
Grade 6 | Kentucky Mathematics Course Standards (2019) Correlation to *Eureka Math*²® (2027)

*Eureka Math*² is a research-proven math curriculum that empowers teachers to center instructional techniques on student success. Teachers can foster more “aha!” learning moments by providing the support needed for all learners to build a more confident math mindset.

This *Eureka Math*² edition builds on a strong foundation of effective instruction. It provides teachers with guidance on delivering rigorous instruction that honors student choice and encourages confident problem-solving.

*Eureka Math*² carefully sequences mathematical content to maximize vertical alignment from kindergarten through high school. This kind of sequencing has proven to be essential in students’ mastery of math.

Teachability

*Eureka Math*² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built into the teacher materials.

Accessibility

*Eureka Math*² incorporates Universal Design for Learning (UDL) principles so all learners can access the mathematics and take on challenging math concepts. UDL, Differentiation, and Multilingual Learner supports are built into the instructional design and are clearly identified in the *Teach* book.

The curriculum also carries a focus on readability. By eliminating unnecessary words and using clear sentences, the *Eureka Math*² teacher-writers have created one of the most readable mathematics curricula on the market. The curriculum’s readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Math Confidence

*Eureka Math*² fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students’ curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop a strong, positive mathematical identity.

Standards for Mathematical Practice	Aligned Components of <i>Eureka Math</i> ²
<p>MP.1 Make sense of problems and persevere in solving them.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.2 Reason abstractly and quantitatively.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.3 Construct viable arguments and critique the reasoning of others.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.4 Model with mathematics.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.5 Use appropriate tools strategically.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.6 Attend to precision.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.7 Look for and make use of structure.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>

Ratios and Proportional Relationships

Understanding ratio concepts and use ratio reasoning to solve problems.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> ²
<p>KY.6.RP.1</p> <p>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</p>	<p>6 M1 Lesson 2: Introduction to Ratios</p> <p>6 M1 Lesson 3: Ratios and Tape Diagrams</p> <p>6 M1 Lesson 4: Exploring Ratios by Making Batches</p> <p>6 M1 Lesson 5: Equivalent Ratios</p> <p>6 M1 Lesson 8: Addition Patterns in Ratio Relationships</p> <p>6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships</p> <p>6 M1 Lesson 11: Applications of Ratio Reasoning</p>
<p>KY.6.RP.2</p> <p>Understand the concept of a unit rate $\frac{a}{b}$ associated with a ratio $a:b$ with $b \neq 0$ and use rate language in the context of a ratio relationship.</p>	<p>6 M1 Lesson 15: The Value of the Ratio</p> <p>6 M1 Lesson 16: Speed</p> <p>6 M1 Lesson 17: Rates</p> <p>6 M1 Lesson 18: Comparing Rates</p> <p>6 M1 Lesson 19: Using Rates to Convert Units</p> <p>6 M1 Lesson 20: Solving Rate Problems</p>
<p>KY.6.RP.3</p> <p>Use ratio and rate reasoning to solve real-world and mathematical problems.</p>	<p>6 M1 Lesson 1: Jars of Jelly Beans</p> <p>6 M1 Lesson 3: Ratios and Tape Diagrams</p> <p>6 M1 Lesson 4: Exploring Ratios by Making Batches</p> <p>6 M1 Lesson 5: Equivalent Ratios</p> <p>6 M1 Lesson 6: Ratio Tables and Double Number Lines</p> <p>6 M1 Lesson 8: Addition Patterns in Ratio Relationships</p> <p>6 M1 Lesson 9: Multiplication Patterns in Ratio Relationships</p> <p>6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships</p>

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Aligned Components of *Eureka Math*²

<p>KY.6.RP.3 <i>continued</i></p>	<p>6 M1 Lesson 11: Applications of Ratio Reasoning</p> <p>6 M4 Lesson 22: Relationship Between Two Variables</p> <p>6 M4 Lesson 23: Graphs of Ratio Relationships</p>
<p>KY.6.RP.3.a</p> <p>Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p>	<p>6 M1 Lesson 6: Ratio Tables and Double Number Lines</p> <p>6 M1 Lesson 7: Graphs of Ratio Relationships</p> <p>6 M1 Lesson 8: Addition Patterns in Ratio Relationships</p> <p>6 M1 Lesson 9: Multiplication Patterns in Ratio Relationships</p> <p>6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships</p> <p>6 M1 Lesson 11: Applications of Ratio Reasoning</p> <p>6 M1 Lesson 12: Multiple Ratio Relationships</p> <p>6 M1 Lesson 13: Comparing Ratio Relationships, Part 1</p> <p>6 M1 Lesson 14: Comparing Ratio Relationships, Part 2</p> <p>6 M1 Lesson 15: The Value of the Ratio</p> <p>6 M1 Lesson 16: Speed</p> <p>6 M1 Lesson 18: Comparing Rates</p>
<p>KY.6.RP.3.b</p> <p>Solve rate problems including those involving unit pricing and constant speed.</p>	<p>6 M1 Lesson 16: Speed</p> <p>6 M1 Lesson 17: Rates</p> <p>6 M1 Lesson 18: Comparing Rates</p> <p>6 M1 Lesson 19: Using Rates to Convert Units</p> <p>6 M1 Lesson 20: Solving Rate Problems</p> <p>6 M1 Lesson 21: Solving Multi-Step Rate Problems</p> <p>6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations</p> <p>6 M5 Lesson 13: Surface Area in Real-World Situations</p>

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<p>KY.6.RP.3.c</p> <p>Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p>	<p>6 M1 Lesson 19: Using Rates to Convert Units</p> <p>6 M1 Lesson 20: Solving Rate Problems</p> <p>6 M1 Lesson 21: Solving Multi-Step Rate Problems</p>
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The Number System

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.NS.1</p> <p>Interpret and compute quotients of fractions and solve word problems involving division of fractions by fractions.</p>	<p>6 M2 Lesson 6: Dividing a Whole Number by a Fraction</p> <p>6 M2 Lesson 7: Dividing a Fraction by a Whole Number</p> <p>6 M2 Lesson 8: Dividing Fractions by Making Common Denominators</p> <p>6 M2 Lesson 9: Dividing Fractions by Using Tape Diagrams</p> <p>6 M2 Lesson 10: Dividing Fractions by Using the Invert and Multiply Strategy</p> <p>6 M2 Lesson 11: Applications of Fraction Division</p> <p>6 M2 Lesson 12: Fraction Operations in a Real-World Situation</p>
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The Number System**Compute fluently with multi-digit numbers and find common factors and multiples.**

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i>²
KY.6.NS.2 Fluently divide multi-digit numbers using an algorithm.	6 M2 Lesson 17: Partial Quotients 6 M2 Lesson 18: The Standard Division Algorithm 6 M2 Lesson 19: Expressing Quotients as Decimals
KY.6.NS.2.a Convert a rational number to a decimal using long division.	7 M2 Lesson 19: Rational Numbers as Decimals, Part 1 7 M2 Lesson 20: Rational Numbers as Decimals, Part 2 7 M2 Lesson 21: Comparing and Ordering Rational Numbers
KY.6.NS.2.b Know that the decimal form of a rational number terminates in 0s or eventually repeats.	7 M2 Lesson 19: Rational Numbers as Decimals, Part 1 7 M2 Lesson 20: Rational Numbers as Decimals, Part 2 7 M2 Lesson 21: Comparing and Ordering Rational Numbers
KY.6.NS.3 Fluently add, subtract, multiply and divide multi-digit decimals using an algorithm for each operation.	6 M2 Lesson 13: Decimal Addition and Subtraction 6 M2 Lesson 14: Patterns in Multiplying Decimals 6 M2 Lesson 15: Decimal Multiplication 6 M2 Lesson 21: Dividing a Decimal by a Whole Number 6 M2 Lesson 22: Dividing a Decimal by a Decimal Greater Than 1 6 M2 Lesson 23: Dividing a Decimal by a Decimal Less Than 1 6 M2 Lesson 24: Living on Mars

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<p>KY.6.NS.4</p> <p>Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.</p>	<p>5 M1 Lesson 21: Express a composite number to 50 as a product of its prime factors.</p> <p>6 M2 Lesson 1: Factors and Multiples</p> <p>6 M2 Lesson 2: Divisibility</p> <p>6 M2 Lesson 3: The Greatest Common Factor</p> <p>6 M2 Lesson 4: The Least Common Multiple</p> <p>6 M2 Lesson 5: The Euclidean Algorithm</p> <p>6 M4 Lesson 13: The Distributive Property</p> <p>6 M4 Lesson 14: Using the Distributive Property to Factor Expressions</p>
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The Number System

Apply and extend previous understanding of numbers to the system of rational numbers.

Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.NS.5</p> <p>Understand that positive and negative numbers are used together to describe quantities having opposite directions or values; use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.</p>	<p>6 M3 Lesson 1: Positive and Negative Numbers</p> <p>6 M3 Lesson 4: Rational Numbers in Real-World Situations</p>
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Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.NS.6</p> <p>Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes, using appropriate range and intervals, to represent points on the line and in the plane, that include negative numbers and coordinates.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>KY.6.NS.6.a</p> <p>Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize 0 is its own opposite and the opposite of a positive number is a negative, and the opposite of a negative number is a positive, such as $-(-3) = 3$.</p>	<p>6 M3 Lesson 2: Integers</p> <p>6 M3 Lesson 3: Rational Numbers</p> <p>6 M3 Lesson 4: Rational Numbers in Real-World Situations</p>
<p>KY.6.NS.6.b</p> <p>Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</p>	<p>6 M3 Lesson 3: Rational Numbers</p> <p>6 M3 Lesson 11: Plotting Points in the Coordinate Plane</p> <p>6 M3 Lesson 12: Reflections in the Coordinate Plane</p> <p>6 M3 Lesson 13: Constructing the Coordinate Plane</p> <p>6 M3 Lesson 15: Distance in the Coordinate Plane</p> <p>6 M3 Lesson 16: Figures in the Coordinate Plane</p> <p>6 M3 Lesson 17: Problem Solving with the Coordinate Plane</p>

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<p>KY.6.NS.6.c</p> <p>Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize the similarity between whole numbers, their negative opposites and their positions on a number line, ordered pairs differ only by signs and their locations on one or both axes.</p>	<p>6 M3 Lesson 10: The Four Quadrants of the Coordinate Plane</p> <p>6 M3 Lesson 11: Plotting Points in the Coordinate Plane</p> <p>6 M3 Lesson 12: Reflections in the Coordinate Plane</p> <p>6 M3 Lesson 13: Constructing the Coordinate Plane</p>
<p>KY.6.NS.7</p> <p>Understand ordering and absolute value of rational numbers.</p>	<p>6 M3 Lesson 5: Comparing Rational Numbers</p> <p>6 M3 Lesson 6: Ordering Rational Numbers</p> <p>6 M3 Lesson 8: Absolute Value and Order</p>
<p>KY.6.NS.7.a</p> <p>Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.</p>	<p>6 M3 Lesson 5: Comparing Rational Numbers</p> <p>6 M3 Lesson 6: Ordering Rational Numbers</p>
<p>KY.6.NS.7.b</p> <p>Write, interpret and explain statements of order for rational numbers in real-world contexts.</p>	<p>6 M3 Lesson 5: Comparing Rational Numbers</p> <p>6 M3 Lesson 6: Ordering Rational Numbers</p>

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<p>KY.6.NS.7.c</p> <p>Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.</p>	<p>6 M3 Lesson 7: Absolute Value</p>
<p>KY.6.NS.7.d</p> <p>Distinguish comparisons of absolute value from statements about order.</p>	<p>6 M3 Lesson 8: Absolute Value and Order</p> <p>6 M3 Lesson 9: Interpreting Order and Distance in Real-World Situations</p>
<p>KY.6.NS.8</p> <p>Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>	<p>6 M3 Lesson 14: Modeling with the Coordinate Plane</p> <p>6 M3 Lesson 15: Distance in the Coordinate Plane</p> <p>6 M3 Lesson 16: Figures in the Coordinate Plane</p> <p>6 M3 Lesson 17: Problem Solving with the Coordinate Plane</p> <p>6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane</p>

Expressions and Equations

Apply and extend previous understandings of arithmetic to algebraic expressions.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> ²
<p>KY.6.EE.1</p> <p>Write and evaluate numerical expressions involving whole-number exponents.</p>	<p>6 M4 Lesson 1: Expressions with Addition and Subtraction</p> <p>6 M4 Lesson 2: Expressions with Multiplication and Division</p> <p>6 M4 Lesson 3: Exploring Exponents</p> <p>6 M4 Lesson 4: Evaluating Expressions with Exponents</p> <p>6 M4 Lesson 5: Exploring Order of Operations</p> <p>6 M4 Lesson 6: Order of Operations</p>
<p>KY.6.EE.2</p> <p>Write, read and evaluate expressions in which letters stand for numbers.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>KY.6.EE.2.a</p> <p>Write expressions that record operations with numbers and with letters standing for numbers.</p>	<p>6 M4 Lesson 7: Algebraic Expressions with Addition and Subtraction</p> <p>6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division</p> <p>6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations</p>
<p>KY.6.EE.2.b</p> <p>Identify parts of an expression using mathematical terms (sums, term, product, factor, quotient, coefficient); view one or more parts of an expression in a single entity.</p>	<p>6 M4 Lesson 7: Algebraic Expressions with Addition and Subtraction</p> <p>6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division</p> <p>6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations</p> <p>6 M4 Lesson 11: Modeling Real-World Situations with Expressions</p>

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<p>KY.6.EE.2.c</p> <p>Evaluate expressions for specific values of their variables, including values that are non-negative rational numbers. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including whole-number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).</p>	<p>6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division</p> <p>6 M4 Lesson 11: Modeling Real-World Situations with Expressions</p> <p>6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions</p> <p>6 M4 Lesson 17: Equations and Solutions</p> <p>6 M5 Lesson 1: The Area of a Parallelogram</p> <p>6 M5 Lesson 3: The Area of a Triangle</p> <p>6 M5 Lesson 12: From Nets to Surface Area</p> <p>6 M5 Lesson 13: Surface Area in Real-World Situations</p> <p>6 M5 Lesson 14: Designing a Box</p> <p>6 M5 Lesson 16: Applying Volume Formulas</p>
<p>KY.6.EE.3</p> <p>Apply the properties of operations to generate equivalent expressions.</p>	<p>6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions</p> <p>6 M4 Lesson 13: The Distributive Property</p> <p>6 M4 Lesson 14: Using the Distributive Property to Factor Expressions</p> <p>6 M4 Lesson 15: Combining Like Terms by Using the Distributive Property</p> <p>6 M4 Lesson 16: Equivalent Algebraic Expressions</p> <p>6 M5 Lesson 4: Areas of Triangles in Real-World Situations</p> <p>6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane</p> <p>6 M5 Lesson 7: Area of Trapezoids and Other Polygons</p>

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<p>KY.6.EE.4</p> <p>Identify when two expressions are equivalent when the two expressions name the same number regardless of which value is substituted into them.</p>	<p>6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions</p> <p>6 M4 Lesson 13: The Distributive Property</p> <p>6 M4 Lesson 14: Using the Distributive Property to Factor Expressions</p> <p>6 M4 Lesson 15: Combining Like Terms by Using the Distributive Property</p> <p>6 M4 Lesson 16: Equivalent Algebraic Expressions</p> <p>6 M5 Lesson 7: Area of Trapezoids and Other Polygons</p> <p>6 M5 Lesson 12: From Nets to Surface Area</p> <p>6 M5 Lesson 17: Problem Solving with Volume</p>
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Expressions and Equations

Reason about and solve one-variable equations and inequalities.

Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.EE.5</p> <p>Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p>	<p>6 M4 Lesson 17: Equations and Solutions</p> <p>6 M4 Lesson 18: Inequalities and Solutions</p> <p>6 M4 Lesson 19: Solving Equations with Addition and Subtraction</p> <p>6 M4 Lesson 20: Solving Equations with Multiplication and Division</p>
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Aligned Components of *Eureka Math*²

<p>KY.6.EE.6</p> <p>Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or depending on the purpose at hand, any number in a specified set.</p>	<p>6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations</p> <p>6 M4 Lesson 10: Multiplication and Division Expressions from Real-World Situations</p> <p>6 M4 Lesson 11: Modeling Real-World Situations with Expressions</p> <p>6 M4 Lesson 16: Equivalent Algebraic Expressions</p>
<p>KY.6.EE.7</p> <p>Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.</p>	<p>6 M4 Lesson 17: Equations and Solutions</p> <p>6 M4 Lesson 19: Solving Equations with Addition and Subtraction</p> <p>6 M4 Lesson 20: Solving Equations with Multiplication and Division</p> <p>6 M4 Lesson 21: Solving Problems with Equations</p> <p>6 M5 Lesson 2: The Area of a Right Triangle</p>
<p>KY.6.EE.8</p> <p>Write an inequality of the form $x > c$, $x < c$, $x \geq c$, or $x \leq c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of these forms have infinitely many solutions; represent solutions of such inequalities on vertical and horizontal number lines.</p>	<p>6 M4 Lesson 18: Inequalities and Solutions</p>

Expressions and Equations**Represent and analyze quantitative relationships between dependent and independent variables.**

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i>²
<p>KY.6.EE.9</p> <p>Use variables to represent two quantities in a real-world problem that changes in relationship to one another;</p>	<p>6 M4 Lesson 22: Relationship Between Two Variables</p> <p>6 M4 Lesson 23: Graphs of Ratio Relationships</p> <p>6 M4 Lesson 24: Graphs of Non-Ratio Relationships</p> <p>6 M4 Lesson 25: The Statue of Liberty</p>
<p>KY.6.EE.9.a</p> <p>Appropriately recognize one quantity as the dependent variable and the other as the independent variable.</p>	<p>6 M4 Lesson 22: Relationship Between Two Variables</p> <p>6 M4 Lesson 23: Graphs of Ratio Relationships</p> <p>6 M4 Lesson 24: Graphs of Non-Ratio Relationships</p> <p>6 M4 Lesson 25: The Statue of Liberty</p>
<p>KY.6.EE.9.b</p> <p>Write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable.</p>	<p>6 M4 Lesson 22: Relationship Between Two Variables</p> <p>6 M4 Lesson 23: Graphs of Ratio Relationships</p> <p>6 M4 Lesson 24: Graphs of Non-Ratio Relationships</p> <p>6 M4 Lesson 25: The Statue of Liberty</p>
<p>KY.6.EE.9.c</p> <p>Analyze the relationship between the dependent and independent variables using graphs and tables and relate these to the question.</p>	<p>6 M4 Lesson 22: Relationship Between Two Variables</p> <p>6 M4 Lesson 23: Graphs of Ratio Relationships</p> <p>6 M4 Lesson 24: Graphs of Non-Ratio Relationships</p> <p>6 M4 Lesson 25: The Statue of Liberty</p>

Geometry

Solve real-world and mathematical problems involving area, surface area, and volume.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> ²
<p>KY.6.G.1</p> <p>Find the area of right triangles, other triangles, special quadrilaterals and polygons by composing into rectangles or decomposing into triangles and quadrilaterals; apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6 M5 Lesson 1: The Area of a Parallelogram</p> <p>6 M5 Lesson 2: The Area of a Right Triangle</p> <p>6 M5 Lesson 3: The Area of a Triangle</p> <p>6 M5 Lesson 4: Areas of Triangles in Real-World Situations</p> <p>6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane</p> <p>6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane</p> <p>6 M5 Lesson 7: Areas of Trapezoids and Other Polygons</p> <p>6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations</p>
<p>KY.6.G.2</p> <p>Find the volume of a right rectangular prism with rational number edge lengths. Apply the formulas $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with rational number edge lengths in the context of solving real-world and mathematical problems.</p>	<p>6 M5 Lesson 15: Exploring Volume</p> <p>6 M5 Lesson 16: Applying Volume Formulas</p> <p>6 M5 Lesson 17: Problem Solving with Volume</p> <p>6 M5 Lesson 18: Volumes of Composite Solids</p> <p>6 M5 Lesson 19: Volume and Surface Area in Real-World Situations</p>

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> ²
<p>KY.6.G.3</p> <p>Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane</p> <p>6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane</p>
<p>KY.6.G.4</p> <p>Classify three-dimensional figures including cubes, prisms, pyramids, cones and spheres.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

Statistics and Probability

Develop understanding of the process of statistical reasoning.

Kentucky Mathematics Course Standards	Aligned Components of <i>Eureka Math</i> ²
<p>KY.6.SP.O</p> <p>Apply the four-step investigative process for statistical reasoning.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>

Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.SP.O.a</p> <p>Formulate Questions: Formulate a statistical question as one that anticipates variability and can be answered with data.</p>	<p>6 M6 Lesson 1: Posing Statistical Questions</p> <p>6 M6 Lesson 2: Describing a Data Distribution</p> <p>6 M6 Lesson 6: Selecting a Data Display</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 20: Choosing a Measure of Center</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>
<p>KY.6.SP.O.b</p> <p>Collect Data: Design and use a plan to collect appropriate data to answer a statistical question.</p>	<p>6 M6 Lesson 1: Posing Statistical Questions</p> <p>6 M6 Lesson 2: Describing a Data Distribution</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 20: Choosing a Measure of Center</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>

Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.SP.O.c</p> <p>Analyze Data: Select appropriate graphical methods and numerical measures to analyze data by displaying variability within a group, comparing individual to individual and comparing individual to group.</p>	<p>6 M6 Lesson 2: Describing a Data Distribution</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 20: Choosing a Measure of Center</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>
<p>KY.6.SP.O.d</p> <p>Interpret Results: Draw logical conclusions and make generalizations from the data based on the original question.</p>	<p>6 M6 Lesson 6: Selecting a Data Display</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 20: Choosing a Measure of Center</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>

Statistics and Probability

Develop understanding of statistical variability.

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<p>KY.6.SP.1</p> <p>Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.</p>	<p>6 M6 Lesson 1: Posing Statistical Questions</p> <p>6 M6 Lesson 6: Selecting a Data Display</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p>
<p>KY.6.SP.2</p> <p>Understand that a set of numerical data collected to answer a statistical question has a distribution which can be described by its center, spread and overall shape.</p>	<p>6 M6 Lesson 2: Describing a Data Distribution</p> <p>6 M6 Lesson 3: Creating a Dot Plot</p> <p>6 M6 Lesson 4: Creating a Histogram</p> <p>6 M6 Lesson 9: Variability in a Data Distribution</p> <p>6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p>
<p>KY.6.SP.3</p> <p>Recognize that a measure of center for a numerical data set summarizes all of its values with a single number to describe a typical value, while a measure of variation describes how the values in the distribution vary.</p>	<p>6 M6 Lesson 7: Using the Mean to Describe the Center</p> <p>6 M6 Lesson 8: The Mean as a Balance Point</p> <p>6 M6 Lesson 9: Variability in a Data Distribution</p> <p>6 M6 Lesson 10: The Mean Absolute Deviation</p> <p>6 M6 Lesson 11: Using the Mean and Mean Absolute Deviation</p> <p>6 M6 Lesson 12: Using the Median to Describe the Center</p> <p>6 M6 Lesson 13: Using the Interquartile Range to Describe Variability</p> <p>6 M6 Lesson 15: More Practice with Box Plots</p> <p>6 M6 Lesson 16: Interpreting Box Plots</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>

Statistics and Probability

Summarize and describe distributions.

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<p>KY.6.SP.4</p> <p>Display the distribution of numerical data in plots on a number line, including dot plots, histograms and box plots.</p>	<p>6 M6 Lesson 3: Creating a Dot Plot</p> <p>6 M6 Lesson 4: Creating a Histogram</p> <p>6 M6 Lesson 5: Comparing Data Displays</p> <p>6 M6 Lesson 6: Selecting a Data Display</p> <p>6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution</p> <p>6 M6 Lesson 15: More Practice with Box Plots</p> <p>6 M6 Lesson 16: Interpreting Box Plots</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>
<p>KY.6.SP.5</p> <p>Summarize numerical data sets in relation to their context, such as by:</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>KY.6.SP.5.a</p> <p>Reporting the number of observations.</p>	<p>6 M6 Lesson 2: Describing a Data Distribution</p>
<p>KY.6.SP.5.b</p> <p>Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</p>	<p>6 M6 Lesson 1: Posing Statistical Questions</p> <p>6 M6 Lesson 5: Comparing Data Displays</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p>

Kentucky Mathematics Course Standards

Aligned Components of *Eureka Math*²

<p>KY.6.SP.5.c</p> <p>Determining quantitative measures of center (median and/or mean) to describe distribution of numerical data.</p>	<p>6 M6 Lesson 7: Using the Mean to Describe the Center</p> <p>6 M6 Lesson 8: The Mean as a Balance Point</p> <p>6 M6 Lesson 10: The Mean Absolute Deviation</p> <p>6 M6 Lesson 11: Using the Mean and Mean Absolute Deviation</p> <p>6 M6 Lesson 12: Using the Median to Describe the Center</p> <p>6 M6 Lesson 13: Using the Interquartile Range to Describe Variability</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p>
<p>KY.6.SP.5.d</p> <p>Describing distributions of numerical data qualitatively relating to shape (using terms such as cluster, mode(s), gap, symmetric, uniform, skewed-left, skewed-right and the presence of outliers) and quantitatively relating to spread/variability (using terms such as range and interquartile range).</p>	<p>6 M6 Lesson 7: Using the Mean to Describe the Center</p> <p>6 M6 Lesson 8: The Mean as a Balance Point</p> <p>6 M6 Lesson 10: The Mean Absolute Deviation</p> <p>6 M6 Lesson 11: Using the Mean and Mean Absolute Deviation</p> <p>6 M6 Lesson 12: Using the Median to Describe the Center</p> <p>6 M6 Lesson 13: Using the Interquartile Range to Describe Variability</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p>
<p>KY.6.SP.5.e</p> <p>Relating the choice of measures of center and variability to the shape of the data distribution.</p>	<p>6 M6 Lesson 20: Choosing a Measure of Center</p>