congruency.							