



## Correlation to 6th Grade Core Content for Assessment

	Mathematics Curriculum Framework	Lesson Number	Lesson Title
<b>Number Properties and Operations</b>			
*MA-06-1.1.1	Students will provide examples of and identify fractions, decimals and percents.	MM1-110	Comparing and Ordering Fractions with Like Denominators
		MM1-115	Writing Fractions in Simplest Form
		MM1-120	Identifying Proper and Improper Fractions
		MM1-125	Writing Mixed Numbers as Improper Fractions
		MM1-127	Writing Remainders as Fractions
		MM1-130	Identifying the Least Common Denominator
		MM1-135	Comparing and Ordering Fractions with Like and Unlike Denominators
		MM1-270	Identifying Place Value in Decimal Numbers
		MM1-275	Comparing Decimal Numbers
		MM1-280	Identifying and Writing Decimals to the Hundredths and Thousandths
		MM1-285	Ordering Decimals According to the Tenths, Hundredths and Thousandths
		MM1-358	Converting Fractions and Mixed Numbers with Denominators of Powers of Ten to Decimals
		MM1-360	Expressing Percent as a Ratio
		MM1-365	Converting Decimals to Fractions and Fractions to Decimals
		MM1-370	Converting Decimals to Percents and Percents to Decimals
		MM1-375	Converting Fractions to Percents and Percents to Fractions
		MM1-380	Converting Fractions to Decimals and Percents
MA-06-1.1.2	Students will describe and provide examples of representations of numbers (whole numbers, fractions in simplest form, mixed numbers, decimals, percents) and operations in a variety of equivalent forms using models, diagrams, and symbols (e.g., number lines, 10 by 10 grids, rectangular arrays, number sentences), based on real-world and mathematical problems.	MM1-110	Comparing and Ordering Fractions with Like Denominators
		MM1-115	Writing Fractions in Simplest Form
		MM1-120	Identifying Proper and Improper Fractions
		MM1-125	Writing Mixed Numbers as Improper Fractions
		MM1-127	Writing Remainders as Fractions
		MM1-130	Identifying the Least Common Denominator
		MM1-135	Comparing and Ordering Fractions with Like and Unlike Denominators
		MM1-270	Identifying Place Value in Decimal Numbers
		MM1-275	Comparing Decimal Numbers
		MM1-280	Identifying and Writing Decimals to the Hundredths and Thousandths
		MM1-285	Ordering Decimals According to the Tenths, Hundredths and Thousandths
		MM1-358	Converting Fractions and Mixed Numbers with Denominators of Powers of Ten to Decimals
		MM1-360	Expressing Percent as a Ratio
		MM1-365	Converting Decimals to Fractions and Fractions to Decimals

	Mathematics Curriculum Framework	Lesson Number	Lesson Title
		MM1-370	Converting Decimals to Percents and Percents to Decimals
		MM1-375	Converting Fractions to Percents and Percents to Fractions
		MM1-380	Converting Fractions to Decimals and Percents
*MA-06-1.1.3	Students will convert between any two of the following numbers: fractions, decimals, and percents (less than or equal to 100%); and will compare and order these numbers.	MM1-358	Converting Fractions and Mixed Numbers with Denominators of Powers of Ten to Decimals
		MM1-360	Expressing Percent as a Ratio
		MM1-365	Converting Decimals to Fractions and Fractions to Decimals
		MM1-370	Converting Decimals to Percents and Percents to Decimals
		MM1-375	Converting Fractions to Percents and Percents to Fractions
		MM1-380	Converting Fractions to Decimals and Percents
		MM1-110	Comparing and Ordering Fractions with Like Denominators
		MM1-135	Comparing and Ordering Fractions with Like and Unlike Denominators
		MM1-275	Comparing Decimal Numbers
*MA-06-1.2.1	Students will estimate to solve real-world and mathematical problems with whole numbers, fractions, decimals and percents, checking for reasonable and appropriate computational results.	MM1-030	Estimating Sums and Differences
		MM1-060	Estimating Products
		MM1-305	Estimating Products by Rounding to the Nearest Whole Number
		MPA-006	Determining Reasonableness of Answers and Appropriate Method of Computation
		MPA-004	Using Rounding to Estimate
		MPA-005	Estimating Products and Quotients Using Patterns
		MPA-033	Estimating Computations with Fractions and Mixed Numbers
		MPA-126	Solving Real-World Problems Involving Sales Tax
		MPA-127	Solving Real-World Problems Involving Discounts
		MPA-128	Solving Real-World Problems Involving Simple Interest
*MA-06-1.3.1	Students will add, subtract, multiply and divide whole numbers, fractions and decimals to solve real-world problems and apply order of operations to simplify numerical expressions.	MM1-145	Adding and Subtracting Fractions with Like and Unlike Denominators
		MM1-150	Adding Mixed Numbers with Like Denominators
		MM1-155	Subtracting Mixed Numbers with Like Denominators
		MM1-160	Adding and Subtracting Mixed Numbers with Unlike Denominators
		MM1-165	Multiplying Fractions
		MM1-170	Multiplying Fractions by Simplifying the Problem
		MM1-175	Multiplying Mixed Numbers
		MM1-180	Dividing Fractions
		MM1-185	Dividing Mixed Numbers
		MM1-300	Adding and Subtracting Decimals
		MM1-310	Multiplying Decimals
		MM1-311	Using a One-Digit Divisor, Express the Remainder as a Decimal
		MM1-313	Using a Two-Digit Divisor, Express the Remainder as a Decimal
		MM1-315	Dividing Decimals by Whole Number Divisors
		MM1-320	Performing Mathematical Operations with Decimal Numbers in Application Problems
		MM1-325	Dividing with Decimal Divisors
		MM1-330	Dividing with a Decimal Divisor and Dividend
		MM1-335	Using Zeros as Placeholders when Dividing with Decimal Numbers in the Dividend
		MM1-340	Rounding Quotients
		MM1-355	Solving Multiple-Step Problems
		MM1-080	Identifying the Order of Operations Using Multiplication, Addition, and Subtraction
		MM1-085	Identifying the Order of Operations for Multiplication, Addition, and Subtraction Using Parentheses and Exponents

	Mathematics Curriculum Framework	Lesson Number	Lesson Title
		MPA-002	Adding, Subtracting, Multiplying, and Dividing Whole Numbers
		MPA-013	Using Powers and Exponents in Expressions
		MPA-008	Order of Operations
MA-06-1.3.2	Students will explain how operations (addition and subtraction; multiplication and division) are inversely related.	MM1-040	Using the Inverse Operations of Addition and Subtraction to Solve Problems Related to Number Sentences
		MM1-045	Identifying and Using Properties of Multiplication to Solve Problems
		MM1-050	Identifying Special Patterns in Multiplication
*MA-06-1.4.1	Students will describe and apply ratios to solve real-world problems.	MM1-205	Writing a Ratio to Compare Two Objects
		MM1-210	Identifying and Writing Equal Ratios
*MA-06-1.5.1	Students will identify and apply prime numbers, composite numbers, prime factorization, factors, multiples and divisibility to solve real-world and mathematical problems (e.g., prime factorization to determine a least common multiple [LCM] or greatest common factor [GCF]).	MM1-088	Applying the Divisibility Rules for 2, 3, 4, 5, 6, 9 and 10
		MM1-090	Identifying Prime and Composite Numbers
		MM1-095	Expressing a Number as a Product of Prime Numbers
		MM1-105	Identifying the Greatest Common Factor and the Least Common Multiple
*MA-06-1.5.2	Students will identify the use of properties (commutative properties of addition and multiplication, the associative properties of addition and multiplication and the identity properties for addition and multiplication) to simplify numerical expressions.	MM1-025	Identifying the Properties of Addition
		MM1-045	Identifying and Using Properties of Multiplication to Solve Problems
<b>Measurement</b>			
*MA-06-2.1.1	Students will measure lengths (to the nearest eighth of an inch or the nearest centimeter) and will determine and use in real-world and mathematical problems:		
	· area and perimeter of triangles;	MM1-505	Determining the Perimeter of Any Polygon
		MM1-510	Determining the Area of Parallelograms and Triangles
	· area and perimeter of quadrilaterals (rectangles, squares); (using the Pythagorean theorem will not be required as a strategy) and	MM1-505	Determining the Perimeter of Any Polygon
		MM1-510	Determining the Area of Parallelograms and Triangles
		MPA-067	Finding the Area of Rectangles and Parallelograms
	· area and perimeter of compound figures composed of triangles and quadrilaterals.	MPA-069	Finding the Area of Triangles and Trapezoids
MA-06-2.1.2	Students will estimate measurements in standard units including fractions and decimals.	MPA-130	Developing a Sense of Relative Sizes of Measures
		MPA-133	Distinguishing Between Exact and Approximate Answers
		MPA-062	Converting Units in Customary System
MA-06-2.1.3	Students will explain how measurements and measurement formulas are related or different (perimeter and area of rectangles).	MM1-505	Determining the Perimeter of Any Polygon
		MM1-510	Determining the Area of Parallelograms and Triangles
MA-06-2.2.1	Students will convert units within the same measurement system and use these units to solve real-world problems.	MM1-535	Converting Customary Units of Measurement for Length
		MM1-540	Converting Customary Unit of Measurement for Capacity and Weight
		MM1-545	Converting Metric Units of Measurement for Length
		MM1-550	Converting Metric Units of Measurement for Mass and Capacity
		MM1-555	Determining Elapsed Time from A.M. to P.M. and P.M. to A.M.
<b>Geometry</b>			
*MA-6-3.1.1	Students will describe and provide examples of the basic geometric elements (points, rays, lines, segments, angles [acute, right, obtuse], planes, radius, diameter, circumference).	MM1-455	Identifying Basic Terms Used in Geometry
		MM1-460	Measuring and Classifying Angles

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		MM1-515	Defining a Circle
*MA-06-3.1.2	Students will describe, and provide examples of the elements (e.g., sides, vertices, angles, congruent parts) of two-dimensional figures (circles, triangles, quadrilaterals, regular polygons), and will apply these elements and figures to solve real-world and mathematical problems.	MM1-465	Naming and Classifying Polygons by Characteristics
		MM1-470	Using Ratios to Identify Similar Figures
		MM1-475	Using Proportions to Solve for Unknown Lengths of Sides of Similar Figures
		MM1-480	Identifying and Labeling Triangles According to Their Sides and Angles
MA-06-3.1.3	Students will describe, provide examples of, and identify elements (e.g., vertices, angles, faces, edges, congruent parts) of common three-dimensional figures (spheres, cones, cylinders, prisms, and pyramids).	MPA-072	Identifying 3-D Figures
		MPA-107	Constructing Three-Dimensional Figures and Examining Their Dimensions
		MPA-115	Finding the Volumes of Prisms, Cylinders, Pyramids, and Cones Using Models
*MA-06-3.1.4	Students will identify and describe congruent figures, and will apply congruent figures to solve real-world and mathematical problems.	MM1-480	Identifying and Labeling Triangles According to Their Sides and Angles
		MPA-121	Identifying Similar and Congruent Polygons Using Proportions
MA-06-3.1.5	Students will identify similar figures and apply similar figures to solve real-world and mathematical problems.	MM1-470	Using Ratios to Identify Similar Figures
		MPA-121	Identifying Similar and Congruent Polygons Using Proportions
MA-06-3.2.1	Students will describe, provide examples of, and apply line symmetry to real-world and mathematical problems.	MM1-500	Using Translations, Rotations and Reflections to Transform Shapes
		<i>New lesson in development</i>	<i>MPA-180 Line and Rotational Symmetry (Future release)</i>
*MA-06-3.2.2	Students will:		
	· reflect figures across a horizontal or vertical line in the first quadrant;	MM1-500	Using Translations, Rotations and Reflections to Transform Shapes
	· translate figures in a plane in the first quadrant and	<i>New lesson in development</i>	<i>MM1-643 Polygons in the Coordinate Plane (Future Release)</i>
	· determine the coordinates of the image after transformation in the first quadrant.	<i>New lesson in development</i>	<i>MM1-643 Polygons in the Coordinate Plane (Future Release)</i>
MA-06-3.2.3	Students will identify rotations of figures in the plane (90° and 180°).	MM1-500	Using Translations, Rotations and Reflections to Transform Shapes
*MA-06-3.3.1	Students will identify and graph ordered pairs on a positive coordinate system (Quadrant I), correctly identifying the origin, axes and ordered pairs; and will apply graphing in the coordinate system to solve real-world and mathematical problems.	MM1-642	Exploring the Coordinate Plane and Graphing Ordered Pairs
		<i>New lesson in development</i>	<i>MM1-643 Polygons in the Coordinate Plane (Future Release)</i>
<b>Data Analysis and Probability</b>			
*MA-06-4.1.1	Students will analyze and make inferences from data displays (drawings, tables/charts, pictographs, bar graphs, circle graphs, line plots, Venn diagrams, line graphs, stem-and-leaf plots).	MM1-390	Analyzing Data in Line Graphs, Bar Graphs, Stem-and-Leaf Plots
		MM1-400	Interpreting Double Bar Graphs
		MM1-405	Interpreting and Constructing Circle Graphs
		MM1-410	Interpreting Box-and-Whisker Plots
		MM1-435	Using Pictographs, Bar Graphs and Line Graphs to Solve Problems
		MPA-094	Interpreting and Constructing Line Plots
MA-06-4.1.2	Students will explain how different representations of data (e.g., tables, graphs, diagrams, plots) are related.	MM1-430	Using Graphs to Solve Story Problems
		MPA-840	Interpreting Data from a Table or a Graph
*MA-06-4.1.4	Students will determine and construct appropriate data displays (bar graphs, line plots, Venn diagrams, tables, line graphs), and will explain why the type of display is appropriate for the data.	MM1-430	Using Graphs to Solve Story Problems
		MPA-098	Making Predictions from Graphs and Choosing the Correct Graph

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*MA-06-4.2.1	Students will determine and apply the mean, median, mode and range of a set of data.	MM1-415	Defining and Calculating the Range and the Mean
		MM1-420	Defining and Calculating the Median and the Mode
*MA-06-4.4.1	Students will describe or determine (e.g., tables, tree diagrams) the sample space of an event for a real-world or mathematical situation.	MPA-089	Using Tree Diagrams
		MM1-230	Finding the Probability of Simple Events
*MA-06-4.4.2	Students will determine single event probabilities based on the results of an experiment and will make inferences based on the data.	MM1-230	Finding the Probability of Simple Events
MA-06-4.4.3	Students will explore the theoretical probability of simple events.	MM1-235	Finding Experimental Probability
<b>Algebraic Thinking</b>			
*MA-06-5.1.1	Students will extend, describe rules for patterns and find a missing term in a pattern from real-world and mathematical problems.	MM1-020	Identifying and Finding Number Patterns Using Whole Numbers
		MPA-104	Recognizing Patterns
*MA-06-5.1.2	Students will create tables for functions and will apply the tables to solve real-world problems.	MPA-103	Distinguishing Between Relations and Functions
		MPA-270	Generating Algebraic Expressions from Patterns of Models
MA-06-5.1.3	Students will describe, define, provide examples of, and apply to real-world and mathematical problems functions using tables, graphs and verbal rules.	MPA-103	Distinguishing Between Relations and Functions
		MPA-270	Generating Algebraic Expressions from Patterns of Models
MA-06-5.1.4	Students will explain how tables, graphs and patterns relate to each other.	MPA-103	Distinguishing Between Relations and Functions
		MPA-270	Generating Algebraic Expressions from Patterns of Models
MA-06-5.1.5	Students will explain how the change in one quantity affects change in another quantity (e.g., in tables or graphs, input/output tables).	MM1-600	Introducing Variables in Algebra
*MA-06-5.2.1	Students will substitute values for variables (up to two different variables) and evaluate algebraic expressions.	MM1-620	Using the Order of Operations in Algebraic Expressions
		MPA-014	Evaluating Expressions for Given Variables
		MM1-615	Translating Words into Algebra
MA-06-5.2.2	Students will describe, define and provide examples of variables and expressions with a missing value based on real-world and mathematical problems.	MM1-605	Converting Fahrenheit and Celsius
		MM1-610	Finding Simple Interest
		MM1-635	Calculating Distance, Rate, or Time by Solving Equations
		MM1-640	Solving Algebraic Word Problems
*MA-06-5.3.1	Students will model and solve real-world and mathematical problems with simple equations and inequalities (e.g., $8x = 4$ , $x+2 > 5$ ).	MM1-625	Solving Algebraic Equations Using the Inverse Operations of Addition and Subtraction
		MM1-630	Solving Algebraic Equations Using the Inverse Operations of Multiplication and Division

MM1-Fundamentals of Mathematics

MPA- Pre-Algebra

HA1-Algebra 1

*Note:* Standards were taken from the Sixth Grade Core Content for Assessment Version 4.1 for Kentucky Department of Education- Grade 6 document adopted by the Kentucky State Board of Education in August 2006.