Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
1 Decompose and recompose whole numbers using factors and exponents (e.g., 32 = 2 x 2 x 2 x 2 x 2 = 2^5), and explain why "squared" means "second power" and "cubed" means "third power".	**Module: Numbers and Number Sense** Unit: Numbers as Factors Session 1: Finding Factors Session 2: Prime and Composite Numbers Session 3: Identifying Common Factors	**Module: Fractions** Unit: Equivalent Fractions Session 1: Identifying the Factors of a Number **Module: Integers and Order of Operations** Unit: Order of Operations Session 1: Simplifying Expressions	**Module: Radicals & Exponents** Unit: Introduction to Radicals & Pythagorean Theorem Session 2: Investigating Squares & Square Roots		
2 Find and use the prime factorization of composite numbers. For example: a. Use the prime factorization to recognize the greatest common factor (GCF). b. Use the prime factorization to recognize the least common multiple (LCM). c. Apply the prime factorization to solve problems and explain solutions.	**Module: Numbers and Number Sense** Unit: Numbers as Factors Session 1: Finding Factors Session 2: Prime and Composite Numbers Session 3: Identifying Common Factors **Module: Fractions** Unit: Multiplication and Division Session 1: Finding Products	**Module: Fractions** Unit: Equivalent Fractions Session 2: Expressing Fractions in Lowest Terms **Module: Fractions** Unit: Multiplying Fractions Session 1: Finding Products of Fractions, Whole Numbers, and Mixed Numbers Session 2: Using the GCF in Finding Products Session 3: Representing Multiplication			

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
2 Find and use the prime factorization of composite numbers. For example: a. Use the prime factorization to recognize the greatest common factor (GCF). b. Use the prime factorization to recognize the least common multiple (LCM). c. Apply the prime factorization to solve problems and explain solutions. (continued)		**Module: Fractions** Unit: Adding Fractions Session 2: Adding with Unlike Denominators			
3 Explain why a number is referred to as being "rational," and recognize that the expression *a/b* can mean *a* parts of size 1/*b* each, *a* divided by *b*, or the ratio of *a* to *b*.	**Module: Fractions** Unit: Proper and Improper Fractions Session 1: Proper Fractions Session 2: Improper Fractions Session 3: Equivalent Fractions	**Module: Fractions** Unit: Essentials of Fractions Session 1: Recognizing a Fraction Session 2: Exploring Proper and Improper Fractions **Module: Fractions** Unit: Equivalent Fractions Session 2: Expressing Fractions in Lowest Terms Session 3: Writing and Comparing Equivalent Fractions	**Module: Ratio and Proportion** Unit: Ratio Session 1: Defining Ratio Session 2: Expressing Ratios as Equivalent Fractions and Decimals Session 3: Forming Ratios Between Unlike Quantities		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
4 Describe what it means to find a specific percent of a number, using real-life examples.		**Module: Percents** Unit: Essentials of Percents Session 1: Investigating the Meaning of Percent Session 2: Expressing Percents as Proper Fractions Session 3: Expressing Percents Greater than 100% as Improper Fractions **Module: Percents** Unit: Finding Percents of Quantities Session 1: Finding Percents of a Whole			
5 Use models and pictures to relate concepts of ratio, proportion and percent, including percents less than 1 and greater than 100.	**Module: Decimals** Unit: Introduction Session 3: Ratios, Decimals, and Percents	**Module: Percents** Unit: Essentials of Percents Session 1: Investigating the Meaning of Percent Session 2: Expressing Percents as Proper Fractions Session 3: Expressing Percents Greater than 100% as Improper Fractions	**Module: Ratio & Proportion** Unit: Ratio Session 1: Defining Ratio **Module: Ratio & Proportion** Unit: Proportion Session 1: Defining a Proportion		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
5 Use models and pictures to relate concepts of ratio, proportion and percent, including percents less than 1 and greater than 100. (continued)		(continued) **Module: Percents** Unit: Finding Percents of Quantities Session 2: Expressing Ratios as Percents			
6 Use the order of operations, including the use of exponents, decimals and rational numbers, to simplify numerical expressions.		**Module: Integers and Order of Operations** Unit: Order of Operations Session 1: Simplifying Expressions Session 2: Introducing the Distributive Property Session 3: Using Grouping Symbols	**Module: Radicals & Exponents** Unit: Introduction to Radicals & Pythagorean Theorem Session 2: Investigating Squares & Square Roots		
7 Use simple expressions involving integers to represent and solve problems; e.g., if a running back loses 15 yards on the first carry but gains 8 yards on the second carry, what is the net gain/loss?	**Module: Operations with Numbers** Unit: The Integers Session 1: Integer Sums Session 2: Differences Between Integers	**Module: Integers and Order of Operations** Unit: Adding and Subtracting Signed Numbers Session 1: Exploring the Number Line and Absolute Value Session 2: Adding with Absolute Value Session 3: Subtracting with Absolute Value			

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
8 Represent multiplication and division situations involving fractions and decimals with models and visual representations; e.g., show with pattern blocks what it means to take 2 2/3 divided by 1/6.	**Module: Fractions** Unit: Multiplication and Division Session 1: Finding Products Session 2: Quotients and Remainders **Module: Decimals** Unit: Multiplication and Division Session 1: Multiplying Decimals Session 2: Dividing Decimals by Whole Numbers	**Module: Fractions** Unit: Multiplying Fractions Session 1: Finding Products of Fractions, Whole Numbers, and Mixed Numbers Session 2: Using the GCF in Finding Products Session 3: Representing Multiplication **Module: Fractions** Unit: Dividing Fractions Session 1: Estimating Quotients of Fractions Session 2: Using Multiplicative Inverses Session 3: Solving Missing Value Problems when Dividing Fractions **Module: Decimals** Unit: Multiplying Decimals Session 1: Multiplying Decimals by Powers of 10 Session 2: Calculating Products Session 3: Finding the Volume of a Prism			

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
8 Represent multiplication and division situations involving fractions and decimals with models and visual representations; e.g., show with pattern blocks what it means to take 2 2/3 divided by 1/6. (continued)		(continued) **Module: Decimals** Unit: Dividing Decimals Session 1: Dividing Decimals by Whole Numbers Session 2: Estimating and Finding Quotients Session 3: Dividing by Powers of 10			
9 Give examples of how ratios are used to represent comparisons; e.g., part-to-part, part-to-whole, whole-to-part.	**Module: Decimals** Unit: Introduction Session 3: Ratios, Decimals, and Percents		**Module: Ratio & Proportion** Unit: Ratio Session 1: Defining Ratio Session 2: Expressing Ratios as Equivalent Fractions & Decimals Session 3: Forming ratios Between Unlike Quantities		
10 Recognize that a quotient may be larger than the dividend when the divisor is a fraction; e.g., 6 divided by _ = 12.	**Module: Fractions** Unit: Multiplication and Division Session 2: Quotients and Remainders	**Module: Fractions** Unit: Dividing Fractions Session 1: Estimating Quotients of Fractions Session 2: Using Multiplicative Inverses Session 3: Solving Missing Value Problems when Dividing Fractions			

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
11 Perform fraction and decimal computations and justify their solutions; e.g., using manipulatives, diagrams, mathematical reasoning.	**Module: Fractions** Unit: Addition and Subtraction Session 1: Sums Involving Like Denominators Session 2: Differences Involving Like Denominators Session 3: Working with Unlike Denominators **Module: Fractions** Unit: Multiplication and Division Session 1: Finding Products Session 2: Quotients and Remainders **Module: Decimals** Unit: Addition and Subtraction Session 1: Adding Decimals Session 2: Subtracting Decimals	**Module: Fractions** Unit: Multiplying Fractions Session 1: Finding Products of Fractions, Whole Numbers, and Mixed Numbers Session 2: Using the GCF in Finding Products Session 3: Representing Multiplication **Module: Fractions** Unit: Dividing Fractions Session 1: Estimating Quotients of Fractions Session 2: Using Multiplicative Inverses Session 3: Solving Missing Value Problems when Dividing Fractions **Module: Fractions** Unit: Adding Fractions Session 1: Adding with Like Denominators Session 2: Adding with Unlike Denominators Session 3: Solving Missing Value Problems when Adding Fractions	**Module: Ratio & Proportion** Unit: Proportion Session 2: Solving for a Variable in a Proportion Session 3: Applying the Means/Extremes Property **Module: Ratio & Proportion** Unit: direct & Inverse Variation Session 1: Exploring & Solving Direct Variation Problems Session 3: Solving Inverse Variation Problems **Module: Ratio & Proportion** Unit: Similar Polygons Session 3: Setting Up & Solving Proportions in Similar Polygons		

7

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
11 Perform fraction and decimal computations and justify their solutions; e.g., using manipulatives, diagrams, mathematical reasoning. (continued)	(continued) **Module: Decimals** Unit: Multiplication and Division Session 1: Multiplying Decimals Session 2: Dividing Decimals by Whole Numbers	(continued) **Module: Fractions** Unit: Subtracting Fractions Session 1: Subtracting with Like Denominators Session 2: Subtracting with Unlike Denominators Session 3: Solving Missing Value Problems when Subtracting Fractions **Module: Decimals** Unit: Adding and Subtracting Decimals Session 1: Using Place Value Grids Session 2: Regrouping with Whole Numbers Session 3: Regrouping to Hundredths **Module: Decimals** Unit: Multiplying Decimals Session 1: Multiplying Decimals by Powers of 10 Session 2: Calculating Products Session 3: Finding the Volume of a Prism			

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
11 Perform fraction and decimal computations and justify their solutions; e.g., using manipulatives, diagrams, mathematical reasoning. (continued)		(continued) **Module: Decimals** Unit: Dividing Decimals Session 1: Dividing Decimals by Whole Numbers Session 2: Estimating and Finding Quotients Session 3: Dividing by Powers of 10			
12 Develop and analyze algorithms for computing with fractions and decimals, and demonstrate fluency in their use.	**Module: Fractions** Unit: Addition and Subtraction Session 1: Sums Involving Like Denominators Session 2: Differences Involving Like Denominators Session 3: Working with Unlike Denominators **Module: Fractions** Unit: Multiplication and Division Session 1: Finding Products Session 2: Quotients and Remainders	**Module: Fractions** Unit: Multiplying Fractions Session 1: Finding Products of Fractions, Whole Numbers, and Mixed Numbers Session 2: Using the GCF in Finding Products Session 3: Representing Multiplication **Module: Fractions** Unit: Dividing Fractions Session 1: Estimating Quotients of Fractions Session 2: Using Multiplicative Inverses	**Module: Ratio & Proportion** Unit: Proportion Session 2: Solving for a Variable in a Proportion Session 3: Applying the Means/Extremes Property **Module: Ratio & Proportion** Unit: direct & Inverse Variation Session 1: Exploring & Solving Direct Variation Problems Session 3: Solving Inverse Variation Problems		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
12 Develop and analyze algorithms for computing with fractions and decimals, and demonstrate fluency in their use. (continued)	(continued) **Module: Decimals** Unit: Addition and Subtraction Session 1: Adding Decimals Session 2: Subtracting Decimals **Module: Decimals** Unit: Multiplication and Division Session 1: Multiplying Decimals Session 2: Dividing Decimals by Whole Numbers	(continued) Session 3: Solving Missing Value Problems when Dividing Fractions **Module: Fractions** Unit: Adding Fractions Session 1: Adding with Like Denominators Session 2: Adding with Unlike Denominators Session 3: Solving Missing Value Problems when Adding Fractions **Module: Fractions** Unit: Subtracting Fractions Session 1: Subtracting with Like Denominators Session 2: Subtracting with Unlike Denominators Session 3: Solving Missing Value Problems when Subtracting Fractions **Module: Decimals** Unit: Adding and Subtracting Decimals Session 1: Using Place Value Grids	(continued) **Module: Ratio & Proportion** Unit: Similar Polygons Session 3: Setting Up & Solving Proportions in Similar Polygons		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
12 Develop and analyze algorithms for computing with fractions and decimals, and demonstrate fluency in their use. (continued)		(continued) Session 2: Regrouping with Whole Numbers Session 3: Regrouping to Hundredths **Module: Decimals** Unit: Multiplying Decimals Session 1: Multiplying Decimals by Powers of 10 Session 2: Calculating Products Session 3: Finding the Volume of a Prism **Module: Decimals** Unit: Dividing Decimals Session 1: Dividing Decimals by Whole Numbers Session 2: Estimating and Finding Quotients Session 3: Dividing by Powers of 10			
13 Estimate reasonable solutions to problem situations involving fractions and decimals; e.g., $7/8 + 12/13 \approx 2$ and $4.23 \times 5.8 \approx 25$.	**Module: Fractions** Unit: Addition and Subtraction Session 1: Sums Involving Like Denominators	**Module: Fractions** Unit: Multiplying Fractions Session 3: Representing Multiplication			

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
13 Estimate reasonable solutions to problem situations involving fractions and decimals; e.g., 7/8 + 12/13 ≈ 2 and 4.23 x 5.8 ≈ 25. (continued)	(continued) Session 2: Differences Involving Like Denominators Session 3: Working with Unlike Denominators	(continued) **Module: Fractions** Unit: Dividing Fractions Session 1: Estimating Quotients of Fractions **Module: Fractions** Unit: Adding Fractions Session 1: Adding with Like Denominators **Module: Decimals** Unit: Dividing Decimals Session 2: Estimating and Finding Quotients			
14 Use proportional reasoning, ratios and percents to represent problem situations and determine the reasonableness of solutions.	**Module: Decimals** Unit: Introduction Session 3: Ratios, Decimals, and Percents	**Module: Percents** Unit: Essentials of Percents Session 1: Investigating the Meaning of Percent Session 2: Expressing Percents as Proper Fractions Session 3: Expressing Percents Greater than 100% as Improper Fractions	**Module: Ratio and Proportion** Unit: Proportion Session 1: Defining a Proportion Session 2: Solving for a Variable in a Proportion Session 3: Applying the Means/Extremes Property		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Number, Number Sense and Operations

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
15 Determine the percent of a number and solve related problems; e.g., find the percent markdown if the original price was $140, and the sale price is $100.	**Module: Decimals** Unit: Introduction Session 3: Ratios, Decimals, and Percents	**Module: Percents** Unit: Finding Percents of Quantities Session 1: Finding Percents of a Whole Session 2: Expressing Ratios as Percents Session 3: Calculating the Whole from a Part and a Percent **Module: Percents** Unit: Increasing and Decreasing Percents Session 1: Calculating Percent Increases Session 2: Calculating Percent Decreases Session 3: Calculating Simple Interest			

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Measurement

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
1 Understand and describe the difference between surface area and volume.		**Module: Decimals** Unit: Multiplying Decimals Session 3: Finding the Volume of a Prism	**Module Fundamentals of Geometry** Unit: Volume and Surface Area Session 1: Calculating the Volume of a Right Triangular Prism Session 2: Calculating the Surface Area of a Right Triangular Prism Session 3: Calculating the Volume & Surface Area of a Right Cylinder		
2 Use strategies to develop formulas for finding circumference and area of circles, and to determine the area of sectors; e.g., _ circle, 2/3 circle, 1/3 circle, _ circle.	**Module: Geometry** Unit: Measurement Session 1: Lines, Angles and Circles		**Module: Essentials of Algebra** Unit: Solving Literal Equations Session 1: Identifying the Variables in a Given Formula **Module: Fundamentals of Geometry** Unit: Volume and Surface Area Session 3: Calculating the Volume & Surface Area of a Right Cylinder		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Measurement

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
3 Estimate perimeter or circumference and area for circles, triangles and quadrilaterals, and surface area and volume for prisms and cylinders by: a. estimating lengths using string or links, areas using tiles or grid, and volumes using cubes; b. measuring attributes (diameter, side lengths, or heights) and using established formulas for circles, triangles, rectangles, parallelograms and rectangular prisms.	**Module: Geometry** Unit: Measurement <u>Session 1:</u> Lines, Angles and Circles <u>Session 2:</u> Rectangles and Squares <u>Session 3:</u> Triangles <u>Session 4:</u> Parallelograms and Trapezoids	**Module: Decimals** Unit: Multiplying Decimals <u>Session 3:</u> Finding the Volume of a Prism	**Module: Essentials of Algebra** Unit: Solving Literal Equations <u>Session 1:</u> Identifying the Variables in a Given Formula **Module: Fundamentals of Geometry** Unit: Triangles <u>Session 2:</u> Exploring the Area of a Triangle **Module: Fundamentals of Geometry** Unit: Volume and Surface Area <u>Session 1:</u> Calculating the Volume of a Right Triangular Prism <u>Session 2:</u> Calculating the Surface Area of a Right Triangular Prism <u>Session 3:</u> Calculating the Volume & Surface Area of a Right Cylinder		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Measurement

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
4 Determine which measure (perimeter, area, surface area, volume) matches the context for a problem situation; e.g., perimeter is the context for fencing a garden, surface area is the context for painting a room.	**Module: Geometry** Unit: Measurement Session 1: Lines, Angles and Circles Session 2: Rectangles and Squares Session 3: Triangles Session 4: Parallelograms and Trapezoids	**Module: Decimals** Unit: Multiplying Decimals Session 3: Finding the Volume of a Prism	**Module: Essentials of Algebra** Unit: Solving Literal Equations Session 1: Identifying the Variables in a Given Formula **Module: Fundamentals of Geometry** Unit: Triangles Session 2: exploring the Area of a Triangle **Module: Fundamentals of Geometry** Unit: Volume and Surface Area Session 1: Calculating the Volume of a Right Triangular Prism Session 2: Calculating the Surface Area of a Right Triangular Prism Session 3: Calculating the Volume & Surface Area of a Right Cylinder		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Measurement

	Mastering Skills & Concepts: Course III	**Mastering Skills & Concepts: Course IV**	**Mastering Skills & Concepts: Course V**	**Mastering Algebra I: Course 1**	**Mastering Algebra I: Course 2**
5 Understand the difference between perimeter and area, and demonstrate that two shapes may have the same perimeter, but different areas or may have the same area, but different perimeters.	**Module: Geometry** Unit: Measurement Session 2: Rectangles and Squares		**Module: Fundamentals of Geometry** Unit: Triangles Session 2: Exploring the Area of a Triangle		
6 Describe what happens to the perimeter and area of a two-dimensional shape when the measurements of the shape are changed; e.g., length of sides are doubled.	**Module: Geometry** Unit: Measurement Session 2: Rectangles and Squares Session 3: Triangles Session 4: Parallelograms and Trapezoids		**Module: Fundamentals of Geometry** Unit: Triangles Session 2: Exploring the Area of a Triangle		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Geometry and Spatial Sense

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
1 Classify and describe two-dimensional and three-dimensional geometric figures and objects by using their properties; e.g., interior angle measures, perpendicular/parallel sides, congruent angles/sides.	**Module: Geometry** Unit: Measurement <u>Session 1:</u> Lines, Angles and Circles <u>Session 2:</u> Rectangles and Squares <u>Session 3:</u> Triangles <u>Session 4:</u> Parallelograms and Trapezoids	**Module: Decimals** Unit: Multiplying Decimals <u>Session 3:</u> Finding the Volume of a Prism	**Module: Fundamentals of Geometry** Unit: Geometry Fundamentals <u>Session 1:</u> Naming and Measuring Angles <u>Session 2:</u> Defining Complementary and Supplementary Angles <u>Session 3:</u> Recognizing Congruent Angles **Module: Fundamentals of Geometry** Unit: Triangles <u>Session 1:</u> Classifying Triangles by Sides <u>Session 2:</u> Exploring the Area of a Triangle <u>Session 3:</u> Classifying Triangles by Angles		
2 Use standard language to define geometric vocabulary: vertex, face, altitude, diagonal, isosceles, equilateral, acute, obtuse and other vocabulary as appropriate.	**Module: Geometry** Unit: Measurement <u>Session 1:</u> Lines, Angles and Circles <u>Session 2:</u> Rectangles and Squares		**Module: Fundamentals of Geometry** Unit: Triangles <u>Session 1:</u> Classifying Triangles by Sides <u>Session 3:</u> Classifying Triangles by Angles		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Geometry and Spatial Sense

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
3 Use multiple classification criteria to classify triangles; e.g., right scalene triangle.			**Module: Fundamentals of Geometry** Unit: Triangles Session 1: Classifying Triangles by Sides Session 3: Classifying Triangles by Angles		
4 Identify and define relationships between planes; i.e., parallel, perpendicular and intersecting.					
5 Predict and describe sizes, positions and orientations of two-dimensional shapes after transformations such as reflections, rotations, translations and dilations.	**Module: Geometry** Unit: Coordinate Geometry and Algebra Session 2: Symmetry and Transformations				
6 Draw similar figures that model proportional relationships; e.g., model similar figures with a 1 to 2 relationship by sketching two of the same figure, one with corresponding sides twice the length of the other.			**Module: Ratio & Proportion** Unit: Similar Polygons Session 1: Defining Similarity Session 2: Identifying Equivalent Ratios Session 3: Setting Up & Solving Proportions in Similar Polygons		
7 Build three-dimensional objects with cubes, and sketch the two-dimensional representations of each side; i.e., projection sets.					

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Patterns, Functions and Algebra

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
1 Represent and analyze patterns, rules and functions, using physical materials, tables and graphs.	**Module: Data Analysis and Probability** Unit: Modeling and Displaying Events <u>Session 1:</u> Displaying and Analyzing Data		**Module: Fundamentals of Statistics** Unit: Interpreting and Constructing Graphs <u>Session 1:</u> Exploring Line Graphs <u>Session 2:</u> Exploring Bar Graphs <u>Session 3:</u> Interpreting Pie Charts		
2 Use words and symbols to describe numerical and geometric patterns, rules and functions.			**Module: Essentials of Algebra** Unit: Simple Equations <u>Session 1:</u> Using Variables to Express Relationships **Module: Ratio & Proportion** Unit: Ratio <u>Session 1:</u> Defining Ratio	**Module: The Language of Algebra** Unit: Variables, Expressions, and Equations <u>Session 1:</u> Translating Words into Expressions	
3 Recognize and generate equivalent forms of algebraic expressions, and explain how the commutative, associative and distributive properties can be used to generate equivalent forms; e.g., perimeter as 2(*l* + *w)* or *2l + 2w.*		**Module: Integers and Order of Operations** Unit: Order of Operations <u>Session 2:</u> Introducing the Distributive Property	**Module: Essentials of Algebra** Unit: Evaluating an Algebraic Expression <u>Session 2:</u> Combining Like Terms **Module: Essentials of Algebra** Unit: Simple Equations <u>Session 2:</u> Simplifying Algebraic Expressions	**Module: The Language of Algebra** Unit: Variables, Expressions, and Equations <u>Session 2:</u> Applying Properties of Real Numbers <u>Session 3:</u> Evaluating and Simplifying Expressions	

Patterns, Functions and Algebra

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
4 Solve simple linear equations and inequalities using physical models, paper and pencil, tables and graphs.			**Module: Essentials of Algebra** Unit: Simple Equations Session 3: Solving Simple Equations **Module: Essentials of Algebra** Unit: Variable on Both Sides of the Equation Session 2: Simplifying Both Sides of an Equation **Module: Essentials of Algebra** Unit: Solving Literal Equations Session 3: Substituting Values & Solving an Equation	**Module: The Language of Algebra** Unit: Linear Equations in One Variable Session 1: Applying Inverse Operations Session 2: Transforming Equations using Multiple Operations Session 3: Solving Absolute Value Equations **Module: Linear Inequalities** Unit: Inequalities in One Variable Session 1: Applying Inverse Operations Session 2: Graphing Solutions on a Number Line **Module: Linear Inequalities** Unit: Inequalities in Two Variables Session 1: Graphing Solutions on a Rectangular Coordinate Plane	

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Patterns, Functions and Algebra

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
5 Produce and interpret graphs that represent the relationship between two variables.	**Module: Geometry** Unit: Coordinate Geometry and Algebra Session 1: The Coordinate Plane **Module: Data Analysis and Probability** Unit: Modeling and Displaying Events Session 1: Displaying and Analyzing Data			**Module: Linear Functions and Equations** Unit: The Rectangular Coordinate Plane Session 1: Graphing Ordered Pairs **Module: Linear Inequalities** Unit: Inequalities in One Variable Session 2: Graphing Solutions on a Number Line **Module: Linear Inequalities** Unit: Inequalities in Two Variables Session 1: Graphing Solutions on a Rectangular Coordinate Plane Session 2: Solving Systems by Graphing	

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Patterns, Functions and Algebra

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
6 Evaluate simple expressions by replacing variables with given values, and use formulas in problem-solving situations.			**Module: Essentials of Algebra** Unit: Evaluating an Algebraic Expression Session 3: Evaluating Expressions Using Substitution **Module: Essentials of Algebra** Unit: Simple Equations Session 2: Simplifying Algebraic Expressions	**Module: The Language of Algebra** Unit: Variables, Expressions, and Equations Session 3: Evaluating and Simplifying Expressions	
7 Identify and describe situations with constant or varying rates of change, and compare them.				**Module: Linear Functions and Equations** Unit: The Rectangular Coordinate Plane Session 2: Defining Slope	
8 Use Technology to analyze change; e.g., use computer applications or graphing calculators to display and interpret rate of change.				**Module: Linear Functions and Equations** Unit: The Rectangular Coordinate Plane Session 2: Defining Slope **The Graphing Tool**	

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Data Analysis and Probability

	Mastering Skills & Concepts: Course III	Mastering Skills & Concepts: Course IV	Mastering Skills & Concepts: Course V	Mastering Algebra I: Course 1	Mastering Algebra I: Course 2
1 Read, construct and interpret line graphs, circle graphs and histograms.			**Module: Fundamentals of Statistics** Unit: Interpreting and Constructing Graphs] Session 1: Exploring Line Graphs Session 3: Interpreting Pie Charts **Module: Fundamentals of Statistics** Unit: Frequency Distribution and Histograms Session 2: Defining a Histogram		
2 Select, create and use graphical representations that are appropriate for the type of data collected.			**Module: Fundamentals of Statistics** Unit: Interpreting and Constructing Graphs] Session 1: Exploring Line Graphs Session 2: Exploring Bar Graphs Session 3: Interpreting Pie Charts		

Alignment of Destination Math Courseware
with
Ohio Academic Content Standards for Mathematics
GRADE SIX

Data Analysis and Probability

	Mastering Skills & Concepts: Course III	**Mastering Skills & Concepts: Course IV**	**Mastering Skills & Concepts: Course V**	**Mastering Algebra I: Course 1**	**Mastering Algebra I: Course 2**
2 Select, create and use graphical representations that are appropriate for the type of data collected. (continued)			(continued) **Module: Fundamentals of Statistics** Unit: Frequency Distribution and Histograms Session 2: Defining a Histogram Session 3: Exploring Cumulative Frequency Graphs		
3 Compare representations of the same data in different types of graphs, such as a bar graph and circle graph.			**Module: Fundamentals of Statistics** Unit: Interpreting and Constructing Graphs] Session 1: Exploring Line Graphs Session 2: Exploring Bar Graphs Session 3: Interpreting Pie Charts		

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3 Compare representations of the same data in different types of graphs, such as a bar graph and circle graph. (continued)			(continued) **Module: Fundamentals of Statistics** Unit: Frequency Distribution and Histograms Session 1: Creating & Interpreting a Frequency Table Session 2: Defining a Histogram Session 3: Exploring Cumulative Frequency Graphs		
4 Understand the different information provided by measures of center (mean, mode and median) and measures of spread (range).	**Module: Data Analysis and Probability** Unit: Modeling and Displaying Events Session 1: Displaying and Analyzing Data		**Module: Fundamentals of Statistics** Unit: The Mean, Median, and Mode Session 1: Defining the Mean and Median Session 2: Defining the Mode Session 3: Calculating the Mean, Median, and Mode		

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5 Describe the frequency distribution of a set of data, as shown in a histogram or frequency table, by general appearance or shape; e.g., number of modes, middle of data, level of symmetry, outliers.	**Module: Data Analysis and Probability** Unit: Modeling and Displaying Events <u>Session 1:</u> Displaying and Analyzing Data		**Module: Fundamentals of Statistics** Unit: Frequency Distribution and Histograms <u>Session 1:</u> Creating & Interpreting a Frequency Table <u>Session 2:</u> Defining a Histogram <u>Session 3:</u> Exploring Cumulative Frequency Graphs		
6 Make logical inferences from statistical data.	**Module: Data Analysis and Probability** Unit: Modeling and Displaying Events <u>Session 1:</u> Displaying and Analyzing Data		**Module: Fundamentals of Statistics** Unit: Interpreting and Constructing Graphs] <u>Session 1:</u> Exploring Line Graphs <u>Session 2:</u> Exploring Bar Graphs <u>Session 3:</u> Interpreting Pie Charts		

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6 Make logical inferences from statistical data. (continued)			(continued) **Module: Fundamentals of Statistics** Unit: The Mean, Median, and Mode Session 1: Defining the Mean and Median Session 2: Defining the Mode Session 3: Calculating the Mean, Median, and Mode **Module: Fundamentals of Statistics** Unit: Frequency Distribution and Histograms Session 1: Creating & Interpreting a Frequency Table Session 2: Defining a Histogram Session 3: Exploring Cumulative Frequency Graphs		
7 Design an experiment to test a theoretical probability and explain how the results may vary.					