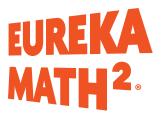
GREAT MINDS



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

When the original *Eureka Math*® curriculum was released, it quickly became the most widely used K-5 mathematics curriculum in the country. Now, the Great Minds® 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 Math² 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 Math² 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 Eureka Math<sup>2</sup>

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

#### **Functions**

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

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

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

#### MA.8.F.1.1

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. 8 M6 Lesson 1: Motion and Speed

8 M6 Lesson 2: Definition of a Function

8 M6 Lesson 4: More Examples of Functions

8 M6 Lesson 5: Graphs of Functions and Equations

Math 1 M3 Topic A: Functions and Their Graphs

### **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 Eureka Math<sup>2</sup>

#### MA.8.DP.1.3

Given a scatter plot with a linear association, informally fit a straight line.

Math 1 M2 Lesson 23: Using Lines to Model Bivariate Quantitative Data

Math 1 M2 Lesson 24: Modeling Relationships with a Line

Math 1 M2 Lesson 25: Calculating and Analyzing Residuals

Math 1 M2 Lesson 27: Interpreting Correlation

### **Algebraic Reasoning**

MA.912.AR.1 Interpret and rewrite algebraic expressions and equations in equivalent forms.

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

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

MA.912.AR.1.1	Math 1 M1 Lesson 4: Interpreting Linear Expressions
Identify and interpret parts of an equation or 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.	Math 1 M5 Lesson 7: Exponential Functions  Math 1 M5 Lesson 14: Exponential Growth  Math 1 M5 Lesson 15: Exponential Decay  Math 1 M5 Lesson 16: Modeling Populations  Math 1 M5 Lesson 22: Modeling the Temperature of Objects Cooling Over Time
MA.912.AR.1.2	Math 1 M1 Lesson 10: Rearranging Formulas
Rearrange equations or formulas to isolate a quantity of interest.	

### **Algebraic Reasoning**

MA.912.AR.2 Write, solve and graph linear equations, functions and inequalities in one and two variables.

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

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

MA.912.AR.2.1	Math 1 M1 Lesson 5: Printing Presses
Given a real-world context, write and solve one-variable multi-step linear equations.	Math 1 M1 Lesson 6: Solution Sets of Equations and Inequalities in One Variable  Math 1 M1 Lesson 7: Solving Linear Equations in One Variable  Math 1 M1 Lesson 8: Some Potential Dangers When Solving Equations  Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable

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

MA.912.AR.2.2	Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables
Write a linear two-variable equation	Math 1 M2 Lesson 3: Creating Linear Equations in Two Variables
to represent the relationship between two quantities from a graph, a written	Math 1 M2 Lesson 6: Proving the Parallel Criterion
description or a table of values within a mathematical or real-world context.	Math 1 M2 Lesson 7: Equations of Parallel and Perpendicular Lines
	Math 1 M4 Lesson 5: Proving the Perpendicular Criterion
MA.912.AR.2.3	Math 1 M2 Lesson 6: Proving the Parallel Criterion
Write a linear two-variable equation for	Math 1 M2 Lesson 7: Equations of Parallel and Perpendicular Lines
a line that is parallel or perpendicular to a given line and goes through a given point.	Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically
	Math 1 M4 Lesson 5: Proving the Perpendicular Criterion
MA.912.AR.2.4	Math 1 M3 Topic A: Functions and Their Graphs
Given a table, equation or written	Math 1 M3 Lesson 9: Identifying Key Features of a Function and Its Graph
description of a linear function, graph	Math 1 M3 Lesson 11: Comparing Functions
that function, and determine and interpret its key features.	
MA.912.AR.2.5	Math 1 M3 Lesson 2: Interpreting and Using Function Notation
Solve and graph mathematical and	Math 1 M3 Lesson 3: Representing, Naming, and Evaluating Functions
real-world problems that are modeled with linear functions. Interpret key features and determine constraints	Math 1 M3 Lesson 4: The Graph of a Function
	Math 1 M3 Lesson 7: Representations of Functions
in terms of the context.	Math 1 M3 Lesson 9: Identifying Key Features of a Function and Its Graph
	Math 1 M3 Lesson 11: Comparing Functions

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

MA.912.AR.2.6	Math 1 M1 Lesson 6: Solution Sets of Equations and Inequalities in One Variable
Given a mathematical or real-world context, write and solve one-variable linear inequalities, including compound inequalities. Represent solutions algebraically or graphically.	Math 1 M1 Lesson 11: Solving Linear Inequalities in One Variable  Math 1 M1 Lesson 12: Solution Sets of Compound Statements  Math 1 M1 Lesson 13: Solving and Graphing Compound Inequalities  Math 1 M1 Lesson 15: Solving Absolute Value Inequalities
MA.912.AR.2.7  Write two-variable linear inequalities to represent relationships between quantities from a graph or a written description within a mathematical or real-world context.	Math 1 M2 Lesson 13: Solution Sets of Linear Inequalities in Two Variables  Math 1 M2 Lesson 14: Graphing Linear Inequalities in Two Variables  Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities  Math 1 M6 Lesson 10: Designing a Fundraiser
MA.912.AR.2.8  Given a mathematical or real-world context, graph the solution set to a two-variable linear inequality.	Math 1 M2 Lesson 13: Solution Sets of Linear Inequalities in Two Variables  Math 1 M2 Lesson 14: Graphing Linear Inequalities in Two Variables

### **Algebraic Reasoning**

MA.912.AR.3 Write, solve and graph quadratic equations, functions and inequalities in one and two variables.

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

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

MA.912.AR.3.4	A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form			
Write a quadratic function to represent	A1 M4 Lesson 12: Using Symmetry to Graph Quadratic Functions from Standard Form			
the relationship between two quantities from a graph, a written description or a table of values within a mathematical	A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts			
	A1 M4 Lesson 25: Maximizing Area			
or real-world context.	A1 M4 Lesson 26: Modeling Data with Quadratic Functions			
	A1 M4 Lesson 27: Search and Rescue Helicopter			
	A1 M6 Lesson 7: World Record Doughnut			
MA.912.AR.3.5	A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form			
Given the <i>x</i> -intercepts and another point on the graph of a quadratic function, write the equation for the function.	A1 M4 Lesson 12: Using Symmetry to Graph Quadratic Functions from Standard Form			
MA.912.AR.3.7	A1 M4 Lesson 4: Graphs of Quadratic Functions			
Given a table, equation or written	A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form			
description of a quadratic function, graph that function, and determine and interpret its key features.	A1 M4 Lesson 12: Using Symmetry to Graph Quadratic Functions from Standard Form			
	A1 M4 Lesson 19: Transforming the Graphs of Quadratic Functions			
	A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts			
	A1 M4 Lesson 25: Maximizing Area			
	A1 M4 Lesson 26: Modeling Data with Quadratic Functions			
	A1 M4 Lesson 27: Search and Rescue Helicopter			

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

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Solve and graph mathematical and real-world problems that are modeled with quadratic functions. Interpret key features and determine constraints in terms of the context.

A1 M4 Lesson 1: Falling Objects

A1 M4 Lesson 2: Projectile Motion

A1 M4 Lesson 3: Analyzing Functions That Model Projectile Motion

A1 M4 Lesson 11: Graphing Quadratic Functions from Factored Form

A1 M4 Lesson 12: Using Symmetry to Graph Quadratic Functions from Standard Form

A1 M4 Lesson 18: The Quadratic Formula and Zeros of a Function

A1 M4 Lesson 21: Completing the Square to Graph Quadratic Functions

A1 M4 Lesson 23: Creating Equations of Quadratic Functions to Model Contexts

A1 M4 Lesson 25: Maximizing Area

A1 M4 Lesson 26: Modeling Data with Quadratic Functions

A1 M4 Lesson 27: Search and Rescue Helicopter

### **Algebraic Reasoning**

MA.912.AR.4 Write, solve and graph absolute value equations, functions and inequalities in one and two variables.

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

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

MA.912.AR.4.1  Given a mathematical or real-world context, write and solve one-variable absolute value equations.	Math 1 M1 Lesson 14: Solving Absolute Value Equations  Math 1 M1 Lesson 16: Applying Absolute Value
MA.912.AR.4.2  Given a mathematical or real-world context, write and solve one-variable absolute value inequalities. Represent solutions algebraically or graphically.	Math 1 M1 Lesson 15: Solving Absolute Value Inequalities  Math 1 M1 Lesson 16: Applying Absolute Value

### **Algebraic Reasoning**

MA.912.AR.5 Write, solve and graph exponential and logarithmic equations and functions in one and two variables.

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

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

MA.912.AR.5.3	Math 1 M5 Topic C: Exponential Growth and Decay
Given a mathematical or real-world	Math 1 M5 Lesson 20: World Population Prediction
context, classify an exponential function as representing growth or decay.	Math 1 M5 Lesson 21: A Closer Look at Populations
MA.912.AR.5.4	Math 1 M5 Lesson 7: Exponential Functions
Write an exponential function	Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs
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.	Math 1 M5 Lesson 14: Exponential Growth
	Math 1 M5 Lesson 15: Exponential Decay
	Math 1 M5 Topic D: Comparing Linear and Exponential Models
	Math 1 M6 Lesson 8: The Deal
MA.912.AR.5.6	Math 1 M5 Lesson 8: Graphing Exponential Functions
Given a table, equation or written	Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)
description of an exponential function, graph that function and determine its key features.	Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between $0$ and $1$ )

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

MA.912.AR.5.7	M	A.	91	12.	Α	R.	5.	7
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Solve and graph mathematical and real-world problems that are modeled with exponential functions. Interpret key features and determine domain constraints in terms of the context.

Math 1 M5 Topic A: Arithmetic and Geometric Sequences

Math 1 M5 Lesson 7: Exponential Functions

Math 1 M5 Lesson 8: Graphing Exponential Functions

Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)

Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1)

Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs

Math 1 M5 Topic C: Exponential Growth and Decay

Math 1 M5 Topic D: Comparing Linear and Exponential Models

Math 1 M6 Lesson 8: The Deal

### **Algebraic Reasoning**

MA.912.AR.9 Write and solve a system of two- and three-variable equations and inequalities that describe quantities or relationships.

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

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

MA.912.AR.9.1	Math 1 M2 Topic B: Systems of Linear Equations in Two Variables
Given a mathematical or real-world context, write and solve a system of two-variable linear equations algebraically or graphically.	
MA.912.AR.9.3	Math 1 M2 Topic B: Systems of Linear Equations in Two Variables
Given a mathematical or real-world context, solve a system consisting of two-variable linear or non-linear equations algebraically or graphically.	Math 1 M3 Lesson 10: Using Graphs to Solve Equations  Math 1 M5 Lesson 11: Solving Equations Containing Exponential Expressions

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

MA.912.AR.9.4	Math 1 M2 Lesson 16: Solution Sets of Systems of Linear Inequalities
Graph the solution set of a system	Math 1 M2 Lesson 17: Graphing Solution Sets of Systems of Linear Inequalities
of two-variable linear inequalities.	Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities
	Math 1 M6 Lesson 10: Designing a Fundraiser
MA.912.AR.9.5	Math 1 M2 Lesson 16: Solution Sets of Systems of Linear Inequalities
Graph the solution set of a system	Math 1 M2 Lesson 17: Graphing Solution Sets of Systems of Linear Inequalities
of two-variable inequalities.	Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities
	Math 1 M6 Lesson 10: Designing a Fundraiser
MA.912.AR.9.6	Math 1 M2 Lesson 8: Low-Flow Showerhead
Given a real-world context, represent constraints as systems of linear equations or inequalities. Interpret solutions to problems as viable or non-viable options.	Math 1 M2 Lesson 12: Applications of Systems of Equations
	Math 1 M2 Lesson 17: Graphing Solution Sets of Systems of Linear Inequalities
	Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities
	Math 1 M6 Lesson 10: Designing a Fundraiser
MA.912.AR.9.7	A1 M4 Lesson 24: Another Look at Systems of Equations
Given a real-world context, represent	Math 1 M2 Lesson 8: Low-Flow Showerhead
constraints as systems of linear and non-linear equations or inequalities. Interpret solutions to problems as viable or non-viable options.	Math 1 M2 Lesson 12: Applications of Systems of Equations
	Math 1 M2 Lesson 17: Graphing Solution Sets of Systems of Linear Inequalities
	Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities
	Math 1 M6 Lesson 10: Designing a Fundraiser

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

MA.912.AR.9.8  Solve real-world problems involving linear programming in two variables.	Math 1 M2 Lesson 17: Graphing Solution Sets of Systems of Linear Inequalities  Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities  Math 1 M6 Lesson 10: Designing a Fundraiser	
MA.912.AR.9.10  Solve and graph mathematical and real-world problems that are modeled with piecewise functions. Interpret key features and determine constraints in terms of the context.	A1 M3 Lesson 14: Piecewise Linear Functions A1 M3 Lesson 15: The Absolute Value Function A1 M3 Lesson 16: Step Functions A1 M3 Lesson 17: Piecewise Linear Functions in Context Math 1 M3 Lesson 12: Sketching Graphs of Functions from Verbal Descriptions Math 1 M3 Lesson 13: Modeling Elevation as a Function of Time	

### **Algebraic Reasoning**

MA.912.AR.10 Solve problems involving sequences and series.

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

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

MA.912.AR.10.1  Given a mathematical or real-world context, write and solve problems involving arithmetic sequences.	Math 1 M4 Lesson 26: Sierpinski Triangle  Math 1 M5 Lesson 5: Arithmetic and Geometric Sequences  Math 1 M5 Lesson 6: Representations of Arithmetic and Geometric Sequences  Math 1 M6 Lesson 8: The Deal
MA.912.AR.10.2  Given a mathematical or real-world context, write and solve problems involving geometric sequences.	Math 1 M4 Lesson 26: Sierpinski Triangle  Math 1 M5 Lesson 5: Arithmetic and Geometric Sequences  Math 1 M5 Lesson 6: Representations of Arithmetic and Geometric Sequences  Math 1 M6 Lesson 8: The Deal

### **Functions**

MA.912.F.1 Understand, compare and analyze properties of functions.

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

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

MA.912.F.1.1	Math 1 M3 Lesson 7: Representations of Functions		
Given an equation or graph that defines	Math 1 M5 Topic A: Arithmetic and Geometric Sequences		
a function, determine the function type.  Given an input-output table, determine	Math 1 M5 Lesson 7: Exponential Functions		
a function type that could represent it.	Math 1 M5 Lesson 13: Calculating Interest		
	Math 1 M5 Lesson 16: Modeling Populations		
	Math 1 M6 Lesson 11: A Vanishing Sea		
MA.912.F.1.2	Math 1 M3 Lesson 1: The Definition of a Function		
Given a function represented in function	Math 1 M3 Lesson 2: Interpreting and Using Function Notation		
notation, evaluate the function for an input in its domain. For a real-world	Math 1 M3 Lesson 3: Representing, Naming, and Evaluating Functions		
context, interpret the output.	Math 1 M3 Lesson 7: Representations of Functions		
	Math 1 M5 Lesson 1: Exploring Patterns		
	Math 1 M5 Lesson 2: The Recursive Challenge		
	Math 1 M5 Lesson 3: Recursive Formulas for Sequences		
	Math 1 M5 Lesson 4: Explicit Formulas for Sequences		
MA.912.F.1.3	Math 1 M5 Lesson 17: Average Rate of Change		
Calculate and interpret the average	Math 1 M5 Lesson 18: Analyzing Exponential Growth		
rate of change of a real-world situation represented graphically, algebraically or in a table over a specified interval.	Math 1 M5 Lesson 19: Comparing Growth of Functions		
	Math 1 M5 Lesson 23: Modeling an Invasive Species Population		

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

MA.912.F.1.5	8 M6 Lesson 7: Interpreting Rate of Change and Initial Value			
Compare key features of linear functions each represented algebraically, graphically, in tables or written descriptions.	8 M6 Lesson 8: Comparing Functions  Math 1 M3 Lesson 9: Identifying Key Features of a Function and Its Graph  Math 1 M3 Lesson 11: Comparing Functions			
MA.912.F.1.6	Math 1 M3 Lesson 11: Comparing Functions			
Compare key features of linear and nonlinear functions each represented	Math 1 M5 Lesson 13: Calculating Interest			
	Math 1 M5 Lesson 16: Modeling Populations			
algebraically, graphically, in tables or written descriptions.	Math 1 M5 Lesson 19: Comparing Growth of Functions			
·	Math 1 M5 Lesson 20: World Population Prediction			
	Math 1 M5 Lesson 21: A Closer Look at Populations			
	Math 1 M5 Lesson 23: Modeling an Invasive Species Population			
MA.912.F.1.7	Math 1 M3 Lesson 11: Comparing Functions			
Compare key features of two functions each represented algebraically, graphically, in tables or written descriptions.				

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

MA.912.F.1.8	Math 1 M5 Lesson 13: Calculating Interest		
Determine whether a linear, quadratic	Math 1 M5 Lesson 16: Modeling Populations		
or exponential function best models	Math 1 M5 Lesson 20: World Population Prediction		
a given real-world situation.	Math 1 M5 Lesson 21: A Closer Look at Populations		
	Math 1 M5 Lesson 23: Modeling an Invasive Species Population		
	Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data		
	Math 1 M6 Lesson 3: Analyzing Paint Splatters		
	Math 1 M6 Lesson 11: A Vanishing Sea		
	Supplemental material is necessary to address quadratic models.		
MA.912.F.1.9	Supplemental material is necessary to address this standard.		
Determine whether a function is even, odd or neither when represented algebraically, graphically or in a table.			

### **Functions**

MA.912.F.2 Identify and describe the effects of transformations on functions. Create new functions given transformations.

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

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

MA.912.F.2.1	Math 1 M3 Topic D: Transformations of Functions		
Identify the effect on the graph or table of a given function after replacing $f(x)$ by $f(x) + k$ , $kf(x)$ , $f(kx)$ and $f(x + k)$ for specific values of $k$ .	Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)  Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1)  Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs		

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

MA.912.F.2.2  Identify the effect on the graph of a given function of two or more transformations defined by adding a real number to the x- or y-values or multiplying the x- or y-values by a real number.	Math 1 M3 Topic D: Transformations of Functions  Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)  Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1)  Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs
<b>MA.912.F.2.3</b> Given the graph or table of $f(x)$ and the graph or table of $f(x) + k$ , $kf(x)$ , $f(kx)$ and $f(x + k)$ , state the type of transformation and find the value of the real number $k$ .	Math 1 M3 Topic D: Transformations of Functions  Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)  Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1)  Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs
MA.912.F.2.4  Given the graph or table of values of two or more transformations of a function, state the type of transformation and find the values of the real number that defines the transformation.	Math 1 M3 Topic D: Transformations of Functions  Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)  Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1)  Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs
MA.912.F.2.5  Given a table, equation or graph that represents a function, create a corresponding table, equation or graph of the transformed function defined by adding a real number to the x- or y-values or multiplying the x- or y-values by a real number.	Math 1 M3 Topic D: Transformations of Functions  Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1)  Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1)  Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs

### **Functions**

MA.912.F.3 Create new functions from existing functions.

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

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

MA.912.F.3.1	Supplemental material is necessary to address this standard.
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.	
MA.912.F.3.2	Math 1 M5 Lesson 22: Modeling the Temperature of Objects Cooling Over Time
Given a mathematical or real-world context, combine two or more functions, limited to linear, quadratic, exponential and polynomial, using arithmetic operations. When appropriate, include domain restrictions for the new function.	Supplemental material is necessary to fully address this standard.
MA.912.F.3.3	Supplemental material is necessary to address this standard.
Solve mathematical and real-world problems involving functions that have been combined using arithmetic operations.	

### **Financial Literacy**

MA.912.FL.3 Describe the advantages and disadvantages of short-term and long-term purchases.

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

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

MA.912.FL.3.1	Math 1 M5 Lesson 13: Calculating Interest			
Compare simple, compound and	Math 1 M5 Lesson 18: Analyzing Exponential Growth			
continuously compounded interest over time.	Supplemental material is necessary to address continuously compounded interest.			
MA.912.FL.3.2	Math 1 M5 Lesson 13: Calculating Interest			
Solve real-world problems involving simple, compound and continuously compounded interest.	Math 1 M5 Lesson 18: Analyzing Exponential Growth			
	Supplemental material is necessary to address continuously compounded interest.			
MA.912.FL.3.4	Math 1 M5 Lesson 13: Calculating Interest			
Explain the relationship between	Math 1 M5 Lesson 18: Analyzing Exponential Growth			
simple interest and linear growth.  Explain the relationship between compound interest and exponential growth and the relationship between continuously compounded interest and exponential growth.	Supplemental material is necessary to address continuously compounded interest.			

### **Geometric Reasoning**

MA.912.GR.1 Prove and apply geometric theorems to solve problems.

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

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

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Prove triangle congruence or similarity using Side-Side-Side, Side-Angle-Side, Angle-Side-Angle, Angle-Angle-Side, Angle-Angle and Hypotenuse-Leg.

Math 1 M4 Lesson 18: Side-Angle-Side

Math 1 M4 Lesson 19: Angle-Angle-Angle and Side-Side-Side

Math 1 M4 Lesson 20: Angle-Side-Angle

Math 1 M4 Lesson 21: Side-Side-Angle and Hypotenuse-Leg

### **Geometric Reasoning**

MA.912.GR.2 Apply properties of transformations to describe congruence or similarity.

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

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

#### MA.912.GR.2.1

Given a preimage and image, describe the transformation and represent the transformation algebraically using coordinates. Math 1 M4 Lesson 2: Translations of the Coordinate Plane

Math 1 M4 Lesson 3: Rotations of the Coordinate Plane

Math 1 M4 Lesson 4: Reflections of the Coordinate Plane

Math 1 M4 Lesson 5: Proving the Perpendicular Criterion

Math 1 M4 Lesson 13: Sequences of Basic Rigid Motions

Math 1 M4 Lesson 14: Transformations of the Coordinate Plane

Math 1 M4 Lesson 15: Designs with Rigid Motions

Math 1 M4 Lesson 16: Congruent Figures

#### MA.912.GR.2.2

Identify transformations that do or do not preserve distance.

Math 1 M4 Lesson 1: Geometric Transformations

Math 1 M4 Lesson 2: Translations of the Coordinate Plane

Math 1 M4 Lesson 3: Rotations of the Coordinate Plane

Math 1 M4 Lesson 4: Reflections of the Coordinate Plane

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

MA.912.GR.2.3	Math 1 M4 Lesson 12: Reflective Symmetry and Rotational Symmetry		
Identify a sequence of transformations	Math 1 M4 Lesson 13: Sequences of Basic Rigid Motions		
that will map a given figure onto itself or onto another congruent or similar figure.	Math 1 M4 Lesson 14: Transformations of the Coordinate Plane		
MA.912.GR.2.4	Math 1 M4 Lesson 12: Reflective Symmetry and Rotational Symmetry		
Determine symmetries of reflection,	Math 1 M4 Lesson 15: Designs with Rigid Motions		
symmetries of rotation and symmetries of translation of a geometric figure.	Supplemental material is necessary to address symmetries of translation.		
MA.912.GR.2.5	Math 1 M4 Lesson 2: Translations of the Coordinate Plane		
Given a geometric figure and a sequence	Math 1 M4 Lesson 3: Rotations of the Coordinate Plane		
of transformations, draw the transformed figure on a coordinate plane.	Math 1 M4 Lesson 4: Reflections of the Coordinate Plane		
rigure on a coordinate plane.	Math 1 M4 Lesson 5: Proving the Perpendicular Criterion		
	Math 1 M4 Lesson 8: Reflections of the Plane		
	Math 1 M4 Lesson 9: Rotations of the Plane		
	Math 1 M4 Lesson 10: Rotations of the Plane with Bisected and Copied Angles		
	Math 1 M4 Lesson 11: Translations of the Plane		
	Math 1 M4 Lesson 13: Sequences of Basic Rigid Motions		
	Math 1 M4 Lesson 14: Transformations of the Coordinate Plane		
	Math 1 M4 Lesson 15: Designs with Rigid Motions		
	Math 1 M4 Lesson 16: Congruent Figures		

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

MA.912.GR.2.6	Math 1 M4 Lesson 16: Congruent Figures		
Apply rigid transformations to map one figure onto another to justify that the two figures are congruent.			
MA.912.GR.2.7	Math 1 M4 Lesson 17: Congruent Triangles		
Justify the criteria for triangle	Math 1 M4 Lesson 18: Side-Angle-Side		
congruence using the definition of congruence in terms of rigid transformations.	Math 1 M4 Lesson 19: Angle-Angle and Side-Side-Side		
	Math 1 M4 Lesson 20: Angle-Side-Angle		
	Math 1 M4 Lesson 21: Side-Side-Angle and Hypotenuse-Leg		

### **Geometric Reasoning**

MA.912.GR.3 Use coordinate geometry to solve problems or prove relationships.

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

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

MA.912.GR.3.2	Math 1 M2 Lesson 6: Proving the Parallel Criterion
Given a mathematical context, use	Math 1 M2 Lesson 7: Equations of Parallel and Perpendicular Lines
coordinate geometry to classify or justify definitions, properties and	Math 1 M2 Lesson 19: The Distance Formula
theorems involving circles, triangles	Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically
or quadrilaterals.	Supplemental material is necessary to address definitions, properties, and theorems involving circles.

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

MA.912.GR.3.3	Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically
Use coordinate geometry to solve mathematical and real-world geometric problems involving lines, circles, triangles and quadrilaterals.	Supplemental material is necessary to address solving problems involving circles.
MA.912.GR.3.4	Math 1 M2 Lesson 21: Using Coordinates to Determine Perimeters and Areas of Figures
Use coordinate geometry to solve mathematical and real-world problems on the coordinate plane involving perimeter or area of polygons.	Math 1 M6 Lesson 11: A Vanishing Sea  Supplemental material is necessary to fully address this standard.

### **Geometric Reasoning**

MA.912.GR.4 Use geometric measurement and dimensions to solve problems.

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

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

MA.912.GR.4.4	Math 1 M2 Lesson 21: Using Coordinates to Determine Perimeters and Areas of Figures
Solve mathematical and real-world	Math 1 M6 Lesson 11: A Vanishing Sea
problems involving the area of two-dimensional figures.	Supplemental material is necessary to fully address this standard.

### **Geometric Reasoning**

MA.912.GR.5 Make formal geometric constructions with a variety of tools and methods.

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

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

MA.912.GR.5.1	Math 1 M4 Lesson 6: Compass and Straightedge Constructions
Construct a copy of a segment or an angle.	Math 1 M4 Lesson 7: Constructing Perpendicular Lines
	Math 1 M4 Lesson 8: Reflections of the Plane
	Math 1 M4 Lesson 10: Rotations of the Plane with Bisected and Copied Angles
	Math 1 M4 Lesson 11: Translations of the Plane
	Math 1 M4 Lesson 22: Validating Triangle and Angle Constructions
	Math 1 M4 Lesson 23: Validating Perpendicular Line Constructions
	Math 1 M4 Lesson 26: Sierpinski Triangle
MA.912.GR.5.2	Math 1 M4 Lesson 6: Compass and Straightedge Constructions
Construct the bisector of a segment or an angle, including the perpendicular bisector of a line segment.	Math 1 M4 Lesson 7: Constructing Perpendicular Lines
	Math 1 M4 Lesson 8: Reflections of the Plane
	Math 1 M4 Lesson 10: Rotations of the Plane with Bisected and Copied Angles
	Math 1 M4 Lesson 11: Translations of the Plane
	Math 1 M4 Lesson 22: Validating Triangle and Angle Constructions
	Math 1 M4 Lesson 23: Validating Perpendicular Line Constructions
	Math 1 M4 Lesson 26: Sierpinski Triangle
MA.912.GR.5.4	Math 1 M4 Lesson 24: Squares Inscribed in Circles
Construct a regular polygon inscribed in a circle. Regular polygons are limited to triangles, quadrilaterals and hexagons.	Math 1 M4 Lesson 25: Regular Hexagons and Equilateral Triangles Inscribed in Circles

### **Data Analysis and Probability**

MA.912.DP.1 Summarize, represent and interpret categorical and numerical data with one and two variables.

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

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

MA.912.DP.1.1	Math 1 M1 Lesson 17: Distributions and Their Shapes
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.	Math 1 M1 Lesson 18: Describing the Center of a Distribution
	Math 1 M1 Lesson 19: Using Center to Compare Data Distributions
	Math 1 M2 Lesson 22: Relationships Between Quantitative Variables
	Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
	Math 1 M6 Lesson 1: Using Data to Edit Digital Photography
	Math 1 M6 Topic B: Modeling with Categorical Data
MA.912.DP.1.3	Math 1 M2 Lesson 27: Interpreting Correlation
Explain the difference between	Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
correlation and causation in the contexts of both numerical and categorical data.	Math 1 M6 Topic B: Modeling with Categorical Data

### **Data Analysis and Probability**

MA.912.DP.2 Solve problems involving univariate and bivariate numerical data.

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

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

MA.912.DP.2.1	Math 1 M1 Topic D: Univariate Data
For two or more sets of numerical univariate data, calculate and compare the appropriate measures of center and measures of variability, accounting for possible effects of outliers. Interpret any notable features of the shape of the data distribution.	

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

MA.912.DP.2.4	Math 1 M2 Lesson 23: Using Lines to Model Bivariate Quantitative Data
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	Math 1 M2 Lesson 24: Modeling Relationships with a Line
	Math 1 M2 Lesson 25: Calculating and Analyzing Residuals
	Math 1 M2 Lesson 27: Interpreting Correlation
to solve real-world problems in terms	Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
of the context of the data.	Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data
	Math 1 M6 Lesson 3: Analyzing Paint Splatters
	Math 1 M6 Lesson 11: A Vanishing Sea
MA.912.DP.2.5	Math 1 M2 Lesson 25: Calculating and Analyzing Residuals
Given a scatter plot that represents	Math 1 M2 Lesson 26: Analyzing Residuals
bivariate numerical data, assess the fit	Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data
of a given linear function by plotting and analyzing residuals.	Math 1 M6 Lesson 3: Analyzing Paint Splatters
MA.912.DP.2.6	Math 1 M2 Lesson 27: Interpreting Correlation
Given a scatter plot with a line of fit	Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
and residuals, determine the strength and direction of the correlation.	Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data
Interpret strength and direction within	Math 1 M6 Lesson 3: Analyzing Paint Splatters
a real-world context.	
MA.912.DP.2.7	Math 1 M2 Lesson 27: Interpreting Correlation
Compute the correlation coefficient of a	Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
linear model using technology. Interpret the strength and direction of the	Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data
correlation coefficient.	Math 1 M6 Lesson 3: Analyzing Paint Splatters

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

#### MA.912.DP.2.8

Fit a quadratic function to bivariate numerical data that suggests a quadratic association and interpret any intercepts or the vertex of the model. Use the model to solve real-world problems in terms of the context of the data.

Supplemental material is necessary to address this standard.

#### MA.912.DP.2.9

Fit an exponential function to bivariate numerical data that suggests an exponential association. Use the model to solve real-world problems in terms of the context of the data.

Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data

Math 1 M6 Lesson 3: Analyzing Paint Splatters

Math 1 M6 Lesson 11: A Vanishing Sea

### **Data Analysis and Probability**

MA.912.DP.3 Solve problems involving categorical data.

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

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

#### MA.912.DP.3.1

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.

Math 1 M6 Topic B: Modeling with Categorical Data

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

MA.912.DP.3.2	Math 1 M6 Topic B: Modeling with Categorical Data
Given marginal and conditional relative frequencies, construct a two-way relative frequency table summarizing categorical bivariate data.	
MA.912.DP.3.3	Math 1 M6 Topic B: Modeling with Categorical Data
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.	
MA.912.DP.3.4	Math 1 M6 Topic B: Modeling with Categorical Data
Given a relative frequency table, construct and interpret a segmented bar graph.	
MA.912.DP.3.5	Math 1 M6 Topic B: Modeling with Categorical Data
Solve real-world problems involving univariate and bivariate categorical data.	Supplemental material is necessary to address real-world problems involving univariate categorical data.

### **Logic and Discrete Theory**

MA.912.LT.4 Develop an understanding of the fundamentals of propositional logic, arguments and methods of proof.

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

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

#### MA.912.LT.4.7

Identify and give examples of undefined terms; axioms; theorems; proofs, including proofs using mathematical induction; and inductive and deductive reasoning. Math 1 M4 Lesson 2: Translations of the Coordinate Plane

Math 1 M4 Lesson 3: Rotations of the Coordinate Plane

Math 1 M4 Lesson 5: Proving the Perpendicular Criterion

Math 1 M4 Topic D: Rigid Motions and Congruence

Supplemental material is necessary to address axioms and proofs using mathematical induction.