



DESTINATION Math.

Correlation of Destination Math[®] Courseware
to Alabama State Standards
July - 2005



| 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 |
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| Kindergarten | | | | | | | |
| Number and Operations | | | | | | | |
| 1. Demonstrate concepts of number sense by using one-to-one correspondence, counting in sequence by ones from 1 to 20, counting backward from 10, recognizing numerals 0-9, and comparing sets of objects up to 10 by using vocabulary terms including more than, less than, most, or least. | Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5 | | | | | | |
| | 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 | | | | | | |

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|-----------|--|---|---|--|---|-------------------------------|-------------------------------|
| | Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10 | | | | | | |
| | 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 | | | | | | |
| | 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: Numbers to 100 Session: Counting from 10 to 20 | | | | | | |
| | Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same | | | | | | |

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| 2. Demonstrate addition by using numbers totaling 5 or less and subtraction by using numbers less than or equal to 5. | Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10 | | | | | | |
| 3. Recognize that a whole object can be divided into parts. | | | | | | | |
| 4. Identify a penny, nickel, dime, and quarter. | Module: Geometry and Measurement Unit: Measurement Session: Money | | | | | | |
| Algebra | | | | | | | |
| 5. Replicate patterns using concrete objects. | | | | | | | |
| Sorting objects by characteristics | Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes | | | | | | |

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| Describing characteristics of patterns and/or objects | Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes | | | | | | |
| | Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns | | | | | | |
| Geometry | | | | | | | |
| 6. Create combinations of rectangles, squares, circles, and triangles using shapes or drawings. | Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles | | | | | | |
| Describing relative location of objects using positional terms | Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles | | | | | | |
| 7. Identify rectangles, squares, circles, and triangles. | | | | | | | |
| Recognizing like shapes in the environment | Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles | | | | | | |

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| Measurement | | | | | | | |
| 8. Use vocabulary associated with length, height, volume, and weight to compare objects. | Module: Geometry and Measurement Unit: Measurement Session: Length | | | | | | |
| | Module: Geometry and Measurement Unit: Measurement Session: Weight | | | | | | |
| 9. Use vocabulary associated with the measurement of time, including words related to clocks and calendars. | Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time | | | | | | |
| Data Analysis and Probability | | | | | | | |
| 10. Complete data displays such as single-loop Venn diagrams and yes/no charts using real objects, concrete representations, or pictorial representations. | Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes | | | | | | |

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| Kindergarten | Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs | | | | | | |
| Grade 1 | | | | | | | |
| Number and Operations | | | | | | | |
| 1. Demonstrate concepts of number sense by counting forward and backward by ones, twos, fives, and tens up to 100; counting forward and backward from an initial number other than 1; and using multiple representations for a given number. | Module: Number Sense Unit: Numbers from 1 to 5 Session: Counting from 1 to 5 | | | | | | |
| | 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 | | | | | | |

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| | Module: Number Sense Unit: Numbers from 1 to 10 Session: Counting from 5 to 10 | | | | | | |
| | 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 | | | | | | |
| | 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: Numbers to 100 Session: Counting from 10 to 20 | | | | | | |
| | Module: Number Sense Unit: Numbers to 100 Session: Counting from 20 to 50 | | | | | | |

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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 | | | | | | |
| Identifying position using the ordinal numbers 1st through 10th | Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time | | | | | | |
| Using vocabulary, including the terms equal, all, and none, to identify sets of objects | Module: Number Sense Unit: Numbers from 1 to 5 Session: Creating Sets of 1 to 5 | | | | | | |
| | Module: Number Sense Unit: Numbers from 1 to 10 Session: Creating Sets of 5 to 10 | | | | | | |
| | Module: Number Sense Unit: Comparing and Ordering Session: More Than, Less Than, or The Same | | | | | | |

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| Recognizing that the quantity remains the same when the spatial arrangement changes | | | | | | | |
| Determining the value of the digit in the ones place and the value of the digit in the tens place in a numeral | | Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones | | | | | |
| Determining the value of a number given the number of tens and ones | Module: Number Sense Unit: Numbers to 100 Session: Counting from 10 to 20 | | | | | | |
| Determining the value of a number that is 10 more or 10 less than a given number | Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Sums within 20 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20 | | | | | | |
| Determining the monetary value of individual coins and sets of like coins up to \$1.00 | Module: Geometry and Measurement Unit: Measurement Session: Money | | | | | | |

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| 2. Demonstrate conceptual understanding of addition and subtraction by telling number stories; joining, separating, and comparing sets of objects; and applying signs (+ and -) to the actions of joining and separating sets. | Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Comparing within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Sums within 20 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20 | | | | | | |

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| Solving simple word problems using a variety of strategies and distinguishing between relevant and irrelevant information | | | | | | | |
| Solving problems requiring the addition and subtraction of one- or two-digit numerals without regrouping | Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Comparing within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Sums within 20 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20 | | | | | | |

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| Using three or more addends | | | | | | | |
| 3. Demonstrate computational fluency of basic addition and subtraction facts by identifying sums to 10 and differences with minuends of 10 or less. | Module: Addition and Subtraction Unit: Addition Session: Combining and Joining within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Comparing within 10 | | | | | | |
| | Module: Addition and Subtraction Unit: Addition Session: Sums within 20, with 10 as One Addend | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 10 | | | | | | |
| 4. Identify parts of a whole with two, three, or four equal parts. | | | | | | | |

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| Dividing an object into equal parts | | | | | | | |
| Algebra | | | | | | | |
| 5. Create repeating patterns. | | | | | | | |
| Describing characteristics of patterns | Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes | | | | | | |
| | Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns | | | | | | |
| Extending patterns including number patterns | Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes | | | | | | |
| | Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns | | | | | | |

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| Demonstrate relationships between operations. | | | | | | | |
| Geometry | | | | | | | |
| 8. Differentiate among plane shapes, including circles, squares, rectangles, and triangles. | | | | | | | |
| Describing similarities and differences between plane and solid shapes | Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles | | | | | | |
| | Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes | | | | | | |
| Transferring shape combinations from one representation (dimension) to another | | | | | | | |
| Recognizing real-life examples of line symmetry | | | | | | | |

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| Changing the position of objects or shapes by sliding (translation) and turning (rotation) | | | | | | | |
| Combining shapes to fill in the area of a given shape | Module: Geometry and Measurement Unit: Geometry Session: Triangles and Rectangles | | | | | | |
| | Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes | | | | | | |
| 9. Identify solid shapes in the environment, including cubes, rectangular prisms, cones, spheres, and cylinders. | Module: Geometry and Measurement Unit: Geometry Session: Three-Dimensional Shapes | | | | | | |
| Measurement | | | | | | | |
| 10. Compare objects according to length, weight, and capacity | | | | | | | |

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| Measuring the length of objects using a variety of nonstandard units | Module: Geometry and Measurement Unit: Measurement Session: Length | | | | | | |
| Ordering according to attributes | Module: Geometry and Measurement Unit: Measurement Session: Length | | | | | | |
| | Module: Geometry and Measurement Unit: Measurement Session: Weight | | | | | | |
| 11. Identify the hour using analog and digital clocks. | | | | | | | |
| Identifying the half hour using analog and digital clocks | Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time | | | | | | |
| 12. Locate days, dates, and months on a calendar. | | | | | | | |
| Using vocabulary associated with a calendar | Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time | | | | | | |

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| Data Analysis and Probability | | | | | | | |
| 13. Organize objects or information into predetermined and labeled data displays, including pictographs, tally charts, bar graphs, or double-loop Venn diagrams. | | | | | | | |
| Generating simple questions for data collection | Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs | | | | | | |
| Creating displays with appropriate labels | Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs | | | | | | |
| Grade 2 | | | | | | | |
| Number and Operations | | | | | | | |

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|--|--|--|---|--|---|-------------------------------|-------------------------------|
| 1. Demonstrate concepts of number sense by using multiple representations of whole numbers up to 1000, counting forward and backward by threes from a given number, identifying a number that is 100 more or 100 less than a given number, and differentiating between odd and even numbers. | | | | | | | |
| Identifying position using ordinal numbers to 100th | Module: Geometry and Measurement Unit: Measurement Session: Clock and Calendar Time | | | | | | |
| Determining the value of a digit in the ones, tens, hundreds, and thousands place | | 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 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones | | | | | |

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| Determining the value of a number expressed in expanded notation | | Module: Number Sense Unit: Numbers to 999 Session: Expanded Form and Equivalent Representations of a Number | | | | | |
| 2. Apply the operations of addition and subtraction to solve problems involving two-digit numerals, using multiple strategies with and without regrouping. | | | | | | | |
| Demonstrating computational fluency for basic addition and subtraction facts with sums through 18 and differences with minuends through 18, using horizontal and vertical forms | Module: Addition and Subtraction 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: Addition and Subtraction Unit: Addition Session: Sums within 20 | | | | | | |
| | Module: Addition and Subtraction Unit: Subtraction Session: Differences within 20 | | | | | | |
| Interpreting multiplication as repeated addition and division as equal groupings | | Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays | | | | | |

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| | | Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication | | | | | |
| Solving multistep addition and subtraction problems originating from real-life experiences | | 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 | | | | | |
| Justifying the strategy used to solve addition and subtraction problems | | | | | | | |
| Using an estimate to determine if an answer is reasonable | | 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 | | | | | |
| 3. Label equal parts of a whole using $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$. | | Module: Operations with Numbers Unit: Division Session: Fractional Parts | | | | | |

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| 4. Determine the monetary value of sets of coins and bills up to \$2.00. | | | | | | | |
| Exchanging coins of equivalent value | Module: Geometry and Measurement Unit: Measurement Session: Money | Module: Geometry and Measurement Unit: Measurement Session: Money | | | | | |
| Applying monetary symbols, including dollar (\$), cent (¢), and decimal point (.) | | Module: Geometry and Measurement Unit: Measurement Session: Money | | | | | |
| Recognizing the decimal numbers .10, .25, .50, and .75 as related to money | | Module: Geometry and Measurement Unit: Measurement Session: Money | | | | | |
| Algebra | | | | | | | |
| 5. Create growing patterns. | | | | | | | |
| 6. Solve problems using the associative property of addition. | | Module: Algebraic Thinking Unit: Properties and Relationships Session: Number Patterns and Properties | | | | | |

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| 7. Describe change over time in observable (qualitative) and measurable (quantitative) terms. | | | | | | | |
| Geometry | | | | | | | |
| 8. Describe attributes of two-dimensional (plane) and three-dimensional (solid) figures using the terms side, surface, edge, vertex, and angle. | | | | | | | |
| Identifying quadrilaterals, pentagons, hexagons, or octagons | | | | | | | |
| Identifying line symmetry in plane geometric figures | | | | | | | |
| Creating designs that exhibit line symmetry | | | | | | | |

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| Recognizing the results of changing the position (transformation) of objects or shapes by sliding (translation), turning (rotation), or flipping (reflection) | | | | | | | |
| 9. Describe the route from one location to another by applying concepts of direction and distance. | | | | | | | |
| Following multistep directions to locate objects | | | | | | | |
| Reading maps of the school environment | | | | | | | |
| Using grids for movement between points | | | | | | | |
| Measurement | | | | | | | |
| 10. Measure length in customary units, including inches, feet, and yards. | | | | | | | |

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| Using metric units | | | | | | | |
| Using appropriate tools, including rulers, yard sticks, meter sticks, or tape measures | Module: Geometry and Measurement Unit: Measurement Session: Length | | | | | | |
| 11. Estimate weight and capacity by making comparisons with familiar objects. | Module: Geometry and Measurement Unit: Measurement Session: Weight | Module: Geometry and Measurement Unit: Geometry Session: Volume | | | | | |
| 12. Tell time to the minute using analog and digital clocks. | | Module: Geometry and Measurement Unit: Measurement Session: Time | | | | | |
| Data Analysis and Probability | | | | | | | |
| 13. Create displays, including appropriate labels, for a given set of data using pictographs, tally charts, bar graphs, or single- or double-loop Venn diagrams. | Module: Algebraic Thinking Unit: Patterns and Displays Session: Tables and Graphs | | | | | | |

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| 14. Determine if one event related to everyday life is more likely or less likely to occur than another event. | | | | | | | |
| Grade 3 | | | | | | | |
| Number and Operations | | | | | | | |
| 1. Demonstrate number sense by comparing, ordering, and expanding whole numbers through 9999. | | | | | | | |
| Comparing numbers using the symbols $>$, $<$, $=$. | | Module: Number Sense Unit: Numbers to 999 Session: Comparing and Ordering | | | | | |
| | | Module: Number Sense Unit: Numbers to 9,999 Session: Comparing and Ordering | | | | | |
| Identifying the place value of any digit within a four-digit number | | Module: Number Sense Unit: Numbers to 999 Session: Place Value: Tens and Ones | | | | | |

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| | | Module: Number Sense Unit: Numbers to 999 Session: Place Value: Hundreds, Tens, and Ones | | | | | |
| | | Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones | | | | | |
| Writing a four-digit number in words and locating it on a number line | | Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones | | | | | |
| Determining the value of a number written in expanded notation to the ten-thousands place | | Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones | | | | | |
| Rounding whole numbers to the nearest ten and hundred and money values to the nearest dollar | | | | | | | |
| 2. Solve addition and subtraction problems, including word problems, involving two- and three-digit numbers with and without regrouping. | | | | | | | |

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| Estimating sums and differences by using compatible numbers, front-end estimation, and rounding | | 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 | | | | | |
| | | Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999 | | | | | |
| Demonstrating computational fluency in addition and subtraction | | 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 | | | | | |
| | | Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 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 |
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| | | Module: Operations with Numbers Unit: Addition and Subtraction Session: Estimating and Finding Differences within 9,999 | | | | | |
| 3. Multiply whole numbers with and without regrouping using single-digit multipliers. | | | | | | | |
| Applying concepts of multiplication through the use of manipulatives, number stories, arrays, repeated addition, or problem situations | | Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays | | | | | |
| | | Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication | | | | | |
| | | Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100 | | | | | |
| Applying basic multiplication facts through 9 x 9 by using manipulatives, solving problems, and writing number stories | | Module: Operations with Numbers Unit: Multiplication Session: Finding Products 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 |
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| Recognizing properties of multiplication | | Module: Operations with Numbers Unit: Multiplication Session: Repeated Addition and Arrays | | | | | |
| | | Module: Operations with Numbers Unit: Multiplication Session: Skip Counting to Show Multiplication | | | | | |
| | | Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100 | | | | | |
| 4. Divide whole numbers using two-digit dividends and one-digit divisors. | | | | | | | |
| Recognizing division as repeated subtraction | | Module: Operations with Numbers Unit: Division Session: Meaning of Division | | | | | |
| 5. Model equivalent fractions with concrete objects or pictorial representations. | | Module: Operations with Numbers Unit: Division Session: Fractional Parts | | | | | |
| 6. Use coins to make change up to \$1.00. | | 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 |
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| Algebra | | | | | | | |
| 7. Complete a given numeric or geometric pattern. | Module: Algebraic Thinking Unit: Patterns and Displays Session: Shapes | | | | | | |
| | Module: Algebraic Thinking Unit: Patterns and Displays Session: Number Patterns | | | | | | |
| Geometry | | | | | | | |
| 8. Identify geometric representations for points, lines, perpendicular lines, parallel lines, angles, and rays. | | | | | | | |
| Recognizing real-life examples of points, lines, perpendicular lines, and parallel lines | | | | | | | |
| Drawing points, lines, and perpendicular lines | | | | | | | |

| 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 |
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| 9. Specify locations on a coordinate grid by using horizontal and vertical movements. | | | | | | | |
| Measurement | | | | | | | |
| 10. Measure length in metric units. | | | | | | | |
| 11. Determine elapsed time to the day with calendars and to the hour with a clock. | | | | | | | |
| Calculating elapsed time to the minute within the same hour | | Module: Geometry and Measurement Unit: Measurement Session: Time | | | | | |
| Applying vocabulary associated with time using a.m., p.m., noon, or midnight | | Module: Geometry and Measurement Unit: Measurement Session: Time | | | | | |
| Data Analysis and 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 |
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| 12. Recognize data as either categorical or numerical. | | | | | | | |
| Comparing related data sets | | | | | | | |
| 13. Determine the likelihood of different outcomes in a simple experiment. | | | | | | | |
| Grade 4 | | | | | | | |
| Number and Operations | | | | | | | |
| 1. Demonstrate number sense by comparing and ordering decimals to hundredths and whole numbers to 999,999. | | | | | | | |

| 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 |
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| Identifying a number when given a pictorial representation of tenths and hundredths or groups of ones, tens, hundreds, and thousands | | | Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million | | | | |
| Writing a number in expanded notation through the hundred-thousands | | Module: Number Sense Unit: Numbers to 9,999 Session: Place Value: Thousands, Hundreds, Tens, and Ones | Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million | | | | |
| Determining the place value of a digit in a whole number through the hundred-thousands and in a decimal to the hundredths | | | Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Whole Numbers to One Million | | | | |
| | | | Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths | | | | |
| 2. Write money amounts in words and dollar-and-cent notation. | | | | | | | |
| Identifying equivalent units of money | | 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 |
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| 3. Rename improper fractions as mixed numbers and mixed numbers as improper fractions. | | | | | | | |
| Using a number line to simplify, compare, and order fractions and mixed numbers | | | Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions | | | | |
| | | | Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions | | | | |
| Writing equivalent forms of fractions | | | Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent Fractions | | | | |
| 4. Demonstrate addition and subtraction of fractions with common denominators. | | | Module: Fractions Unit: Addition and Subtraction Session: Sums involving Like Denominators | | | | |
| | | | Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators | | | | |
| 5. Round whole numbers to the nearest ten, hundred, or thousand and decimals to the nearest tenth. | | | Module: Decimals Unit: Introduction Session: Ordering and Rounding | | | | |

| 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 |
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| | | | Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers | | | | |
| 6. Solve problems, including word problems, that involve addition and subtraction of four- digit numbers with and without regrouping. | | | | | | | |
| Estimating sums and differences of whole numbers by using appropriate strategies such as rounding, front-end estimation, and compatible numbers | | 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 of Whole Numbers Session: Whole Number Sums | | | | |
| | | 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 | | | | | |
| Adding and subtracting decimals and money amounts | | | Module: Decimals Unit: Addition and Subtraction Session: Adding 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 |
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| | | | Module: Decimals Unit: Addition and Subtraction Session: Subtracting Decimals | | | | |
| 7. Solve problems, including word problems, involving the basic operations of multiplication and division on whole numbers through two-digit multipliers and one-digit divisors. | | | | | | | |
| Estimating products and quotients of whole numbers by using appropriate strategies such as rounding, front-end estimation, and compatible numbers | | | Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Introduction to Long Division | | | | |
| Identifying information needed to determine the appropriate operation to solve a problem | | | | | | | |
| Demonstrating computational fluency in multiplication and division fact families through 12 | | Module: Operations with Numbers Unit: Multiplication Session: Finding Products Less than 100 | | | | | |
| 8. Recognize equivalent forms of commonly used fractions and decimals. | | | Module: Fractions Unit: Proper and Improper Fractions Session: Equivalent 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: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents | | | | |
| Algebra | | | | | | | |
| 9. Write number sentences for word problems that involve multiplication or division. | | | 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: Introduction to Long Division | | | | |
| | | | Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors | | | | |
| | | | Module: Fractions Unit: Multiplication and Division Session: Finding Products | | | | |
| | | | Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders | | | | |

| 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 |
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| | | | Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals | | | | |
| | | | Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers | | | | |
| 10. Complete addition and subtraction number sentences with a missing addend or subtrahend. | | | | | | | |
| Geometry | | | | | | | |
| 11. Identify triangles, quadrilaterals, pentagons, hexagons, or octagons based on the number of sides, angles, and vertices. | | | | | | | |
| Demonstrating slides (translations), flips (reflections), and turns (rotations) using triangles, quadrilaterals, pentagons, hexagons, or octagons | | | 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 |
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| Drawing lines of symmetry in triangles, quadrilaterals, pentagons, hexagons, or octagons | | | Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations | | | | |
| 12. Find locations on a map or grid using ordered pairs. | | | Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane | | | | |
| Measurement | | | | | | | |
| 13. Calculate elapsed time in hours and minutes. | | Module: Geometry and Measurement Unit: Measurement Session: Time | | | | | |
| 14. Measure length, width, weight, and capacity, using metric and customary units, and temperature in degrees Fahrenheit and degrees Celsius. | | Module: Geometry and Measurement Unit: Geometry Session: Volume | | | | | |
| | | Module: Geometry and Measurement Unit: Measurement Session: Temperature | | | | | |
| Data Analysis and 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 |
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| 15. Represent categorical data using tables and graphs, including bar graphs, line graphs, and line plots. | | | | | | | |
| Collecting data using observations, surveys, or experiments | | | Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data | | | | |
| Creating tally charts to represent data collected from real-life situations | | | | | | | |
| 16. Determine if outcomes of simple events are likely, unlikely, certain, equally likely, or impossible. | | | Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance | | | | |
| 17. Represent numerical data using tables and graphs, including bar graphs and line graphs. | | | Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data | | | | |
| Grade 5 | | | | | | | |
| Number 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 |
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| 1. Demonstrate number sense by comparing, ordering, rounding, and expanding whole numbers through millions and decimals to thousandths. | | | | | | | |
| Relating percents to parts out of 100 by using equivalent fractions and decimals | | | Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents | | | | |
| Determining the value of a digit to thousandths | | | Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths | | | | |
| 2. Solve problems involving basic operations on whole numbers, including addition and subtraction of seven-digit numbers, multiplication with two-digit multipliers, and division with two-digit divisors. | | | | | | | |
| Estimating products and quotients | | | Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers 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 |
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| | | | Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders | | | | |
| | | | Module: Decimals Unit: Multiplication and Division Session: Multiplying Decimals | | | | |
| | | | Module: Decimals Unit: Multiplication and Division Session: Dividing Decimals by Whole Numbers | | | | |
| Determining divisibility by 2, 3, 4, 5, 6, 9, and 10 | | | | | | | |
| Demonstrating computational fluency with addition, subtraction, multiplication, and division of 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 | | | | |

| 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 |
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| | | | 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: Introduction to Long Division | | | | |
| | | | Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors | | | | |
| 3. Solve word problems that involve decimals, fractions, or money. | | | 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 | | | | |

| 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 |
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| | | | Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions | | | | |
| | | | 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 | | | | |
| | | | Module: Fractions Unit: Multiplication and Division Session: Finding Products | | | | |
| | | | Module: Fractions Unit: Multiplication and Division Session: Quotients and Remainders | | | | |
| | | | Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths | | | | |

| 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 |
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| | | | Module: Decimals Unit: Introduction Session: Ordering and Rounding | | | | |
| | | | Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents | | | | |
| | | | 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 | | | | |
| Solving word problems involving elapsed time | | 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 |
|--|--|---|---|--|---|-------------------------------|-------------------------------|
| 4. Determine the sum and difference of fractions with common and uncommon denominators. | | | | | | | |
| Changing mixed numbers to improper fractions | | | Module: Fractions Unit: Proper and Improper Fractions Session: Improper Fractions | | | | |
| Solving problems involving addition and subtraction of fractions with common and uncommon denominators | | | 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 | | | | |
| Using least common multiples | | | Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators | | | | |
| Estimating sums and differences of fractions | | | Module: Fractions Unit: Addition and Subtraction Session: Sums involving 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 |
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| | | | Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators | | | | |
| | | | Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators | | | | |
| 5. Identify numbers less than zero by extending the number line. | | | Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Negative Whole Numbers | | | | |
| 6. Demonstrate the commutative, associative, and identity properties of addition and multiplication of whole numbers. | | | Module: Numbers and Number Sense Unit: Numbers as Factors Session: Finding Factors | | | | |
| | | | Module: Operations with Numbers Unit: Addition and Subtraction of Whole Numbers Session: Whole Number Sums | | | | |
| | | | Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Multipliers | | | | |
| 7. Write a number sentence for a problem expressed in words. | | | 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 |
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| | | | 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: Introduction to Long Division | | | | |
| | | | Module: Operations with Numbers Unit: Multiplication and Division of Whole Numbers Session: Two-Digit Divisors | | | | |
| | | | Module: Fractions Unit: Addition and Subtraction Session: Sums involving 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 |
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| | | | Module: Fractions Unit: Addition and Subtraction Session: Differences involving Like Denominators | | | | |
| | | | Module: Fractions Unit: Addition and Subtraction Session: Working with Unlike Denominators | | | | |
| Geometry | | | | | | | |
| 8. Identify regular polygons and congruent polygons. | | | | | | | |
| Identifying angles as right, obtuse, acute, or straight | | | Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles | | | | |
| Classifying triangles as equilateral, isosceles, or scalene | | | Module: Geometry Unit: Measurement Session: Triangles | | | | |
| Identifying figures that have rotational symmetry | | | 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 |
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| Predicting the results of a flip (reflection), turn (rotation), or slide (translation) | | | Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations | | | | |
| 9. Identify components of the Cartesian plane, including the x-axis, y-axis, origin, and quadrants. | | | Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane | | | | |
| 10. Identify the center, radius, and diameter of a circle. | | | Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles | | | | |
| Measurement | | | | | | | |
| 11. Estimate perimeter and area of irregular shapes using unit squares and grid paper. | | | | | | | |
| 12. Calculate the perimeter of rectangles from measured dimensions. | | | Module: Geometry Unit: Measurement Session: Rectangles and Squares | | | | |
| 13. Convert a larger unit of measurement to a smaller unit of measurement within the same system (customary or metric). | | | | | | | |

| 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 |
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| Data Analysis and Probability | | | | | | | |
| 14. Analyze data collected from a survey or experiment to distinguish between what the data show and what might account for the results. | | | | | | | |
| Evaluating different representations of the same data to determine how well each representation shows important aspects of the data | | | | | | | |
| Using given measures of central tendency (mean, median, and mode) to analyze data | | | Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Displaying and Analyzing Data | | | | |
| 15. Use common fractions to represent the probability of events that are neither certain nor impossible. | | | Module: Data Analysis and Probability Unit: Modeling and Displaying Events Session: Looking at Chance | | | | |
| Grade 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 |
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| Number and Operations | | | | | | | |
| 1. Demonstrate computational fluency with addition, subtraction, multiplication, and division of decimals and fractions. | | | | | | | |
| Comparing rational numbers written as fractions, decimals, mixed numbers, and percents | | | Module: Numbers and Number Sense Unit: Large and Small Numbers Session: Ordering and Rounding Whole Numbers | | | | |
| | | | Module: Fractions Unit: Proper and Improper Fractions Session: Ordering and Rounding Fractions | | | | |
| | | | Module: Decimals Unit: Introduction Session: Ordering and Rounding | | | | |
| Converting fractions and mixed numbers to decimals and percents | | | Module: Decimals Unit: Introduction Session: Ratios, Decimals, and Percents | Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent | Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals | | |
| | | | | Module: Percents Unit: Essentials of Percents Session: Expressing Percents as 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 |
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| | | | | Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions | | | |
| Converting terminating decimals and percents to fractions and mixed numbers | | | | Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent | | | |
| | | | | Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions | | | |
| | | | | Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions | | | |
| | | | | Module: Decimals Unit: Essentials of Decimals Session: Exploring Repeating and Terminating Decimals | | | |
| Writing decimal numbers in expanded notation | | | Module: Decimals Unit: Introduction Session: Tenths, Hundredths, and Thousandths | | | | |
| Using prime factorizations | | | Module: Numbers and Number Sense Unit: Numbers as Factors Session: Prime and Composite 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 |
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| Identifying prime and composite numbers | | | Module: Numbers and Number Sense Unit: Numbers as Factors Session: Prime and Composite Numbers | | | | |
| Using greatest common factor (GCF) to simplify fractions | | | Module: Numbers and Number Sense Unit: Numbers as Factors Session: Identifying Common Factors | | | | |
| Formulating algorithms using basic operations on fractions and decimals | | | | | | | |
| Applying the distributive property to compute with fractions and decimals | | | | Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication | | | |
| | | | | Module: Integers and Order of Operations Unit: Order of Operations Session: Introducing the Distributive Property | | | |
| Using least common multiple (LCM) to add and subtract fractions with unlike denominators | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators | | | |
| 2. Solve problems involving decimals, percents, fractions, and proportions. | | | | Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed Numbers | Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion | | |

| 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 |
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| | | | | Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products | Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion | | |
| | | | | Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication | Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Unlike 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 |
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| | | | | Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions | | | |
| | | | | Module: Decimals Unit: Adding and Subtracting Decimals Session: Using Place Value Grids | | | |
| | | | | Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping with Whole Numbers | | | |
| | | | | Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping to Hundredths | | | |

| 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 |
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| | | | | 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: Estimating and Finding Quotients | | | |
| | | | | Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10 | | | |
| | | | | Module: Percents Unit: Essentials of Percents Session: Investigating the Meaning of Percent | | | |

| 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 |
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| | | | | Module: Percents Unit: Essentials of Percents Session: Expressing Percents as Proper Fractions | | | |
| | | | | Module: Percents Unit: Essentials of Percents Session: Expressing Percents greater than 100% as Improper Fractions | | | |
| | | | | Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole | | | |
| | | | | Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents | | | |
| | | | | 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 |
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| | | | | Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest | | | |
| Estimating with fractions and decimals | | | | Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions | | | |
| | | | | Module: Decimals Unit: Dividing Decimals Session: Estimating and Finding Quotients | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators | | | |
| Algebra | | | | | | | |
| 3. Solve problems using numeric and geometric patterns. | | | | | | | |
| Geometry | | | | | | | |

| 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 |
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| 4. Identify two-dimensional and three-dimensional figures based on attributes, properties, and component parts. | | | | | | | |
| Classifying quadrilaterals based on their attributes | | | Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids | | | | |
| Identifying line and rotational symmetries of polygons | | | Module: Geometry Unit: Coordinate Geometry and Algebra Session: Symmetry and Transformations | | | | |
| Classifying triangles as right, obtuse, or acute | | | | | Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Sides | | |
| | | | | | Module: Fundamentals of Geometry Unit: Triangles Session: Classifying Triangles by Angles | | |
| 5. Plot coordinates on grids, graphs, and maps. | | | | | | | |
| Identifying the coordinates of a point on the Cartesian plane | | | Module: Geometry Unit: Coordinate Geometry and Algebra Session: The Coordinate Plane | | | | |

| 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 |
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| Comparing parallel and perpendicular lines | | | Module: Geometry Unit: Measurement Session: Rectangles and Squares | | | | |
| 6. Classify angles as acute, obtuse, right, or straight. | | | | | | | |
| Estimating angle measures using 45 degrees, 90 degrees, 180 degrees, 270 degrees, or 360 degrees as referents | | | Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles | | | | |
| | | | Module: Geometry Unit: Measurement Session: Triangles | | | | |
| Measuring angles | | | Module: Geometry Unit: Measurement Session: Lines, Angles, and Circles | | | | |
| 7. Solve problems involving perimeter and area of parallelograms and rectangles. | | | | | | | |
| Estimating perimeter and area | | | | | | | |

| 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 |
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| Developing formulas to determine perimeter and area of parallelograms and rectangles | | | Module: Geometry Unit: Measurement Session: Rectangles and Squares | | | | |
| | | | Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids | | | | |
| 8. Determine the distance between two points on a scale drawing or a map using proportional reasoning. | | | | | | | |
| Using different forms of notation to symbolize ratios and rates | | | | | Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio | | |
| | | | | | Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals | | |
| | | | | | Module: Ratio & Proportion Unit: Ratio Session: Forming Ratios between Unlike Quantities | | |
| | | | | | Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property | | |

| 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 |
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| 9. Convert units of length, weight, or capacity within the same system (customary or metric). | | | | | | | |
| Data Analysis and Probability | | | | | | | |
| 10. Interpret information from bar graphs, line graphs, and circle graphs. | | | | | Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs | | |
| | | | | | Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs | | |
| | | | | | Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts | | |
| 11. Find the probability of a simple event. | | | | | | | |
| Expressing probabilities as ratios, percents, and decimals | | | | | 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 |
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| | | | | | 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 | | |
| Grade 7 | | | | | | | |
| Number 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 |
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| 1. Demonstrate computational fluency with addition, subtraction, and multiplication of integers. | | | | | | | |
| Developing algorithms for performing operations on 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: Introduction to Long Division | | | | |
| Using inverse properties of addition and of multiplication | | | | Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions | | | |
| | | | | Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Products of Signed Numbers | | | |
| 2. Use order of operations to evaluate numerical 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 |
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| Computing absolute values | | | | 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 | | | |
| Finding square roots of perfect squares through 225 | | | | | Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots | | |
| Evaluating powers | | | | | 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 | | |
| | | | | | Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers between 0 & 1 in Scientific Notation | | |
| Applying properties of operations to compute with integers, fractions, and decimals | | | | Module: Fractions Unit: Multiplying Fractions Session: Finding Products of Fractions, Whole Numbers, and Mixed 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 |
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| | | | | Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products | | | |
| | | | | Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing Fractions | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Unlike 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 |
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| | | | | Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions | | | |
| | | | | Module: Decimals Unit: Adding and Subtracting Decimals Session: Using Place Value Grids | | | |
| | | | | Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping with Whole Numbers | | | |
| | | | | Module: Decimals Unit: Adding and Subtracting Decimals Session: Regrouping to Hundredths | | | |

| 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 |
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| | | | | 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: Estimating and Finding Quotients | | | |
| | | | | Module: Decimals Unit: Dividing Decimals Session: Dividing by Powers of 10 | | | |
| | | | | 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 |
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| | | | | 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 | | | |
| | | | | 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: Representing the Multiplication of Signed Numbers | | | |
| | | | | Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals | | | |
| 3. Solve problems requiring the use of operations on rational numbers. | | | | | | | |
| Describing the method used | | | | | | | |

| 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 |
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| Determining the reasonableness of results | | | | | | | |
| Using percents to solve problems, including problems involving discounts, taxes, commissions, and simple interest | | | | Module: Percents Unit: Finding Percents of Quantities Session: Finding Percents of a Whole | | | |
| | | | | Module: Percents Unit: Finding Percents of Quantities Session: Expressing Ratios as Percents | | | |
| | | | | 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 | | | |
| | | | | Module: Percents Unit: Increasing and Decreasing Percents Session: Calculating Simple Interest | | | |

| 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 |
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| Algebra | | | | | | | |
| 4. Express a pattern shown in a table, graph, or chart as an algebraic equation | | | | | | | |
| Recognizing the relationships between numerical patterns in tables and their respective graphs in the coordinate plane | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | |
| | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope | |
| Determining if a constant rate of change exists in a pattern | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | |
| | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope | |
| 5. Translate verbal phrases into algebraic expressions and algebraic expressions into verbal phrases. | | | | | | | |

| 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 |
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| Exhibiting understanding of a variable as an unknown quantity | | | | | Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables | Module: The Language of Algebra Unit: Variables, Expressions, and Equations Session: Translating Words into Expressions | |
| | | | | | 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 | | |
| 6. Solve one- and two-step equations. | | | | | | | |
| Solving inequalities in one variable | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Applying Inverse Operations | |
| | | | | | | 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 | |

| 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 |
|---|--|---|---|--|---|--|-------------------------------|
| Graphing solution sets of inequalities on a number line | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line | |
| Recognizing properties of equality | | | | | | Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations | |
| Geometry | | | | | | | |
| 7. Determine the transformation(s), including translations, reflections, or rotations, used to alter the position of a polygon on the coordinate plane. | | | | | | | |
| Determining the type of symmetry (rotational or line) found in a reflection or rotation | | | | | | | |
| Graphing transformations of quadrilaterals on the Cartesian plane by plotting the vertices | | | | | | | |

| 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 |
|---|--|---|---|--|---|-------------------------------|-------------------------------|
| Graphing figures which are similar to other figures using dilations | | | | | | | |
| 8. Recognize geometric relationships among two-dimensional and three-dimensional objects. | | | | | | | |
| Drawing geometric figures when given specified components, including base and height | | | | | | | |
| Investigating properties and relationships among congruent figures | | | | | | | |
| Identifying geometric ideas in settings outside the mathematics classroom | | | | | | | |
| Using networks to represent and solve problems | | | | | | | |
| Measurement | | | | | | | |

| 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 |
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| 9. Solve problems involving circumference and area of circles. | | | | | | | |
| Estimating circumference, diameter, and area | | | | | | | |
| Determining appropriate units of measure to describe circumference, diameter, and area | | | | Module: Decimals Unit: Multiplying Decimals Session: Finding the Volume of a Prism | | | |
| Measuring circumference and diameter using customary and metric units | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder | | |
| Using circumference and diameter to approximate the value of pi | | | | Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals | | | |
| Identifying pi as an irrational number | | | | Module: Decimals Unit: Essentials of Decimals Session: Rounding Decimals | | | |
| Developing formulas for determining circumference and area | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right 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 |
|--|--|---|---|--|---|-------------------------------|-------------------------------|
| 10. Find the perimeter of polygons and the area of triangles and trapezoids. | | | | | | | |
| Developing formulas for determining perimeter and area of triangles and trapezoids | | | Module: Geometry Unit: Measurement Session: Triangles | | | | |
| | | | Module: Geometry Unit: Measurement Session: Parallelograms and Trapezoids | | | | |
| 11. Solve problems involving ratios or rates, using proportional reasoning. | | | | | | | |
| Determining the unit rate | | | | | Module: Ratio & Proportion Unit: Ratio Session: Defining Ratio | | |
| | | | | | Module: Ratio & Proportion Unit: Ratio Session: Expressing Ratios as Equivalent Fractions & Decimals | | |
| Converting rates from one unit to another | | | | | Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property | | |

| 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 |
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| Converting units of length, weight, or capacity from metric to customary and from customary to metric | | | | | Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property | | |
| Data Analysis and Probability | | | | | | | |
| 12. Determine measures of central tendency (mean, median, and mode) and the range using a given set of data or graphs, including histograms, frequency tables, and stem-and-leaf plots. | | | | | Module: Fundamentals of Statistics Unit: The Mean, Median, & Mode Session: Defining the Mean & Median | | Module: Describing Data Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots |
| | | | | | 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 | | |
| | | | | | 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 |
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| | | | | | 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 | | |
| Creating histograms | | | | | Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Defining a Histogram | | |
| 13. Determine the probability of a compound event. | | | | | | | |
| Representing outcomes as a list, chart, picture, or tree diagram | | | | | 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 |
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| | | | | | 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 | | |
| Determining the number of possible outcomes by using the fundamental counting principle or other techniques | | | | | Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability | | |
| Modeling the probability of events through simulations with random numbers | | | | | 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 |
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| | | | | | 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 | | |
| Grade 8 | | | | | | | |
| Number and Operations | | | | | | | |
| 1. Use various strategies and operations to solve problems involving real numbers. | | | | | | | |
| Using alternative representations of rational 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 |
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| Applying GCF, LCM, and prime and composite numbers, including justification for the reasonableness of results, when working with rational numbers | | | | Module: Fractions Unit: Multiplying Fractions Session: Using the GCF in Finding Products | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators | | | |
| Applying proportional reasoning | | | | | Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion | | |
| | | | | | Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion | | |
| | | | | | Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property | | |
| Using vocabulary associated with sets, including union and 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 |
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| Determining whether a number is rational or irrational | | | | | Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational Numbers | | |
| Demonstrating computational fluency with operations on rational 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 | | | |
| | | | | Module: Fractions Unit: Multiplying Fractions Session: Representing Multiplication | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Estimating Quotients of Fractions | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Using Multiplicative Inverses | | | |
| | | | | Module: Fractions Unit: Dividing Fractions Session: Solving Missing Value Problems when Dividing 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 |
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| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Like Denominators | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Adding with Unlike Denominators | | | |
| | | | | Module: Fractions Unit: Adding Fractions Session: Solving Missing Value Problems when Adding Fractions | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Like Denominators | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Subtracting with Unlike Denominators | | | |
| | | | | Module: Fractions Unit: Subtracting Fractions Session: Solving Missing Value Problems when Subtracting Fractions | | | |
| | | | | 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 |
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| | | | | 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 | | | |
| | | | | 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: Representing the Multiplication of Signed Numbers | | | |
| | | | | Module: Integers and Order of Operations Unit: Multiplying and Dividing Signed Numbers Session: Finding Quotients Using Reciprocals | | | |
| 2. Simplify expressions containing natural number exponents by applying one or more of the laws of exponents. | | | | | | | |
| Writing numbers using scientific notation | | | | | Module: Radicals & Exponents Unit: Introduction to Scientific Notation Session: Writing Numbers Using Scientific Notation | | |

| 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 |
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| 3. Use order of operations to evaluate and simplify algebraic expressions. | | | | | | | |
| Applying the substitution principle | | | | | 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: Algebra Fundamentals Session: Introducing Variables | | |
| Applying the properties of operations on rational numbers to evaluate and simplify algebraic expressions | | | | | Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms | | |
| | | | | | Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic 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 |
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| | | | | | | | |
| | | | | | Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations | | |
| Algebra | | | | | | | |
| 4. Graph linear relations by plotting points or by using the slope and y-intercept. | | | | | | | |
| Determining slopes and y-intercepts of lines | | | | | | 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 | |
| Calculating the slope of a linear relation given as a table or graph | | | | | | 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 | |

| 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 |
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| | | | | | | Module: Linear Functions and Equations Unit: Introduction to Functions Session: Exploring the Slope-Intercept Equation of a Line | |
| Exhibiting conceptual understanding of various uses of variables | | | | | Module: Essentials of Algebra Unit: Algebra Fundamentals Session: Introducing Variables | | |
| | | | | | 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: Simple Equations Session: Using Variables to Express Relationships | | |
| | | | | | Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions | | |
| 5. Solve problems involving linear 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 |
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| Identifying functions from information in tables, sets of ordered pairs, equations, graphs, and mappings | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | |
| | | | | | | 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 | |
| | | | | | | 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 | |
| Determining the rule that defines a function | | | | | | Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations 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 |
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| Classifying variables in a function as independent or dependent | | | | | | | |
| Classifying relations as linear or nonlinear by examining tables, graphs, or simple equations | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas |
| | | | | | | 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 | |
| 6. Solve multistep linear equations, including equations requiring the use of the distributive property. | | | | | Module: Essentials of Algebra Unit: Variable on Both Sides of the Equation Session: Writing Equations | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection | |
| | | | | | Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Combining Like Terms | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | |

| 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 |
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| | | | | | Module: Essentials of Algebra Unit: Simple Equations Session: Simplifying Algebraic Expressions | Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Substitution to Eliminate a Variable | |
| | | | | | Module: Essentials of Algebra Unit: Simple Equations Session: Solving Simple Equations | Module: Systems of Linear Equations Unit: Algebraic Solutions of Linear Systems Session: Using Addition or Subtraction to Eliminate a Variable | |
| Geometry | | | | | | | |
| 7. Solve problems using the Pythagorean Theorem. | | | | | | | |
| Applying the Triangle Inequality Theorem | | | | | | | |
| Verifying 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 | | |

| 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 |
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| Applying the Pythagorean Theorem to determine if a triangle is a right triangle | | | | | Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Exploring the Pythagorean Theorem | | |
| Applying the Pythagorean Theorem to find the missing length of a side of a right triangle | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons | | |
| Calculating distances on the coordinate plane using the Pythagorean Theorem | | | | | | | |
| 8. Compare quadrilaterals, triangles, and solids, using their properties and characteristics. | | | | | | | |
| Developing mathematical arguments about the relationships among types of quadrilaterals and triangles | | | | | | | |
| Identifying angle bisectors, perpendicular bisectors, congruent angles, and congruent figures | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles | | |
| Constructing congruent and similar polygons, congruent angles, congruent segments, and parallel and perpendicular lines | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles | | |

| 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 |
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| | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons | | |
| | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles | | |
| Measurement | | | | | | | |
| 9. Determine the measures of special angle pairs, including adjacent, vertical, supplementary, and complementary angles, and angles formed by parallel lines cut by a transversal. | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles | | |
| | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles | | |
| | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles | | |
| 10. Find the perimeter and area of regular and irregular plane figures. | | | | | Module: Fundamentals of Geometry Unit: Triangles Session: Exploring the Area of a Triangle | | |

| 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 |
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| | | | | | Module: Essentials of Algebra Unit: Evaluating an Algebraic Expression Session: Representing the Dimensions & Area of a Rectangle | | |
| 11. Determine the surface area and volume of rectangular prisms, cylinders, and pyramids. | | | | | | | |
| Estimating surface area and volume of solid figures | | | | | 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 | | |
| Determining the appropriate units of measure to describe surface area and volume | | | | | 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 | | |

| 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 |
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| | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder | | |
| Developing formulas for determining surface area and volume of rectangular prisms, cylinders, and pyramids | | | | | 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 | | |
| 12. Determine the lengths of missing sides and measures of angles in similar and congruent figures. | | | | | | | |
| Applying proportional reasoning | | | | | Module: Ratio & Proportion Unit: Proportion Session: Defining a Proportion | | |
| | | | | | Module: Ratio & Proportion Unit: Proportion Session: Solving for a Variable in a Proportion | | |

| 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 |
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| | | | | | Module: Ratio & Proportion Unit: Proportion Session: Applying the Means/Extremes Property | | |
| Using dilations on the coordinate plane to determine measures of similar figures | | | | | | | |
| Finding the ratios of the perimeters and areas of similar triangles, trapezoids, and parallelograms | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity | | |
| | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios | | |
| | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons | | |
| Data Analysis and Probability | | | | | | | |
| 13. Interpret data from populations, using given and collected 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 |
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| Representing the data with the most appropriate graph, including box-and-whisker plot, circle graph, and scatterplot | | | | | Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Line Graphs | | Module: Describing Data Unit: Graphical Displays Session: Stem-&-Leaf Plots & Box Plots |
| | | | | | Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Exploring Bar Graphs | | Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs |
| | | | | | Module: Fundamentals of Statistics Unit: Interpreting and Constructing Graphs Session: Interpreting Pie Charts | | |
| | | | | | Module: Fundamentals of Statistics Unit: Frequency Distribution and Histograms Session: Exploring Cumulative Frequency Graphs | | |
| Making predictions by estimating the line of best fit from a scatterplot | | | | | | | Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs |
| Comparing data sets involving two populations | | | | | | | |
| Determining the measure of center that is the most appropriate for a given 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 |
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| 14. Determine the theoretical probability of an event. | | | | | | | |
| Calculating the probability of complementary events and mutually exclusive events | | | | | 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 Mutually Exclusive Events | | |
| Comparing experimental and theoretical probability | | | | | 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 |
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| | | | | | 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 | | |
| Computing the probability of two independent events and two dependent events | | | | | Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events | | |
| Determining the probability of an event through simulation | | | | | 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 |
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| | | | | | 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 | | |
| Algebra I | | | | | | | |
| Number and Operations | | | | | | | |
| 1. Simplify numerical expressions using properties of real numbers and order of operations, including those involving square roots, radical form, or decimal approximations. | | | | | | | |
| Applying laws of exponents to simplify expressions, including those containing zero and negative integral exponents | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers |
| Algebra | | | | | | | |

| 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 |
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| 2. Analyze linear functions from their equations, slopes, and intercepts. | | | | | | | |
| Finding the slope of a line from its equation or by applying the slope formula | | | | | | 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 | |
| Determining the equations of linear functions given two points, a point and the slope, tables of values, graphs, or ordered pairs | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | |
| | | | | | | 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 | |

| 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 |
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| | | | | | | 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 | |
| Graphing two-variable linear equations and inequalities on the Cartesian plane | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | |
| | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope | |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection | |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | |

| 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 |
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| | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line | |
| | | | | | | Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Graphing Solutions on a Rectangular Coordinate Plane | |
| 3. Determine characteristics of a relation, including its domain, range, and whether it is a function, when given graphs, tables of values, mappings, or sets of ordered pairs. | | | | | | | |
| Finding the range of a function when given its domain | | | | | | Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions | |
| 4. Represent graphically common relations, including $x =$ constant, $y =$ constant, $y = x$ | | | | | | | |
| Identifying situations that are modeled by common relations, including $x =$ constant, $y =$ constant, $y = x$, etc. | | | | | | Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions | Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals |
| | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | Module: The Real Number System Unit: Rational & Irrational Numbers Session: The Square Root Function |

| 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 |
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| | | | | | | 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 | |
| | | | | | | 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 | |
| 5. Perform operations of addition, subtraction, and multiplication on polynomial expressions. | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers |
| | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions |
| | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Multiplying Polynomials |

| 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 |
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| Dividing by a monomial | | | | | | | |
| 6. Factor binomials, trinomials, and other polynomials using GCF, difference of squares, perfect square trinomials, and grouping. | | | | | | | Module: Powers & Polynomials Unit: Factoring Polynomials Session: Finding Common Factors |
| | | | | | | | Module: Powers & Polynomials Unit: Factoring Polynomials Session: Factoring Quadratic Trinomials |
| | | | | | | | Module: Powers & Polynomials Unit: Factoring Polynomials Session: Special Cases |
| 7. Solve multistep equations and inequalities including linear, radical, absolute value, and literal equations. | | | | | | | Module: Algebraic Expressions & Functions Unit: Radical Equations & Functions Session: Solving Radical Equations |
| Writing the solution of an equation or inequality in set notation | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Solving Absolute Value Inequalities | |

| 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 |
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| | | | | | | Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Solving Absolute Value Equations | |
| Graphing the solution of an equation or inequality | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection | |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | |
| | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line | |
| | | | | | | Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Solving Systems by Graphing | |
| Modeling real-world problems by developing and solving equations and inequalities, including those involving direct and inverse variation | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Graphing Ordered Pairs | |
| | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Defining Slope | |

| 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 |
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| | | | | | | Module: Linear Functions and Equations Unit: The Rectangular Coordinate Plane Session: Finding x- and y- Intercepts | |
| | | | | | | 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 | |
| | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Applying Inverse Operations | |
| | | | | | | 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 | |

| 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 |
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| | | | | | | 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 | |
| 8. Solve systems of linear equations and inequalities in two variables graphically or algebraically. | | | | | | | |
| Modeling real-world problems by developing and solving systems of linear equations and inequalities | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection | |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | |
| | | | | | | 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 | |

| 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 |
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| 9. Solve quadratic equations using the zero product property. | | | | | | | |
| Approximating solutions graphically and numerically | | | | | | | 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 |
| | | | | | | | 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 |

| 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 |
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| Geometry | | | | | | | |
| 10. Calculate length, midpoint, and slope of a line segment when given coordinates of its endpoints on the Cartesian plane. | | | | | | | |
| Deriving the distance, midpoint, and slope formulas | | | | | | | |
| Measurement | | | | | | | |
| 11. Solve problems algebraically that involve area and perimeter of a polygon, area and circumference of a circle, and volume and surface area of right circular cylinders or right rectangular prisms. | | | | | | | |
| Applying formulas to solve word problems | | | | | 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 | | |

| 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 |
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| | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder | | |
| Data Analysis and Probability | | | | | | | |
| 12. Compare various methods of data reporting, including scatterplots, stem-and-leaf plots, histograms, box-and- whisker plots, and line graphs, to make inferences or predictions. | | | | | | | |
| Determining effects of linear transformations of data | | | | | | | |
| Determining effects of outliers | | | | | | | |
| Evaluating the appropriateness of the design of a survey | | | | | | | |

| 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 |
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| 13. Identify characteristics of a data set, including measurement or categorical and univariate or bivariate. | | | | | | | |
| 14. Use a scatterplot and its line of best fit or a specific line graph to determine the relationship existing between two sets of data, including positive, negative, or no relationship. | | | | | | | Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs |
| 15. Estimate probabilities given data in lists or graphs. | | | | | | | |
| Comparing theoretical and experimental probabilities | | | | | | | |
| Geometry | | | | | | | |
| Algebra | | | | | | | |
| 1. Determine the equation of a line parallel or perpendicular to a second line through a given point. | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | |

| 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 |
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| Geometry | | | | | | | |
| 2. Justify theorems related to pairs of angles, including angles formed by parallel and perpendicular lines, vertical angles, adjacent angles, complementary angles, and supplementary angles. | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Naming and Measuring Angles | | |
| | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Defining Complementary & Supplementary Angles | | |
| | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles | | |
| 3. Verify the relationships among different classes of polygons by using their properties. | | | | | | | |
| Determining the missing lengths of sides or measures of angles in similar polygons | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Defining Similarity | | |
| | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Identifying Equivalent Ratios | | |

| 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 |
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| | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons | | |
| 4. Determine the measure of interior and exterior angles associated with polygons. | | | | | | | |
| Verifying the formulas for the measures of interior and exterior angles of polygons inductively and deductively | | | | | Module: Fundamentals of Geometry Unit: Geometry Fundamentals Session: Recognizing Congruent Angles | | |
| 5. Solve real-life and mathematical problems using properties and theorems related to circles, quadrilaterals, and other geometric shapes. | | | | | | | |
| Determining the equation of a circle given its center and radius | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder | | |
| 6. Apply the Pythagorean Theorem to solve application problems, expressing answers in simplified radical form or as decimal approximations, using Pythagorean triples when applicable. | | | | | Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Investigating Squares & Square Roots | | |
| | | | | | Module: Radicals & Exponents Unit: Introduction to Radicals & Pythagorean Theorem Session: Defining Irrational 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 |
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| | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons | | |
| 7. Use the ratios of the sides of special right triangles to find lengths of missing sides. | | | | | | | |
| Deriving the ratios of the sides of 30-60-90 and 45-45-90 triangle | | | | | | | |
| 8. Deduce relationships between two triangles, including proving congruence or similarity of the triangles from given information, using the relationships to solve problems and to establish other relationships. | | | | | | | |
| Determining the geometric mean to find missing lengths in right triangles | | | | | | | |
| 9. Use inductive reasoning to make conjectures and deductive reasoning to justify conclusions. | | | | | | | |

| 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 |
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| Recognizing the limitations of justifying a conclusion through inductive reasoning | | | | | | | |
| 10. Find the missing measures of sides and angles in right triangles by applying the right triangle definitions of sine, cosine, and tangent. | | | | | | | |
| 11. Determine the areas and perimeters of regular polygons, including inscribed or circumscribed polygons, given the coordinates of vertices or other characteristics. | | | | | | | |
| 12. Apply distance, midpoint, and slope formulas to solve problems and to confirm properties of polygons. | | | | | | | |
| 13. Identify the coordinates of the vertices of the image of a given polygon that is translated, rotated, reflected, or dilated. | | | | | | | |
| 14. Classify polyhedrons according to their properties, including the number of faces. | | | | | | | |

| 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 |
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| Identifying Euclidean solids | | | | | | | |
| Measurement | | | | | | | |
| 15. Calculate measures of arcs and sectors of a circle from given information. | | | | | | | |
| 16. Calculate surface areas and volumes of solid figures, including spheres, cones, and pyramids. | | | | | | | |
| Developing formulas for surface area and volume of spheres, cones, and pyramids | | | | | | | |
| Calculating specific missing dimensions of solid figures from surface area or volume | | | | | | | |
| Determining the relationship between the surface areas of similar figures and volumes of similar figures | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Surface Area of a Right Triangular Prism | | |

| 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 |
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| | | | | | Module: Fundamentals of Geometry Unit: Volume and Surface Area Session: Calculating the Volume & Surface Area of a Right Cylinder | | |
| Data Analysis and Probability | | | | | | | |
| 17. Analyze sets of data from geometric contexts to determine what, if any, relationships exist. | | | | | | | |
| Distinguishing between conclusions drawn when using deductive and statistical reasoning | | | | | | | |
| Calculating probabilities arising in geometric contexts | | | | | | | |
| 18. Construct with precision a circle graph to represent data from given tables or classroom experiments. | | | | | | | |
| Algebraic Connections | | | | | | | |

| 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 |
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| Algebra | | | | | | | |
| 1. Use algebraic and geometric techniques to make financial and economic decisions, including those involving banking and investments, insurance, personal budgets, credit purchases, recreation, and deceptive and fraudulent pricing and advertising. | | | | | | | |
| Generating, manually or with technological tools, graphs and tables related to personal finance and economics | | | | | | | |
| 2. Solve problems using direct, inverse, and joint variation. | | | | | 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 |
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| 3. Use formulas or equations of functions to calculate outcomes of exponential growth or decay. | | | | | | | |
| 4. Determine maximum and minimum values of a function using linear programming procedures. | | | | | | Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Solving Systems by Graphing | |
| 5. Approximate rates of change of nonlinear relationships from graphical and numerical data. | | | | | | | |
| Graphing information from tables, equations, or classroom-generated data to model consumer costs and to predict future outcomes | | | | | | | |
| 6. Use the extreme value of a given quadratic function to solve applied problems. | | | | | | | |
| 7. Make predictions based upon tables or graphs from societal contexts. | | | | | | | |

| 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 |
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| Geometry | | | | | | | |
| 8. Determine missing information in an application-based situation by using the properties of right triangles, including trigonometric ratios. | | | | | | | |
| 9. Analyze the aesthetics of real-life situations using line symmetry, rotational symmetry, or the golden ratio. | | | | | | | |
| 10. Use arc length and sector area to solve applied problems. | | | | | | | |
| Measurement | | | | | | | |
| 11. Critique the appropriateness of measurements in terms of precision, accuracy, and approximate error. | | | | | | | |

| 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 |
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| 12. Use ratios of perimeters, areas, and volumes of similar figures to solve applied problems. | | | | | Module: Ratio & Proportion Unit: Similar Polygons Session: Setting up & Solving Proportions in Similar Polygons | | |
| Data Analysis and Probability | | | | | | | |
| 13. Model a set of data by estimating the equation of a curve of best fit from tables of values or scatterplots. | | | | | | | Module: Describing Data Unit: Graphical Displays Session: Scatter Plots & Linear Best-Fit Graphs |
| 14. Estimate probabilities given a frequency distribution. | | | | | | | |
| Making decisions on the basis of probabilities | | | | | | | |
| Algebra II | | | | | | | |
| Number 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 |
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| 1. Determine the relationships of subsets of complex numbers. | | | | | | | |
| 2. Simplify expressions involving complex numbers, using order of operations and including conjugate and absolute value. | | | | | | | Module: The Real Number System Unit: Rational & Irrational Numbers Session: Working with Radicals |
| Algebra | | | | | | | |
| 3. Analyze families of functions, including shifts, reflections, and dilations of $y = k/x$ (inverse variation), $y = kx$ (direct variation/linear), $y = [x]$ (greatest integer), $y = x^2$ (quadratic), $y = ax$ (exponential), and $y = \log ax$ | | | | | | Module: The Language of Algebra Unit: Linear Equations in One Variable Session: Applying Inverse Operations | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas |
| | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Applying Inverse Operations | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas |
| | | | | | | Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations 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 |
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| | | | | | | | 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 |
| | | | | | | | 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 |
| | | | | | | | Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational 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 |
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| | | | | | | | Module: Algebraic Expressions & Functions Unit: Rational Expressions, Equations & Functions Session: Rational Equations |
| Identifying the domain and range of a relation given its graph, a table of values, or its equation, including those with restricted domains | | | | | | Module: Linear Functions and Equations Unit: Introduction to Functions Session: Relations and Functions | Module: The Real Number System Unit: Rational & Irrational Numbers Session: The Square Root Function |
| | | | | | | | 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 Functions |
| Identifying real-world situations corresponding to families of functions | | | | | | | |
| 4. Determine approximate real zeros of functions graphically and numerically and exact real zeros of polynomial functions. | | | | | | | |

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| Using the zero product property, completing the square, and the quadratic formula | | | | | | | 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 |
| Deriving the quadratic formula | | | | | | | Module: Quadratic Functions & Equations Unit: Solving Quadratic Equations Using Algebra Session: The Quadratic Formula |
| 5. Identify the characteristics of quadratic functions from their roots, graphs, or equations. | | | | | | | |
| Generating an equation when given its roots or graph | | | | | | | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas |
| Graphing a function when given its equation | | | | | | | 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: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing |
| Determining the maximum or minimum values of quadratic functions both graphically and algebraically | | | | | | | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas |
| Applying functions to real-world problems | | | | | | | 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 |
| | | | | | | | 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 |

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| | | | | | | | 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 |
| 6. Perform operations on functions, including addition, subtraction, multiplication, division, and composition. | | | | | | | |
| Determining the inverse of a function or a relation | | | | | | | 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 Functions |
| Performing operations on polynomial and rational expressions containing variables | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Adding & Subtracting Polynomial Expressions |
| | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Multiplying Polynomials |

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| | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers |
| Constructing graphs by analyzing their functions as sums, differences, or products | | | | | | | 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 |
| | | | | | | | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing |
| 7. Solve equations, inequalities, and applied problems involving absolute values, radicals, and quadratics over the complex numbers, as well as simple trigonometric, exponential, and logarithmic functions. | | | | | | | |
| Solving equations using laws of exponents, including rational and irrational exponents | | | | | | | Module: Powers & Polynomials Unit: Polynomial Arithmetic Session: Working with Powers |

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| Expressing the solution of an equation, inequality, or applied problem as a graph on a number line or by using set or interval notation | | | | | | Module: Linear Inequalities Unit: Inequalities in One Variable Session: Graphing Solutions on a Number Line | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Graphing Parabolas |
| | | | | | | Module: Linear Inequalities Unit: Inequalities in Two Variables Session: Solving Systems by Graphing | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Analyzing Properties of Parabolas |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Finding the Point of Intersection | Module: Quadratic Functions & Equations Unit: Graphing Quadratic Functions & Equations Session: Solving Quadratic Equations by Graphing |
| | | | | | | Module: Systems of Linear Equations Unit: Graphic Solutions of Linear Systems Session: Graphing Parallel & Perpendicular Lines | |
| 8. Solve systems of linear equations or inequalities in two or three variables using algebraic techniques, including those involving matrices. | | | | | | | |
| Evaluating the determinant of a 2x2 or 3x3 matrix | | | | | | | |

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| Solving word problems involving real-life situations | | | | | | | |
| 9. Graph trigonometric functions of the form $y=a \sin(bx)$, $y=a \cos(bx)$, and $y=a \tan(bx)$. | | | | | | | |
| Determining period and amplitude of sine, cosine, and tangent functions from graphs or basic equations | | | | | | | |
| Determining specific unit circle coordinates associated with special angles | | | | | | | |
| Geometry | | | | | | | |
| 10. Solve general triangles, mathematical problems, and real-world applications using the Law of Sines and the Law of Cosines. | | | | | | | |
| Deriving formulas for Law of Sines and Law of Cosines | | | | | | | |

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| Determining area of oblique triangles | | | | | | | |
| 11. Define the six trigonometric functions using ratios of the sides of a right triangle, coordinates on the unit circle, and the reciprocal of other functions. | | | | | | | |
| 12. Verify simple trigonometric identities using Pythagorean and/or reciprocal identities. | | | | | | | |
| Data Analysis and Probability | | | | | | | |
| 13. Use different forms of representation to compare characteristics of data gathered from two populations. | | | | | | | |
| Evaluating the appropriateness of the design of an experimental study | | | | | | | |
| Describing how sample statistics reflect values of population parameters | | | | | | | |

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| 14. Determine an equation of linear regression from a set of data. | | | | | | | |
| Examining data to determine if a linear, quadratic, or exponential relationship exists and to predict outcomes | | | | | | | |
| 15. Calculate probabilities of events using the laws of probability. | | | | | | | |
| Using permutations and combinations to calculate probabilities | | | | | | | |
| Calculating conditional probability | | | | | | | |
| Calculating probabilities of mutually exclusive events, independent events, and dependent events | | | | | Module: Fundamentals of Probability Unit: Simple Probability Session: Defining & Expressing Probability | | |
| | | | | | Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Independent Events | | |

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| | | | | | Module: Fundamentals of Probability Unit: Probability of Combined Events Session: Calculating the Probability of Mutually Exclusive Events | | |