## 7-8 | Florida's B.E.S.T. Standards for Mathematics Correlation to Eureka Math ${ }^{2 ®}$

When the original Eureka Math ${ }^{\circledR}$ curriculum was released, it quickly became the most widely used $\mathrm{K}-5$ mathematics curriculum in the country. Now, the Great Minds ${ }^{\circledR}$ teacher-writers have created Eureka Math ${ }^{2 ®}$, 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 ${ }^{2}$ 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 ${ }^{2}$ employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering highquality 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 ${ }^{2}$ 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 ${ }^{2}$ 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.

## Digital Engagement

The digital elements of Eureka Math ${ }^{2}$ 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 Math² |
| :---: | :---: |
| MA.K12.MTR.1.1 <br> 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 <br> 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 <br> 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 <br> 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 <br> 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 <br> 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 <br> 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. |

## Number Sense and Operations

## MA.7.NSO. 1 Rewrite numbers in equivalent forms.

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

## Aligned Components of Eureka Math²

## MA.7.NSO.1.1

Know and apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions, limited to whole-number exponents and rational number bases.

## MA.7.NSO.1.2

Rewrite rational numbers in different but equivalent forms including fractions, mixed numbers, repeating decimals and percentages to solve mathematical and real-world problems.

6 M4 Topic A: Numerical Expressions

7-8 M1 Lesson 9: Decimal Expansions of Rational Numbers

Supplemental material is necessary to fully address this standard.

## Number Sense and Operations

## MA.7.NSO. 2 Add, subtract, multiply and divide rational numbers.

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

Aligned Components of Eureka Math ${ }^{2}$

## MA.7.NSO.2.1

Solve mathematical problems using multi-step order of operations with rational numbers including grouping symbols, whole-number exponents and absolute value.

```
7-8 M1 Lesson 7: Exponential Expressions and Relating Multiplication to Division
7-8 M1 Lesson 8: Dividing Integers and Rational Numbers
```


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

 for Mathematics
## Aligned Components of Eureka Math²

## MA.7.NSO.2.2

Add, subtract, multiply and divide rational numbers with procedural fluency.

## MA.7.NSO.2.3

Solve real-world problems involving any of the four operations with rational numbers.

```
7-8 M1 Topic A: Add and Subtract Rational Numbers
7-8 M1 Topic B: Multiply and Divide Rational Numbers
7-8 M1 Lesson 1: Adding Integers and Rational Numbers
7-8 M1 Lesson 3: Finding Distances to Find Differences
7-8 M1 Lesson 4: Subtracting Integers
7-8 M1 Lesson 5: Subtracting Rational Numbers
7-8 M1 Lesson 6: Multiplying Integers and Rational Numbers
7-8 M1 Lesson 8: Dividing Integers and Rational Numbers
```


## Algebraic Reasoning

 MA.7.AR. 1 Rewrite algebraic expressions in equivalent forms.Florida's B.E.S.T. Standards for Mathematics

## Aligned Components of Eureka Math²

| MA.7.AR.1.1 | $7-8$ M2 Lesson 2: Using Equivalent Expressions to Solve Equations |
| :--- | :--- |
| Apply properties of operations to add and <br> subtract linear expressions with rational <br> coefficients. |  |
| MA.7.AR.1.2 | $7-8$ M2 Lesson 2: Using Equivalent Expressions to Solve Equations |
| Determine whether two linear expressions |  |
| are equivalent. |  |

## Algebraic Reasoning

## MA.7.AR. 2 Write and solve equations and inequalities in one variable.

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

## Aligned Components of Eureka Math ${ }^{2}$

## MA.7.AR.2.1

Write and solve one-step inequalities in one variable within a mathematical context and represent solutions algebraically or graphically.

## MA.7.AR.2.2

Write and solve two-step equations in one variable within a mathematical or real-world context, where all terms are rational numbers.

```
7-8 M2 Lesson 4: Using Equations to Solve Inequalities
7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
```

7-8 M2 Lesson 1: Finding Unknown Angle Measures
7-8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations
7-8 M2 Lesson 3: Solving Equations
7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

## Algebraic Reasoning

## MA.7.AR. 3 Use percentages and proportional reasoning to solve problems.

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

## MA.7.AR.3.1

Apply previous understanding of percentages and ratios to solve multi-step real-world percent problems.

## MA.7.AR.3.2

Apply previous understanding of ratios to solve real-world problems involving proportions.

7-8 M2 Topic D: Percents and Proportional Relationships
7-8 M2 Lesson 16: Applying Proportional Reasoning
7-8 M2 Lesson 17: Using Proportional Reasoning to Solve Multi-Step Problems

7-8 M2 Lesson 17: Using Proportional Reasoning to Solve Multi-Step Problems
7-8 M2 Lesson 18: Handstand Sprint

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

Aligned Components of Eureka Math ${ }^{2}$

## MA.7.AR.3.3

Solve mathematical and real-world problems involving the conversion of units across different measurement systems.

Supplemental material is necessary to address this standard.

## Algebraic Reasoning

## MA.7.AR. 4 Analyze and represent two-variable proportional relationships.

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

Aligned Components of Eureka Math ${ }^{2}$

| MA.7.AR.4.1 | $7-8$ M2 Lesson 12: An Experiment with Ratios and Rates |
| :--- | :--- |
| Determine whether two quantities have <br> a proportional relationship by examining <br> a table, graph or written description. | $7-8$ M2 Lesson 13: Exploring Tables of Proportional Relationships |
| $7-8$ M2 Lesson 14: Exploring Graphs of Proportional Relationships |  |
| $7-8$ M2 Lesson 19: Proportional Reasoning and Percents |  |
| MA.7.AR.4.2 | $7-8$ M2 Lesson 14: Exploring Graphs of Proportional Relationships |
| Determine the constant of proportionality <br> within a mathematical or real-world <br> context given a table, graph or written <br> description of a proportional relationship. | $7-8$ M2 Lesson 15: Relating Representations of Proportional Relationships |
| MA.7.AR.4.3 M2 Lesson 16: Applying Proportional Reasoning <br> Given a mathematical or real-world <br> context, graph proportional relationships <br> from a table, equation or a written <br> description. | Supplemental material is necessary to address this standard. |

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

 for Mathematics
## Aligned Components of Eureka Math²

## MA.7.AR.4.4

Given any representation of a proportional relationship, translate the representation to a written description, table or equation.

## MA.7.AR.4.5

Solve real-world problems involving proportional relationships.
7-8 M2 Lesson 15: Relating Representations of Proportional Relationships

7-8 M2 Lesson 14: Exploring Graphs of Proportional Relationships

7-8 M2 Lesson 15: Relating Representations of Proportional Relationships

7-8 M2 Lesson 16: Applying Proportional Reasoning

7-8 M2 Lesson 17: Using Proportional Reasoning to Solve Multi-Step Problems

7-8 M2 Lesson 18: Handstand Sprint

## Geometric Reasoning

## MA.7.GR. 1 Solve problems involving two-dimensional figures, including circles.

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

## Aligned Components of Eureka Math ${ }^{2}$

## MA.7.GR.1.1

Apply formulas to find the areas of trapezoids, parallelograms and rhombi.

6 M5 Lesson 1: The Area of a Parallelogram
6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane
6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane
6 M5 Lesson 7: Areas of Trapezoids and Other Polygons
Supplemental material is necessary to address formulas to find the areas of rhombi.

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

 for Mathematics
## Aligned Components of Eureka Math ${ }^{2}$

| MA.7.GR.1.2 <br> Solve mathematical or real-world <br> problems involving the area of polygons <br> or composite figures by decomposing <br> them into triangles or quadrilaterals. | 6 M5 Topic A: Areas of Polygons |
| :--- | :--- |
| MA.7.GR.1.3 Topic B: Problem Solving with Area <br> Explore the proportional relationship <br> between circumferences and diameters <br> of circles. Apply a formula for the <br> circumference of a circle to solve <br> mathematical and real-world problems. | 7-8 M3 Lesson 4: Area and Circumference of a Circle <br> 7-8 M3 Lesson 5: Area and Circumference of Circular Regions |
| MA.7.GR.1.4 <br> Explore and apply a formula to find the <br> area of a circle to solve mathematical <br> and real-world problems. | $7-8$ M3 Lesson 5: Area and Circumference of Circular Regions |

## Geometric Reasoning

## MA.7.GR. 2 Solve problems involving three-dimensional figures, including right circular cylinders.

## Florida's B.E.S.T. Standards for Mathematics <br> Aligned Components of Eureka Math ${ }^{2}$

## MA.7.GR.2.1

Given a mathematical or real-world context, find the surface area of a right circular cylinder using the figure's net.

## MA.7.GR.2.2

Solve real-world problems involving surface area of right circular cylinders.

## MA.7.GR.2.3

Solve mathematical and real-world problems involving volume of right circular cylinders.

## Data Analysis and Probability

MA.7.DP. 1 Represent and interpret numerical and categorical data.
Florida's B.E.S.T. Standards for Mathematics

## Aligned Components of Eureka Math ${ }^{2}$

## MA.7.DP.1.1

Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers.

```
M6 Topic B: Mean and Mean Absolute Deviation
6 \text { M6 Lesson 12: Using the Median to Describe the Center}
6 M6 Lesson 13: Using the Interquartile Range to Describe Variability
6 \text { M6 Lesson 15: More Practice with Box Plots}
6 \text { M6 Lesson 16: Interpreting Box Plots}
6 \text { M6 Lesson 19: Comparing Data Distributions}
6M6 Lesson 22: Presenting Statistical Projects
```


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

 for Mathematics
## Aligned Components of Eureka Math ${ }^{2}$

## MA.7.DP.1.2

Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations.

## MA.7.DP.1.3

Given categorical data from a random sample, use proportional relationships to make predictions about a population.

## MA.7.DP.1.4

Use proportional reasoning to construct, display and interpret data in circle graphs.

## MA.7.DP.1.5

Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.

## 7-8 M6 Topic D: Comparing Populations

Supplemental material is necessary to address this standard.

Supplemental material is necessary to address this standard.

## Data Analysis and Probability

MA.7.DP. 2 Develop an understanding of probability. Find and compare experimental and theoretical probabilities.

## Florida's B.E.S.T. Standards for Mathematics <br> Aligned Components of Eureka Math ${ }^{2}$

| MA.7.DP.2.1 <br> Determine the sample space for a simple <br> experiment. | $7-8$ M6 Lesson 4: Multistage Experiments |
| :--- | :--- |
| MA.7.DP.2.2 | $7-8$ M6 Lesson 6: The Law of Large Numbers |
| Given the probability of a chance |  |
| event, interpret the likelihood of it |  |
| occurring. Compare the probabilities |  |
| of chance events. |  |

## 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 Eureka Math²

## MA.8.NSO.1.1 <br> 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.

## MA.8.NSO.1.2

Plot, order and compare rational and irrational numbers, represented in various forms.

## MA.8.NSO.1.3

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.

$$
\begin{aligned}
& \text { 7-8 M1 Lesson 20: Using the Pythagorean Theorem } \\
& \text { 7-8 M1 Lesson 21: Approximating Values of Roots } \\
& \text { 7-8 M1 Lesson 22: Rational and Irrational Numbers } \\
& \text { 7-8 M1 Lesson 23: Revisiting Equations with Squares and Cubes } \\
& \text { 7-8 M2 Lesson 6: Expressing Repeating Decimals as Fractions }
\end{aligned}
$$

7-8 M1 Lesson 21: Approximating Values of Roots

7-8 M1 Lesson 22: Rational and Irrational Numbers

[^0]Florida's B.E.S.T. Standards for Mathematics

## Aligned Components of Eureka Math ${ }^{2}$

## MA.8.NSO.1.4

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.

## MA.8.NSO.1.5

Add, subtract, multiply and divide numbers expressed in scientific notation with procedural fluency.
7-8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation
7-8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation

7-8 M1 Lesson 17: Get to the Point
7-8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation
7-8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation
7-8 M1 Lesson 17: Get to the Point
7-8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation7-8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation
7-8 M1 Lesson 17: Get to the Point
7-8 M1 Lesson 18: Solving Equations with Squares and Cubes
7-8 M1 Lesson 20: Using the Pythagorean Theorem
7-8 M1 Lesson 21: Approximating Values of Roots
7-8 M1 Lesson 23: Revisiting Equations with Squares and Cubes
7-8 M2 Lesson 11: Using Linear Equations to Solve Real-World Problems
7-8 M2 Lesson 18: Handstand Sprint
7-8 M2 Lesson 23: What Is the Best Deal?

## Algebraic Reasoning

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

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

## Aligned Components of Eureka Math ${ }^{2}$

| MA.8.AR.1.1 <br> Apply the Laws of Exponents to generate <br> equivalent algebraic expressions, <br> limited to integer exponents and <br> monomial bases. | 7-8 M1 Lesson 11: Products of Exponential Expressions with Positive Whole-Number Exponents <br> 7-8 Lesson 12: More Properties of Exponents |
| :--- | :--- |
| 7-8 M1 Lesson 13: Making Sense of Integer Exponents |  |$\quad$| MA.8.AR.1.2 |
| :--- |
| Apply properties of operations to multiply <br> two linear expressions with rational <br> coefficients. |
| A1 M1 Lesson 4: Adding and Subtracting Polynomial Expressions |
| A1 M1 Lesson 5: Multiplying Polynomial Expressions |
| MA.8.AR.1.3 <br> Rewrite the sum of two algebraic <br> expressions having a common monomial <br> factor as a common factor multiplied <br> by the sum of two algebraic expressions. |
| A1 M1 Lesson 5: Multiplying Polynomial Expressions Lesson 6: Polynomial Identities |

## 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 Eureka Math ${ }^{2}$

## MA.8.AR.2.1

Solve multi-step linear equations in one variable, with rational number coefficients. Include equations with variables on both sides.

## MA.8.AR.2.2

Solve two-step linear inequalities in one variable and represent solutions algebraically and graphically.

## MA.8.AR.2.3

Given an equation in the form of $x^{2}=p$ and $x^{3}=q$, where $p$ is a whole number and $q$ is an integer, determine the real solutions.

7-8 M2 Lesson 4: Using Equations to Solve Inequalities
7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

## 7-8 M1 Lesson 18: Solving Equations with Squares and Cubes

7-8 M1 Lesson 19: The Pythagorean Theorem
7-8 M1 Lesson 20: Using the Pythagorean Theorem
7-8 M1 Lesson 21: Approximating Values of Roots
7-8 M1 Lesson 23: Revisiting Equations with Squares and Cubes

## 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 ${ }^{2}$

| MA.8.AR.3.1 | 7-8 M2 Lesson 12: An Experiment with Ratios and Rates |
| :---: | :---: |
| Determine if a linear relationship is also | 7-8 M2 Lesson 13: Exploring Tables of Proportional Relationships |
| a proportional relationship. | 7-8 M2 Lesson 14: Exploring Graphs of Proportional Relationships |
|  | 7-8 M2 Lesson 19: Proportional Reasoning and Percents |
| MA.8.AR.3.2 | 7-8 M4 Lesson 4: Comparing Proportional Relationships |
| Given a table, graph or written description of a linear relationship, determine the slope. | 7-8 M4 Lesson 5: Proportional Relationships and Slope |
| MA.8.AR.3.3 | 7-8 M4 Lesson 5: Proportional Relationships and Slope |
| Given a table, graph or written description of a linear relationship, write an equation in slope-intercept form. | 7-8 M4 Lesson 6: Slopes of Rising Lines and Falling Lines |
|  | 7-8 M4 Lesson 7: Using Coordinates to Find Slope |
|  | 7-8 M4 Lesson 8: Slope-Intercept Form of the Equation of a Line |
|  | 7-8 M5 Lesson 6: Linear Functions and Rate of Change |
|  | 7-8 M5 Lesson 7: Interpreting Rate of Change and Initial Value |
|  | 7-8 M5 Lesson 23: Applications of Volume |
| MA.8.AR.3.4 | 7-8 M5 Lesson 6: Linear Functions and Rate of Change |
| 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. | 7-8 M5 Lesson 7: Interpreting Rate of Change and Initial Value |
|  | 7-8 M5 Lesson 23: Applications of Volume |
|  |  |

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

## MA.8.AR.3.5

Given a real-world context, determine and interpret the slope and $y$-intercept of a two-variable linear equation from a written description, a table, a graph or an equation in slope-intercept form.

## Aligned Components of Eureka Math ${ }^{2}$

7-8 M5 Lesson 6: Linear Functions and Rate of Change
7-8 M5 Lesson 7: Interpreting Rate of Change and Initial Value
7-8 M5 Lesson 23: Applications of Volume

## 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 Eureka Math ${ }^{2}$

## MA.8.AR.4.1

Given a system of two linear equations and a specified set of possible solutions, determine which ordered pairs satisfy the system of linear equations.

## MA.8.AR.4.2

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.
7-8 M4 Lesson 11: Introduction to Systems of Linear Equations

7-8 M4 Lesson 12: Identifying Solutions
Supplemental material is necessary to address this standard.

7-8 M4 Topic C: Solving Systems of Linear Equations
7-8 M4 Topic D: Writing and Solving Systems of Linear Equations

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

 for Mathematics
## Aligned Components of Eureka Math²

## MA.8.AR.4.3

Given a mathematical or real-world context, solve systems of two linear equations by graphing

```
7-8 M4 Topic C: Solving Systems of Linear Equations
7-8 M4 Topic D: Writing and Solving Systems of Linear Equations
```


## Functions

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

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

## Aligned Components of Eureka Math ${ }^{2}$

## 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.

## MA.8.F.1.2

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.

7-8 M5 Lesson 1: Motion and Speed
7-8 M5 Lesson 2: Definition of a Function
7-8 M5 Lesson 4: More Examples of Functions
7-8 M5 Lesson 5: Graphs of Functions and Equations
A1 M3 Topic A: Functions and Their Graphs

7-8 M5 Lesson 3: Linear Functions and Proportionality
7-8 M5 Lesson 6: Linear Functions and Rate of Change
7-8 M5 Lesson 10: Graphs of Nonlinear Functions

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

## Aligned Components of Eureka Math²

## MA.8.F.1.3

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.

7-8 M5 Lesson 9: Increasing and Decreasing Functions<br>7-8 M5 Lesson 10: Graphs of Nonlinear Functions

## 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 <br> for Mathematics <br> Aligned Components of Eureka Math ${ }^{2}$

| MA.8.GR.1.1 | $7-8$ M1 Lesson 19: The Pythagorean Theorem |
| :--- | :--- |
| Apply the Pythagorean Theorem to solve <br> mathematical and real-world problems <br> involving unknown side lengths in right <br> triangles. | $7-8$ M3 Lesson 16: Proving the Converse of the Pythagorean Theorem <br> $7-8 ~ M 3 ~ L e s s o n ~ 17: ~ A p p l i c a t i o n s ~ o f ~ t h e ~ P y t h a g o r e a n ~ T h e o r e m ~$ |
|  | $7-8$ M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths |
| M-8 M5 Lesson 19: Volumes of Pyramids and Cones |  |
| Apply the Pythagorean Theorem to solve <br> mathematical and real-world problems <br> involving the distance between two <br> points in a coordinate plane. | $7-8$ M3 Lesson 17: Applications of the Pythagorean Theorem |

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

## Aligned Components of Eureka Math ${ }^{2}$

| MA.8.GR.1.3 | 7-8 M1 Lesson 19: The Pythagorean Theorem |
| :---: | :---: |
| 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. | 7-8 M3 Lesson 1: Sketching and Constructing Geometric Figures <br> 7-8 M3 Lesson 2: Conditions of Unique Triangles <br> 7-8 M3 Lesson 3: Exploring and Constructing Circles <br> 7-8 M3 Lesson 16: Proving the Converse of the Pythagorean Theorem <br> 7-8 M3 Lesson 17: Applications of the Pythagorean Theorem <br> 7-8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths <br> 7-8 M5 Lesson 19: Volumes of Pyramids and Cones |
| MA.8.GR.1.4 <br> Solve mathematical problems involving the relationships between supplementary, complementary, vertical or adjacent angles. | 7-8 M2 Lesson 1: Finding Unknown Angle Measures <br> 7-8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations <br> 7-8 M2 Lesson 7: Solving Multi-Step Equations |
| MA.8.GR.1.5 <br> Solve problems involving the relationships of interior and exterior angles of a triangle. | 7-8 M3 Lesson 12: Lines Cut by a Transversal <br> 7-8 M3 Lesson 13: Angle Sum of a Triangle <br> 7-8 M3 Lesson 14: Exterior Angles of Triangles <br> 7-8 M3 Lesson 28: Exploring Angles in Similar Triangles <br> 7-8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths |
| MA.8.GR.1.6 <br> Develop and use formulas for the sums of the interior angles of regular polygons by decomposing them into triangles. | Supplemental material is necessary to address this standard. |

## Geometric Reasoning

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

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

## Aligned Components of Eureka Math ${ }^{2}$

## MA.8.GR.2.1

Given a preimage and image generated by a single transformation, identify the transformation that describes the relationship.

## MA.8.GR.2.2

Given a preimage and image generated by a single dilation, identify the scale factor that describes the relationship.

## MA.8.GR.2.4

Solve mathematical and real-world problems involving proportional relationships between similar triangles.

```
7-8 M3 Lesson 27: Similar Figures
7-8 M3 Lesson 28: Exploring Angles in Similar Triangles
7-8 M3 Lesson 27: Similar Figures
7-8 M3 Lesson 28: Exploring Angles in Similar Triangles
```

7-8 M3 Lesson 9: Rigid Motions on the Coordinate Plane
7-8 M3 Lesson 22: Dilations
7-8 M3 Lesson 23: Using Lined Paper to Explore Dilations
7-8 M3 Lesson 24: Figures and Dilations
7-8 M3 Lesson 25: The Shadowy Hand
7-8 M3 Lesson 26: Dilations on the Coordinate Plane
7-8 M3 Lesson 9: Rigid Motions on the Coordinate Plane
7-8 M3 Lesson 22: Dilations
7-8 M3 Lesson 23: Using Lined Paper to Explore Dilations
7-8 M3 Lesson 24: Figures and Dilations
7-8 M3 Lesson 25: The Shadowy Hand
7-8 M3 Lesson 26: Dilations on the Coordinate Plane
8 M3 Lesson 12: Exploring Angles in Similar Triangles
8 M3 Lesson 13: Similar Triangles
8 M3 Topic D: Applications of Similar Figures

7-8 M3 Lesson 9: Rigid Motions on the Coordinate Plane
7-8 M3 Lesson 22: Dilations
7-8 M3 Lesson 23: Using Lined Paper to Explore Dilations
7-8 M3 Lesson 24: Figures and Dilations
7-8 M3 Lesson 25: The Shadowy Hand
7-8 M3 Lesson 26: Dilations on the Coordinate Plane

7-8 M3 Lesson 9: Rigid Motions on the Coordinate Plane
7-8 M3 Lesson 22: Dilations
7-8 M3 Lesson 23: Using Lined Paper to Explore Dilations
7-8 M3 Lesson 24: Figures and Dilations
7-8 M3 Lesson 25: The Shadowy Hand
7-8 M3 Lesson 26: Dilations on the Coordinate Plane

8 M3 Lesson 12: Exploring Angles in Similar Triangles
8 M3 Lesson 13: Similar Triangles
8 M3 Topic D: Applications of Similar Figures

## 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 Math²

## MA.8.DP.1.1

Given a set of real-world bivariate numerical data, construct a scatter plot or a line graph as appropriate for the context.

## MA.8.DP.1.2

Given a scatter plot within a real-world context, describe patterns of association.

## MA.8.DP.1.3

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

$$
\begin{aligned}
& \text { 7-8 M6 Lesson 18: Scatter Plots } \\
& \text { 7-8 M6 Lesson 19: Patterns in Scatter Plots } \\
& \hline \text { 7-8 M6 Lesson 18: Scatter Plots } \\
& \text { 7-8 M6 Lesson 19: Patterns in Scatter Plots } \\
& \hline \text { A1 M2 Lesson 17: Modeling Relationships with a Line } \\
& \text { A1 M2 Lesson 18: Calculating and Analyzing Residuals } \\
& \text { A1 M2 Lesson 20: Interpreting Correlation } \\
& \text { A1 M6 Topic A: Modeling Bivariate Quantitative Data }
\end{aligned}
$$

## 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 Eureka Math ${ }^{2}$

## MA.8.DP.2.1

Determine the sample space for
a repeated experiment.

## 7-8 | Florida's B.E.S.T. Standards for Mathematics Correlation to Eureka Math²

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

## Aligned Components of Eureka Math²

MA.8.DP.2.2
Find the theoretical probability of an
event related to a repeated experiment.

## MA.8.DP.2.3

Solve real-world problems involving probabilities related to single or repeated experiments, including making predictions based on theoretical probability.


[^0]:    7-8 M1 Lesson 11: Products of Exponential Expressions with Positive Whole-Number Exponents
    7-8 M1 Lesson 12: More Properties of Exponents
    7-8 M1 Lesson 13: Making Sense of Integer Exponents

