

## ABOUT *EUREKA MATH*

Created by the nonprofit Great Minds, *Eureka Math* helps teachers deliver unparalleled math instruction that provides students with a deep understanding of and fluency in math. Crafted by teachers and math scholars, the curriculum carefully sequences the mathematical progressions to maximize coherence from Prekindergarten through Precalculus—a principle tested and proven to be essential in students’ mastery of math.

Teachers and students using *Eureka Math* find the trademark “Aha!” moments in *Eureka Math* to be a source of joy and inspiration, lesson after lesson, year after year.

## ALIGNED

*Eureka Math* is the only curriculum found by [EdReports.org](https://www.edreports.org) to align fully with the Common Core State Standards for Mathematics for all grades, Kindergarten through Grade 8. Great Minds offers detailed analyses that demonstrate how each grade of *Eureka Math* aligns with specific state standards. Access these free alignment studies at [greatminds.org/state-studies](https://www.greatminds.org/state-studies).

## DATA

Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at [greatminds.org/data](https://www.greatminds.org/data).

## FULL SUITE OF RESOURCES

As a nonprofit, Great Minds offers the *Eureka Math* curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at [greatminds.org/math/curriculum](https://www.greatminds.org/math/curriculum).

The teacher–writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following:

- Printed material in English and Spanish
- Digital resources
- Professional development
- Classroom tools and manipulatives
- Teacher support materials
- Parent resources





# Florida Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards in Mathematics Correlation to *Eureka Math*<sup>®</sup>

---

## ALGEBRA I MATHEMATICS

The majority of the Algebra I Florida B.E.S.T. Mathematics Standards are fully covered by the Algebra I *Eureka Math* curriculum. The areas where the Algebra I Mathematics Florida Standards and Algebra I *Eureka Math* do not align will require the use of *Eureka Math* content from other courses. A detailed analysis of alignment is provided in the table below.

## INDICATORS

-  **GREEN** indicates the Florida standard is addressed in *Eureka Math*.
-  **YELLOW** indicates the Florida standard may not be completely addressed in *Eureka Math*.
-  **RED** indicates the Florida standard is not addressed in *Eureka Math*.
-  **BLUE** indicates there is a discrepancy between the grade level at which this standard is addressed in Florida and in *Eureka Math*.

**Strand**

**Benchmark**

**Aligned Components of *Eureka Math***

<p><b>Number Sense and Operations</b></p>	<p><b>Standard: MA.912.NSO.1</b>  <b>Generate equivalent expressions and perform operations with expressions involving exponents, radicals or logarithms.</b></p>	
	<p><b>MA.912.NSO.1.1</b></p> <p>Extend previous understanding of the Laws of Exponents to include rational exponents. Apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions involving rational exponents.</p>	<p>G8 M1 Topic A: Exponential Notation and Properties of Integer Exponents</p> <p>Algebra I M1 Lesson 7: Algebraic Expressions—The Commutative and Associative Properties</p>
	<p><b>MA.912.NSO.1.2</b></p> <p>Generate equivalent monomial algebraic expressions using the properties of exponents.</p>	<p>G8 M1 Topic A: Exponential Notation and Properties of Integer Exponents</p> <p>Algebra I M1 Lesson 7: Algebraic Expressions—The Commutative and Associative Properties</p>
	<p><b>MA.912.NSO.1.4</b></p> <p>Apply previous understanding of operations with rational numbers to add, subtract, multiply and divide numerical radicals.</p>	<p>Geometry M2 Topic D: Applying Similarity to Right Triangles</p> <p>Algebra II M1 Lesson 9: Radicals and Conjugates</p> <p>Algebra II M1 Lesson 22: Equivalent Rational Expressions</p> <p>Algebra II M1 Lesson 23: Comparing Rational Expressions</p> <p>Algebra II M1 Lesson 24: Multiplying and Dividing Rational Expressions</p> <p>Algebra II M1 Lesson 25: Adding and Subtracting Rational Expressions</p>

**Strand**

**Benchmark**

**Aligned Components of *Eureka Math***

<b>Algebraic Reasoning</b>	<b>Standard: MA.912.AR.1</b> <b>Interpret and rewrite algebraic expressions and equations in equivalent forms.</b>	
	<b>MA.912.AR.1.1</b>  Identify and interpret parts of an expression that represent a quantity in terms of a mathematical or real-world context, including viewing one or more of its parts as a single entity.	Algebra I M1 Topic C: Solving Equations and Inequalities  Algebra I M1 Topic D: Creating Equations to Solve Problems
	<b>MA.912.AR.1.2</b>  Rearrange equations or formulas to isolate a quantity of interest.	Algebra I M3 Lesson 3: Arithmetic and Geometric Sequences  Algebra I M3 Lesson 4: Why Do Banks Pay YOU to Provide Their Services?
	<b>MA.912.AR.1.3</b>  Add, subtract and multiply polynomial expressions with rational number coefficients.	Algebra I M1 Lesson 8: Adding and Subtracting Polynomials  Algebra I M1 Lesson 9: Multiplying Polynomials
	<b>MA.912.AR.1.4</b>  Divide a polynomial expression by a monomial expression with rational number coefficients.	Algebra II M1 Lesson 3: The Division of Polynomials
	<b>MA.912.AR.1.7</b>  Rewrite a polynomial expression as a product of polynomials.	Algebra I M1 Lesson 9: Multiplying Polynomials  Algebra I M4 Lesson 1: Multiplying and Factoring Polynomial Expressions  Algebra I M4 Lesson 2: Multiplying and Factoring Polynomial Expressions

**Strand**

**Benchmark**

**Aligned Components of *Eureka Math***

	<p><b>Standard: MA.912.AR.2</b>  <b>Write, solve and graph linear equations, functions and inequalities in one and two variables.</b></p>	
	<p><b>MA.912.AR.2.1</b>           Given a real-world context, write and solve one-variable multi-step linear equations.</p>	<p>Algebra I M1 Topic C: Solving Equations and Inequalities           Algebra I M1 Topic D: Creating Equations to Solve Problems</p>
	<p><b>MA.912.AR.2.2</b>           Write a linear two-variable equation to represent relationships between quantities from a graph, a written description or a table of values within a mathematical or real-world context.</p>	<p>Algebra I M1 Lesson 15: Solution Sets of Two or More Equations (or Inequalities) Joined by “And” or “Or”           Algebra I M1 Lesson 16: Solving and Graphing Inequalities Joined by “And” or “Or”           Algebra I M1 Lesson 17: Equations Involving Factored Expressions           Algebra I M1 Lesson 18: Equations Involving a Variable Expression in the Denominator           Algebra I M1 Lesson 19: Rearranging Formulas           Algebra I M1 Lesson 20: Solution Sets to Equations with Two Variables           Algebra I M1 Lesson 21: Solution Sets to Inequalities with Two Variables           Algebra I M1 Lesson 22: Solution Sets to Simultaneous Equations           Algebra I M1 Lesson 23: Solution Sets to Simultaneous Equations</p>

Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.AR.2.3</b></p> <p>Write a linear two-variable equation for a line that is parallel or perpendicular to a given line and goes through a given point.</p>	Algebra I M1 Topic C: Solving Equations and Inequalities
	<p><b>MA.912.AR.2.4</b></p> <p>Given a table, equation or written description of a linear function, graph that function, and determine and interpret its key features.</p>	Algebra I M3 Topic B: Functions and Their Graphs
	<p><b>MA.912.AR.2.5</b></p> <p>Solve and graph mathematical and real-world problems that are modeled with linear functions. Interpret key features and determine domain constraints in terms of the context.</p>	Algebra I M3 Topic C: Using Functions and Graphs to Solve Problems
	<p><b>MA.912.AR.2.6</b></p> <p>Given a mathematical or real-world context, write and solve one-variable linear inequalities, including compound inequalities. Represent solutions algebraically or graphically.</p>	Algebra I M1 Topic C: Solving Equations and Inequalities
	<p><b>MA.912.AR.2.7</b></p> <p>Write two-variable linear inequalities to represent relationships between quantities from a graph or a written description within a mathematical or real-world context.</p>	Algebra I M1 Topic C: Solving Equations and Inequalities

Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.AR.2.8</b></p> <p>Given a mathematical or real-world context, graph the solution set to a two-variable linear inequality.</p>	<p>Algebra I M1 Topic C: Solving Equations and Inequalities</p>
<p><b>Standard: MA.912.AR.3</b>  <b>Write, solve and graph quadratic equations, functions and inequalities in one and two variables.</b></p>		
	<p><b>MA.912.AR.3.1</b></p> <p>Given a mathematical or real-world context, write and solve one-variable quadratic equations over the real number system.</p>	<p>Algebra I M4 Lesson 6: Solving Basic One-Variable Quadratic Equations</p> <p>Algebra I M4 Lesson 7: Creating and Solving Quadratic Equations in One Variable</p>
	<p><b>MA.912.AR.3.4</b></p> <p>Write a quadratic function to represent the relationship between two quantities from a graph, a written description or a table of values within a mathematical or real-world context.</p>	<p>Algebra I M4 Topic A: Quadratic Expressions, Equations, Functions, and Their Connection to Rectangles</p>
	<p><b>MA.912.AR.3.5</b></p> <p>Given the x-intercepts and another point on the graph of a quadratic function, write the equation for the function.</p>	<p>Algebra I M4 Topic B: Using Different Forms for Quadratic Functions</p>
	<p><b>MA.912.AR.3.6</b></p> <p>Given an expression or equation representing a quadratic function, determine the vertex and zeros and interpret them in terms of a real-world context.</p>	<p>Algebra I M4 Topic A: Quadratic Expressions, Equations, Functions, and Their Connection to Rectangles</p>

Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.AR.3.7</b></p> <p>Given a table, equation or written description of a quadratic function, graph that function and determine and interpret its key features.</p>	<p>Algebra I M4 Lesson 8: Exploring the Symmetry in Graphs of Quadratic Functions</p> <p>Algebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, <math>f(x) = a(x-m)(x-n)</math></p> <p>Algebra I M4 Lesson 10: Interpreting Quadratic Functions from Graphs and Tables</p>
	<p><b>MA.912.AR.3.8</b></p> <p>Solve and graph mathematical and real-world problems that are modeled with quadratic functions. Interpret key features and determine domain constraints in terms of the context.</p>	<p>Algebra I M4 Lesson 23: Modeling with Quadratic Functions</p> <p>Algebra I M4 Lesson 24: Modeling with Quadratic Functions</p>
<p><b>Standard: MA.912.AR.5</b>  <b>Write, solve and graph exponential and logarithmic equations and functions in one and two variables.</b></p>		
	<p><b>MA.912.AR.5.3</b></p> <p>Given a mathematical or real-world context, classify an exponential function as representing growth or decay.</p>	<p>Algebra I M3 Lesson 6: Exponential Growth—U.S. Population and World Population</p> <p>Algebra I M3 Lesson 7: Exponential Decay</p>
	<p><b>MA.912.AR.5.4</b></p> <p>Write an exponential function to represent a relationship between two quantities from a graph, a written description or a table of values within a mathematical or real-world context.</p>	<p>Algebra I M3 Topic B: Functions and Their Graphs</p>



Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.AR.5.6</b></p> <p>Given a table, equation or written description of an exponential function, graph that function and determine its key features.</p>	<p>Algebra I M3 Topic B: Functions and Their Graphs</p>
<p><b>Standard: MA.912.AR.9</b>  <b>Write and solve a system of two- and three-variable equations and inequalities that describe quantities or relationships.</b></p>		
	<p><b>MA.912.AR.9.1</b></p> <p>Given a mathematical or real-world context, write and solve a system of two-variable linear equations algebraically or graphically.</p>	<p>Algebra I M1 Lesson 20: Solution Sets to Equations with Two Variables</p> <p>Algebra I M1 Lesson 21: Solution Sets to Inequalities with Two Variables</p> <p>Algebra I M1 Lesson 22: Solution Sets to Simultaneous Equations</p> <p>Algebra I M1 Lesson 23: Solution Sets to Simultaneous Equations</p> <p>Algebra I M1 Lesson 24: Applications of Systems of Equations and Inequalities</p>
	<p><b>MA.912.AR.9.4</b></p> <p>Graph the solution set of a system of two-variable linear inequalities.</p>	<p>Algebra I M1 Lesson 15: Solution Sets of Two or More Equations (or Inequalities) Joined by “And” or “Or”</p> <p>Algebra I M1 Lesson 16: Solving and Graphing Inequalities Joined by “And” or “Or”</p>

Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.AR.9.5</b></p> <p>Given a real-world context, represent constraints as systems of linear equations or inequalities. Interpret solutions to problems as viable or non-viable options.</p>	Algebra I M1 Topic D: Creating Equations to Solve Problems
Functions	<p><b>Standard: MA.912.F.1</b></p> <p><b>Understand, compare and analyze properties of functions.</b></p>	
	<p><b>MA.912.F.1.1</b></p> <p>Given an equation or graph that defines a function, classify the function type. Given an input-output table, determine a function type that could represent it.</p>	Algebra I M3 Topic B: Functions and Their Graphs
	<p><b>MA.912.F.1.2</b></p> <p>Given a function represented in function notation, evaluate the function for an input in its domain. For a real-world context, interpret the output.</p>	Algebra I M3 Topic B: Functions and Their Graphs
	<p><b>MA.912.F.1.3</b></p> <p>Calculate and interpret the average rate of change of a real-world situation represented graphically, algebraically or in a table over a specified interval.</p>	<p>Algebra I M3 Lesson 13: Interpreting the Graph of a Function</p> <p>Algebra I M3 Lesson 14: Linear and Exponential Models—Comparing Growth Rates</p>
	<p><b>MA.912.F.1.5</b></p> <p>Compare key features of linear and nonlinear functions each represented in the same way, such as algebraically, graphically, in tables or written descriptions.</p>	Algebra I M3 Topic D: Using Functions and Graphs to Solve Problems

**Strand**

**Benchmark**

**Aligned Components of *Eureka Math***

	<p><b>MA.912.F.1.7</b></p> <p>Determine whether a linear, quadratic or exponential function best models a given real-world situation.</p>	<p>Algebra I M3 Topic D: Using Functions and Graphs to Solve Problems</p>
<p><b>Standard: MA.912.F.2</b>  <b>Identify and describe the effects of transformations on functions. Create new functions given transformations.</b></p>		
	<p><b>MA.912.F.2.1</b></p> <p>Identify the effect on the graph or table of a given function after replacing <math>f(x)</math> by <math>f(x) + k</math>, <math>kf(x)</math>, <math>f(kx)</math> and <math>f(x+k)</math> for specific values of <math>k</math>.</p>	<p>Algebra I M3 Topic C: Transformations of Functions</p>
	<p><b>MA.912.F.2.3</b></p> <p>Given the graph or table of <math>f(x)</math> and the graph or table of <math>f(x) + k</math>, <math>kf(x)</math>, <math>f(kx)</math>, and <math>f(x+k)</math>, state the type of transformation and find the value of the real number <math>k</math>.</p>	<p>Algebra I M3 Topic C: Transformations of Functions</p>
<p><b>Standard: MA.912.F.3</b>  <b>Create new functions from existing functions.</b></p>		
	<p><b>MA.912.F.3.1</b></p> <p>Given a mathematical or real-world context, combine two functions, limited to linear and quadratic, using arithmetic operations. When appropriate, include domain restrictions for the new function.</p>	<p>Algebra I M3 Topic B: Functions and Their Graphs</p>

**Strand**

**Benchmark**

**Aligned Components of *Eureka Math***

<b>Financial Literacy</b>	<b>Standard: MA.912.FL.1</b> <b>Determine simple and compound interest and demonstrate its relationship to functions. Calculate and use net present and net future values.</b>	
	<b>MA.912.FL.1.2</b>  Solve problems involving simple, compound and continuously compounded interest, including determining the present value and future value of money.	Algebra I M3 Lesson 3: Arithmetic and Geometric Sequences  Algebra I M3 Lesson 4: Why Do Banks Pay YOU to Provide Their Services?
	<b>MA.912.FL.1.3</b>  Explain the relationship between simple interest and linear growth.	Algebra I M3 Lesson 3: Arithmetic and Geometric Sequences  Algebra I M3 Lesson 4: Why Do Banks Pay YOU to Provide Their Services?
	<b>MA.912.FL.1.4</b>  Explain the relationship between compound interest and exponential growth and the relationship between continuously compounded interest and exponential growth.	Algebra I M3 Lesson 3: Arithmetic and Geometric Sequences  Algebra I M3 Lesson 4: Why Do Banks Pay YOU to Provide Their Services?
<b>Data Analysis and Probability</b>	<b>Standard: MA.912.DP.1</b> <b>Summarize, represent and interpret categorical and numerical data with one and two variables.</b>	
	<b>MA.912.DP.1.1</b>  Given a set of data, select an appropriate method to represent the data, depending on whether it is numerical or categorical data and on whether it is univariate or bivariate.	Algebra I M2 Topic A: Shapes and Centers of Distributions  Algebra I M2 Topic C: Categorical Data on Two Variables

Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.DP.1.2</b></p> <p>Interpret data distributions represented in various ways. State whether the data is numerical or categorical, whether it is univariate or bivariate and interpret the different components and quantities in the display.</p>	<p>Algebra I M2 Topic A: Shapes and Centers of Distributions</p> <p>Algebra I M2 Topic C: Categorical Data on Two Variables</p>
	<p><b>MA.912.DP.1.3</b></p> <p>Explain the difference between correlation and causation in the contexts of both numerical and categorical data.</p>	<p>Algebra I M2 Lesson 19: Interpreting Correlation</p>
	<p><b>MA.912.DP.1.4</b></p> <p>Estimate a population total, mean or percentage using data from a sample survey; develop a margin of error through the use of simulation.</p>	<p>Algebra I M2 Topic B: Describing Variability and Comparing Distributions</p>
<p><b>Standard: MA.912.DP.2</b>  <b>Solve problems involving univariate and bivariate numerical data.</b></p>		
	<p><b>MA.912.DP.2.3</b></p> <p>Fit a linear function to bivariate numerical data that suggests a linear association and interpret the slope and y-intercept of the model. Use the model to solve real-world problems in terms of the context of the data.</p>	<p>Algebra I M2 Topic D: Numerical Data on Two Variables</p>
	<p><b>MA.912.DP.2.4</b></p> <p>Given a scatter plot that represents bivariate numerical data, assess the fit of a given linear function by plotting and analyzing residuals.</p>	<p>Algebra I M2 Topic D: Numerical Data on Two Variables</p>

Strand	Benchmark	Aligned Components of <i>Eureka Math</i>
	<p><b>MA.912.DP.2.5</b></p> <p>Given a scatter plot with a line of fit and residuals, determine the strength and direction of the correlation. Interpret strength and direction within a real-world context.</p>	Algebra I M2 Topic D: Numerical Data on Two Variables
	<p><b>Standard: MA.912.DP.3</b>  <b>Solve problems involving categorical data.</b></p>	
	<p><b>MA.912.DP.3.1</b></p> <p>Construct a two-way frequency table summarizing bivariate categorical data. Interpret joint and marginal frequencies and determine possible associations in terms of a real-world context.</p>	Algebra I M2 Topic C: Categorical Data on Two Variables
	<p><b>MA.912.DP.3.2</b></p> <p>Given marginal and conditional relative frequencies, construct a two-way relative frequency table summarizing categorical bivariate data.</p>	Algebra I M2 Topic C: Categorical Data on Two Variables
	<p><b>MA.912.DP.3.3</b></p> <p>Given a two-way relative frequency table or segmented bar graph summarizing categorical bivariate data, interpret joint, marginal and conditional relative frequencies in terms of a real-world context.</p>	Algebra I M2 Topic C: Categorical Data on Two Variables