

---

## Grade 8 | Florida's B.E.S.T. Standards for Mathematics Correlation to *Eureka Math*<sup>2</sup>®

When the original *Eureka Math*<sup>®</sup> curriculum was released, it quickly became the most widely used K–5 mathematics curriculum in the country. Now, the Great Minds<sup>®</sup> teacher–writers have created *Eureka Math*<sup>2</sup>®, a groundbreaking new curriculum that helps teachers deliver *exponentially better* math instruction while still providing students with the same deep understanding of and fluency in math. *Eureka Math*<sup>2</sup> carefully sequences mathematical content to maximize vertical alignment—a principle tested and proven to be essential in students' mastery of math—from kindergarten through high school.

While this innovative new curriculum includes all the trademark *Eureka Math* aha moments that have been delighting students and teachers for years, it also boasts these exciting new features:

### Teachability

*Eureka Math*<sup>2</sup> 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 right into the teacher materials.

### Accessibility

*Eureka Math*<sup>2</sup> incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the *Teach* book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the *Eureka Math*<sup>2</sup> 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.

### Digital Engagement

The digital elements of *Eureka Math*<sup>2</sup> add to students' engagement with the math. The curriculum provides teachers with digital slides for each lesson. In addition, each grade level includes wordless videos that spark students' interest and curiosity. Students at all levels work through mathematical explorations that help lead to their own mathematical discoveries. Digital lessons and videos provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

Mathematical Thinking and Reasoning Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.K12.MTR.1.1</b> Actively participate in effortful learning both individually and collectively.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>
<p><b>MA.K12.MTR.2.1</b> Demonstrate understanding by representing problems in multiple ways.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>
<p><b>MA.K12.MTR.3.1</b> Complete tasks with mathematical fluency.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>
<p><b>MA.K12.MTR.4.1</b> Engage in discussions that reflect on the mathematical thinking of self and others.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>
<p><b>MA.K12.MTR.5.1</b> Use patterns and structure to help understand and connect mathematical concepts.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>
<p><b>MA.K12.MTR.6.1</b> Assess the reasonableness of solutions.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>
<p><b>MA.K12.MTR.7.1</b> Apply mathematics to real-world contexts.</p>	<p>Lessons in every module engage students in mathematical thinking and reasoning. These are indicated in margin notes included with every lesson.</p>

## Number Sense and Operations

**MA.8.NSO.1** Solve problems involving rational numbers, including numbers in scientific notation, and extend the understanding of rational numbers to irrational numbers.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.NSO.1.1</b></p> <p>Extend previous understanding of rational numbers to define irrational numbers within the real number system. Locate an approximate value of a numerical expression involving irrational numbers on a number line.</p>	<p>8 M1 Lesson 21: Approximating Values of Roots and <math>\pi^2</math></p> <p>8 M1 Lesson 22: Familiar and Not So Familiar Numbers</p> <p>8 M1 Lesson 23: Ordering Irrational Numbers</p> <p>8 M4 Lesson 5: An Interesting Application of Linear Equations, Part 1</p> <p>8 M4 Lesson 6: An Interesting Application of Linear Equations, Part 2</p>
<p><b>MA.8.NSO.1.2</b></p> <p>Plot, order and compare rational and irrational numbers, represented in various forms.</p>	<p>8 M1 Lesson 21: Approximating Values of Roots and <math>\pi^2</math></p> <p>8 M1 Lesson 23: Ordering Irrational Numbers</p>
<p><b>MA.8.NSO.1.3</b></p> <p>Extend previous understanding of the Laws of Exponents to include integer exponents. Apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions, limited to integer exponents and rational number bases, with procedural fluency.</p>	<p>8 M1 Topic B: Properties and Definitions of Exponents</p>

**Florida's B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.NSO.1.4</b></p> <p>Express numbers in scientific notation to represent and approximate very large or very small quantities. Determine how many times larger or smaller one number is compared to a second number.</p>	<p>8 M1 Lesson 2: Comparing Large Numbers</p> <p>8 M1 Lesson 4: Adding and Subtracting Numbers Written in Scientific Notation</p> <p>8 M1 Topic C: Applications of the Properties and Definitions of Exponents</p>
<p><b>MA.8.NSO.1.5</b></p> <p>Add, subtract, multiply and divide numbers expressed in scientific notation with procedural fluency.</p>	<p>8 M1 Lesson 2: Comparing Large Numbers</p> <p>8 M1 Lesson 4: Adding and Subtracting Numbers Written in Scientific Notation</p> <p>8 M1 Lesson 12: Operations with Numbers in Scientific Notation</p> <p>8 M1 Lesson 13: Applications with Numbers in Scientific Notation</p> <p>8 M1 Lesson 14: Choosing Units of Measurement</p> <p>8 M1 Lesson 15: Get to the Point</p>
<p><b>MA.8.NSO.1.6</b></p> <p>Solve real-world problems involving operations with numbers expressed in scientific notation.</p>	<p>8 M1 Lesson 2: Comparing Large Numbers</p> <p>8 M1 Lesson 4: Adding and Subtracting Numbers Written in Scientific Notation</p> <p>8 M1 Lesson 12: Operations with Numbers in Scientific Notation</p> <p>8 M1 Lesson 13: Applications with Numbers in Scientific Notation</p> <p>8 M1 Lesson 14: Choosing Units of Measurement</p> <p>8 M1 Lesson 15: Get to the Point</p>

**Florida's B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.NSO.1.7</b></p> <p>Solve multi-step mathematical and real-world problems involving the order of operations with rational numbers including exponents and radicals.</p>	<p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p> <p>8 M1 Lesson 16: Perfect Squares and Perfect Cubes</p> <p>8 M1 Lesson 17: Solving Equations with Squares and Cubes</p> <p>8 M1 Lesson 20: Square Roots</p> <p>8 M1 Lesson 22: Familiar and Not So Familiar Numbers</p> <p>8 M1 Lesson 24: Revisiting Equations with Squares and Cubes</p>
---	--

**Algebraic Reasoning**

**MA.8.AR.1** Generate equivalent algebraic expressions.

**Florida's B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.AR.1.1</b></p> <p>Apply the Laws of Exponents to generate equivalent algebraic expressions, limited to integer exponents and monomial bases.</p>	<p>8 M1 Topic B: Properties and Definitions of Exponents</p>
---	--

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.AR.1.2</b></p> <p>Apply properties of operations to multiply two linear expressions with rational coefficients.</p>	<p>A1 M1 Lesson 4: Adding and Subtracting Polynomial Expressions</p> <p>A1 M1 Lesson 5: Multiplying Polynomial Expressions</p> <p>A1 M1 Lesson 6: Polynomial Identities</p>
<p><b>MA.8.AR.1.3</b></p> <p>Rewrite the sum of two algebraic expressions having a common monomial factor as a common factor multiplied by the sum of two algebraic expressions.</p>	<p>A1 M1 Lesson 4: Adding and Subtracting Polynomial Expressions</p> <p>A1 M1 Lesson 5: Multiplying Polynomial Expressions</p> <p>A1 M1 Lesson 6: Polynomial Identities</p>

### Algebraic Reasoning

**MA.8.AR.2 Solve multi-step one-variable equations and inequalities.**

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.AR.2.1</b></p> <p>Solve multi-step linear equations in one variable, with rational number coefficients. Include equations with variables on both sides.</p>	<p>8 M4 Topic A: Linear Equations in One Variable</p> <p>8 M4 Lesson 7: Linear Equations with More Than One Solution</p> <p>8 M4 Lesson 8: Another Possible Number of Solutions</p> <p>8 M4 Lesson 10: Using Linear Equations to Solve Real-World Problems</p> <p>8 M4 Lesson 11: Planning a Trip</p>
<p><b>MA.8.AR.2.2</b></p> <p>Solve two-step linear inequalities in one variable and represent solutions algebraically and graphically.</p>	<p>7 M3 Topic D: Inequalities</p>

**Florida's B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.AR.2.3</b></p> <p>Given an equation in the form of <math>x^2 = p</math> and <math>x^3 = q</math>, where <math>p</math> is a whole number and <math>q</math> is an integer, determine the real solutions.</p>	<p>8 M1 Lesson 16: Perfect Squares and Perfect Cubes</p> <p>8 M1 Lesson 17: Solving Equations with Squares and Cubes</p> <p>8 M1 Lesson 20: Square Roots</p> <p>8 M1 Lesson 22: Familiar and Not So Familiar Numbers</p> <p>8 M1 Lesson 24: Revisiting Equations with Squares and Cubes</p>
---	---

**Algebraic Reasoning**

**MA.8.AR.3 Extend understanding of proportional relationships to two-variable linear equations.**

**Florida's B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.AR.3.1</b></p> <p>Determine if a linear relationship is also a proportional relationship.</p>	<p>7 M1 Topic A: Understanding Proportional Relationships</p> <p>7 M1 Lesson 14: Extreme Bicycles</p>
<p><b>MA.8.AR.3.2</b></p> <p>Given a table, graph or written description of a linear relationship, determine the slope.</p>	<p>8 M4 Lesson 15: Comparing Proportional Relationships</p> <p>8 M4 Lesson 16: Proportional Relationships and Slope</p>

**Florida's B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.AR.3.3</b></p> <p>Given a table, graph or written description of a linear relationship, write an equation in slope-intercept form.</p>	<p>8 M3 Lesson 17: Similar Triangles on a Line</p> <p>8 M4 Lesson 16: Proportional Relationships and Slope</p> <p>8 M4 Lesson 17: Slopes of Rising Lines</p> <p>8 M4 Lesson 18: Slopes of Falling Lines</p> <p>8 M4 Lesson 19: Using Coordinates to Find Slope</p> <p>8 M4 Lesson 20: Slope-Intercept Form of the Equation of a Line</p> <p>8 M6 Lesson 6: Linear Functions and Rate of Change</p> <p>8 M6 Lesson 7: Interpreting Rate of Change and Initial Value</p> <p>8 M6 Lesson 25: Applications of Volume</p>
<p><b>MA.8.AR.3.4</b></p> <p>Given a mathematical or real-world context, graph a two-variable linear equation from a written description, a table or an equation in slope-intercept form.</p>	<p>8 M6 Lesson 6: Linear Functions and Rate of Change</p> <p>8 M6 Lesson 7: Interpreting Rate of Change and Initial Value</p> <p>8 M6 Lesson 25: Applications of Volume</p>
<p><b>MA.8.AR.3.5</b></p> <p>Given a real-world context, determine and interpret the slope and <math>y</math>-intercept of a two-variable linear equation from a written description, a table, a graph or an equation in slope-intercept form.</p>	<p>8 M6 Lesson 6: Linear Functions and Rate of Change</p> <p>8 M6 Lesson 7: Interpreting Rate of Change and Initial Value</p> <p>8 M6 Lesson 25: Applications of Volume</p>



## Algebraic Reasoning

### MA.8.AR.4 Develop an understanding of two-variable systems of equations.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.AR.4.1</b></p> <p>Given a system of two linear equations and a specified set of possible solutions, determine which ordered pairs satisfy the system of linear equations.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p><b>MA.8.AR.4.2</b></p> <p>Given a system of two linear equations represented graphically on the same coordinate plane, determine whether there is one solution, no solution or infinitely many solutions.</p>	<p>8 M5 Topic A: Solving Systems of Linear Equations Graphically</p>
<p><b>MA.8.AR.4.3</b></p> <p>Given a mathematical or real-world context, solve systems of two linear equations by graphing.</p>	<p>8 M5 Topic A: Solving Systems of Linear Equations Graphically</p> <p>8 M5 Topic C: Writing and Solving Systems of Linear Equations</p>

## Functions

### MA.8.F.1 Define, evaluate and compare functions.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.F.1.1</b></p> <p>Given a set of ordered pairs, a table, a graph or mapping diagram, determine whether the relationship is a function. Identify the domain and range of the relation.</p>	<p>8 M6 Lesson 1: Motion and Speed</p> <p>8 M6 Lesson 2: Definition of a Function</p> <p>8 M6 Lesson 4: More Examples of Functions</p> <p>8 M6 Lesson 5: Graphs of Functions and Equations</p> <p>A1 M3 Topic A: Functions and Their Graphs</p>
<p><b>MA.8.F.1.2</b></p> <p>Given a function defined by a graph or an equation, determine whether the function is a linear function. Given an input-output table, determine whether it could represent a linear function.</p>	<p>8 M6 Lesson 3: Linear Functions and Proportionality</p> <p>8 M6 Lesson 6: Linear Functions and Rate of Change</p> <p>8 M6 Lesson 10: Graphs of Nonlinear Functions</p>
<p><b>MA.8.F.1.3</b></p> <p>Analyze a real-world written description or graphical representation of a functional relationship between two quantities and identify where the function is increasing, decreasing or constant.</p>	<p>8 M6 Lesson 9: Increasing and Decreasing Functions</p> <p>8 M6 Lesson 10: Graphs of Nonlinear Functions</p>

## Geometric Reasoning

**MA.8.GR.1** Develop an understanding of the Pythagorean Theorem and angle relationships involving triangles.

Florida’s B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.GR.1.1</b></p> <p>Apply the Pythagorean Theorem to solve mathematical and real-world problems involving unknown side lengths in right triangles.</p>	<p>8 M1 Lesson 18: The Pythagorean Theorem</p> <p>8 M1 Lesson 19: Using the Pythagorean Theorem</p> <p>8 M1 Lesson 20: Square Roots</p> <p>8 M2 Lesson 19: Using the Pythagorean Theorem and Its Converse</p> <p>8 M2 Lesson 21: Applying the Pythagorean Theorem</p> <p>8 M2 Lesson 22: On the Right Path</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>
<p><b>MA.8.GR.1.2</b></p> <p>Apply the Pythagorean Theorem to solve mathematical and real-world problems involving the distance between two points in a coordinate plane.</p>	<p>8 M2 Lesson 20: Distance in the Coordinate Plane</p> <p>8 M2 Lesson 22: On the Right Path</p>
<p><b>MA.8.GR.1.3</b></p> <p>Use the Triangle Inequality Theorem to determine if a triangle can be formed from a given set of sides. Use the converse of the Pythagorean Theorem to determine if a right triangle can be formed from a given set of sides.</p>	<p>7 M4 Topic A: Constructing Geometric Figures</p> <p>7 M4 Topic B: Constructing Triangles</p> <p>8 M1 Lesson 18: The Pythagorean Theorem</p> <p>8 M1 Lesson 19: Using the Pythagorean Theorem</p> <p>8 M1 Lesson 20: Square Roots</p> <p>8 M2 Lesson 19: Using the Pythagorean Theorem and Its Converse</p> <p>8 M2 Lesson 21: Applying the Pythagorean Theorem</p> <p>8 M2 Lesson 22: On the Right Path</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>

<b>Florida's B.E.S.T. Standards for Mathematics</b>	<b>Aligned Components of <i>Eureka Math</i><sup>2</sup></b>
<p><b>MA.8.GR.1.4</b></p> <p>Solve mathematical problems involving the relationships between supplementary, complementary, vertical or adjacent angles.</p>	<p>7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures</p> <p>7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p>
<p><b>MA.8.GR.1.5</b></p> <p>Solve problems involving the relationships of interior and exterior angles of a triangle.</p>	<p>8 M2 Topic C: Angle Relationships</p> <p>8 M3 Lesson 12: Exploring Angles in Similar Triangles</p> <p>8 M3 Lesson 13: Similar Triangles</p> <p>8 M3 Lesson 14: Using Similar Figures to Find Unknown Side Lengths</p> <p>8 M3 Lesson 15: Applications of Similar Figures</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>
<p><b>MA.8.GR.1.6</b></p> <p>Develop and use formulas for the sums of the interior angles of regular polygons by decomposing them into triangles.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

## Geometric Reasoning

**MA.8.GR.2 Understand similarity and congruence using models and transformations.**

<b>Florida's B.E.S.T. Standards for Mathematics</b>	<b>Aligned Components of <i>Eureka Math</i><sup>2</sup></b>
<p><b>MA.8.GR.2.1</b></p> <p>Given a preimage and image generated by a single transformation, identify the transformation that describes the relationship.</p>	<p>8 M3 Lesson 11: Similar Figures</p> <p>8 M3 Lesson 12: Exploring Angles in Similar Triangles</p> <p>8 M3 Lesson 13: Similar Triangles</p> <p>8 M3 Lesson 17: Similar Triangles on a Line</p>

**Florida’s B.E.S.T. Standards  
for Mathematics**

**Aligned Components of *Eureka Math*<sup>2</sup>**

<p><b>MA.8.GR.2.2</b></p> <p>Given a preimage and image generated by a single dilation, identify the scale factor that describes the relationship.</p>	<p>8 M3 Topic A: Dilations</p> <p>8 M3 Topic B: Properties of Dilations</p> <p>8 M3 Lesson 9: Describing Dilations</p> <p>8 M3 Lesson 10: Sequencing Transformations</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>
<p><b>MA.8.GR.2.3</b></p> <p>Describe and apply the effect of a single transformation on two-dimensional figures using coordinates and the coordinate plane.</p>	<p>8 M2 Lesson 4: Translations and Reflections on the Coordinate Plane</p> <p>8 M2 Lesson 6: Rotations on the Coordinate Plane</p> <p>8 M2 Lesson 9: Ordering Sequences of Rigid Motions</p> <p>8 M3 Topic A: Dilations</p> <p>8 M3 Topic B: Properties of Dilations</p> <p>8 M3 Lesson 9: Describing Dilations</p> <p>8 M3 Lesson 10: Sequencing Transformations</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>
<p><b>MA.8.GR.2.4</b></p> <p>Solve mathematical and real-world problems involving proportional relationships between similar triangles.</p>	<p>8 M3 Lesson 12: Exploring Angles in Similar Triangles</p> <p>8 M3 Lesson 13: Similar Triangles</p> <p>8 M3 Topic D: Applications of Similar Figures</p>

## Data Analysis and Probability

### MA.8.DP.1 Represent and investigate numerical bivariate data.

Florida’s B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.DP.1.1</b></p> <p>Given a set of real-world bivariate numerical data, construct a scatter plot or a line graph as appropriate for the context.</p>	<p>8 M6 Lesson 11: Scatter Plots</p> <p>8 M6 Lesson 12: Patterns in Scatter Plots</p> <p>8 M6 Lesson 13: Informally Fitting a Line to Data</p> <p>8 M6 Lesson 14: Determining an Equation of a Line Fit to Data</p>
<p><b>MA.8.DP.1.2</b></p> <p>Given a scatter plot within a real-world context, describe patterns of association.</p>	<p>8 M6 Lesson 11: Scatter Plots</p> <p>8 M6 Lesson 12: Patterns in Scatter Plots</p>
<p><b>MA.8.DP.1.3</b></p> <p>Given a scatter plot with a linear association, informally fit a straight line.</p>	<p>A1 M2 Lesson 17: Modeling Relationships with a Line</p> <p>A1 M2 Lesson 18: Calculating and Analyzing Residuals</p> <p>A1 M2 Lesson 20: Interpreting Correlation</p> <p>A1 M6 Topic A: Modeling Bivariate Quantitative Data</p>

## Data Analysis and Probability

### MA.8.DP.2 Represent and find probabilities of repeated experiments.

Florida's B.E.S.T. Standards for Mathematics	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>MA.8.DP.2.1</b></p> <p>Determine the sample space for a repeated experiment.</p>	<p>7 M6 Lesson 5: Multistage Experiments</p>
<p><b>MA.8.DP.2.2</b></p> <p>Find the theoretical probability of an event related to a repeated experiment.</p>	<p>7 M6 Lesson 4: Theoretical Probability</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p>
<p><b>MA.8.DP.2.3</b></p> <p>Solve real-world problems involving probabilities related to single or repeated experiments, including making predictions based on theoretical probability.</p>	<p>7 M6 Lesson 4: Theoretical Probability</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p>