# Mathematics I | South Carolina College and Career Ready Standards for Mathematics Correlation to Eureka Math ${ }^{\text {®® }}$ 

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 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 ${ }^{2}$ 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.

## Math 1 | South Carolina College and Career Ready Standards for Mathematics Correlation to Eureka Math ${ }^{2}$

## Mathematical Process Standards

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

1. 

Make sense of problems and persevere in solving them.
2.

Reason both contextually and abstractly.
3.

Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.
4.

Connect mathematical ideas and real-world situations through modeling.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

Communicate mathematically and approach mathematical situations with precision.
7.

Identify and utilize structure and patterns.

Lessons in every module engage students in the mathematical process standards. These are indicated in margin notes included with every lesson.

## Algebra

## Creating Equations

## South Carolina College and Career Ready Standards for Mathematics

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

## A1.ACE. 1

Create and solve equations and inequalities in one variable that model real-world problems involving linear, quadratic, simple rational, and exponential relationships. Interpret the solutions and determine whether they are reasonable.

## A1.ACE. 2

Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using appropriate labels, units, and scales.

## A2.ACE. 3

Use systems of equations and inequalities to represent constraints arising in real-world situations. Solve such systems using graphical and analytical methods, including linear programming. Interpret the solution within the context of the situation.

Math 1 M1 Lesson 5: Printing Presses
Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable
Math 1 M1 Lesson 11: Solving Linear Inequalities in One Variable
Math 1 M1 Lesson 16: Applying Absolute Value
Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables

Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables
Math 1 M2 Lesson 2: Graphing Linear Equations in Two Variables
Math 1 M2 Lesson 3: Creating Linear Equations in Two Variables
Math 1 M2 Lesson 4: Proving Conditional Statements
Math 1 M2 Lesson 5: Proving Biconditional Statements
Math 1 M2 Lesson 8: Low-Flow Showerhead
Math 1 M4 Lesson 5: Proving the Perpendicular Criterion

Math 1 M1 Lesson 9: Writing and Solving Equations 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 16: Applying Absolute Value
Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables
Math 1 M2 Lesson 15: Applications of Linear Inequalities
Math 1 M6 Lesson 10: Designing a Fundraiser

## South Carolina College and Career <br> Ready Standards for Mathematics

## Aligned Components of Eureka Math²

## A1.ACE. 4

Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.

## Algebra

## Reasoning with Equations and Inequalities

## South Carolina College and Career <br> Ready Standards for Mathematics

## Aligned Components of Eureka Math²

## A1.AREI. 1

Understand and justify that the steps taken when solving simple equations in one variable create new equations that have the same solution as the original.

Math 1 M1 Lesson 3: The Commutative, Associative, and Distributive Properties<br>Math 1 M1 Lesson 7: Solving Linear Equations in One Variable<br>Math 1 M1 Lesson 8: Some Potential Dangers When Solving Equations<br>Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable<br>Math 1 M1 Lesson 6: Solution Sets of Equations and Inequalities in One Variable<br>Math 1 M1 Lesson 7: Solving Linear Equations in One Variable<br>Math 1 M1 Lesson 8: Some Potential Dangers When Solving Equations<br>Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable<br>Math 1 M1 Lesson 11: Solving Linear Inequalities in One Variable<br>Math 1 M1 Lesson 14: Solving Absolute Value Equations<br>Math 1 M1 Lesson 15: Solving Absolute Value Inequalities

## South Carolina College and Career <br> Ready Standards for Mathematics

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

## A1.AREI. 5 Math 1 M2 Lesson 10: A New Way to Solve Systems

Justify that the solution to a system of linear equations is not changed when one of the equations is replaced by a linear combination of the other equation.

|  |  |
| :---: | :---: |
| Solve systems of linear equations algebraically and graphically focusing on pairs of linear equations in two variables. | Math 1 M2 Lesson 10: A New Way to Solve Systems <br> Math 1 M2 Lesson 11: The Elimination Method <br> Math 1 M2 Lesson 12: Applications of Systems of Equations |
| A1.AREI.6.a <br> Solve systems of linear equations using the substitution method. | Math 1 M2 Lesson 9: Systems of Linear Equations in Two Variables Math 1 M2 Lesson 10: A New Way to Solve Systems <br> Math 1 M2 Lesson 11: The Elimination Method <br> Math 1 M2 Lesson 12: Applications of Systems of Equations |
| A1.AREI.6.b <br> Solve systems of linear equations using linear combination. | Math 1 M2 Lesson 9: Systems of Linear Equations in Two Variables Math 1 M2 Lesson 10: A New Way to Solve Systems <br> Math 1 M2 Lesson 11: The Elimination Method <br> Math 1 M2 Lesson 12: Applications of Systems of Equations |
| A1.AREI. 10 <br> Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane. | Math 1 M2 Lesson 2: Graphing Linear Equations in Two Variables |

## South Carolina College and Career

Ready Standards for Mathematics

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

## Math 1 M3 Lesson 10: Using Graphs to Solve Equations

Math 1 M5 Lesson 11: Solving Equations Containing Exponential Expressions
Math 1 M5 Lesson 19: Comparing Growth of Functions

Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables
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 16: Solution Sets of Systems of Linear Inequalities
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

## Algebra

## Structure and Expressions

South Carolina College and Career Ready Standards for Mathematics

## A1.ASE. 1

Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions.

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

## Functions

## Building Functions

## South Carolina College and Career Ready Standards for Mathematics

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

## A2.FBF. 1

Write a function that describes a relationship between two quantities.

## A2.FBF.1.a

Write a function that models a relationship between two quantities using both explicit expressions and a recursive process and by combining standard forms using addition, subtraction, multiplication and division to build new functions.

## A2.FBF.1.b

Combine functions using the operations addition, subtraction, multiplication, and division to build new functions that describe the relationship between two quantities in mathematical and real-world situations.

## A2.FBF. 2

Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.

## Math 1 M6 Lesson 3: Analyzing Paint Splatters

Math 1 M6 Lesson 9: Solar System Models

Math 1 M1 Lesson 2: Looking for Patterns
Math 1 M5 Topic A: Arithmetic and Geometric Sequences
Math 1 M5 Lesson 7: Exponential Functions
Math 1 M5 Lesson 13: Calculating Interest
Math 1 M6 Lesson 3: Analyzing Paint Splatters
Math 1 M6 Lesson 8: The Deal
Math 1 M6 Lesson 9: Solar System Models

Math 1 M6 Lesson 8: The Deal

Math 1 M5 Lesson 5: Arithmetic and Geometric Sequences
Math 1 M5 Lesson 6: Representations of Arithmetic and Geometric Sequences

South Carolina College and Career
Ready Standards for Mathematics

## A1.FBF. 3

Describe the effect of the transformations $k f(x), f(x)+k, f(x+k)$, and combinations of such transformations on the graph of $y=f(x)$ for any real number $k$. Find the value of $k$ given the graphs and write the equation of a transformed parent function given its graph.

## Aligned Components of Eureka Math²

## 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

## Interpreting Functions

South Carolina College and Career Ready Standards for Mathematics

## A1.FIF. 1

Extend previous knowledge of a function to apply to general behavior and features of a function.

## A1.FIF.1.a

Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.

This standard is fully addressed by the lessons aligned to its subsections.

## Math 1 M3 Topic A: Functions and Their Graphs

## South Carolina College and Career Ready Standards for Mathematics

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

Represent a function using function notation and explain that $f(x)$ denotes the output of function $f$ that corresponds to the input $x$.
A1.FIF.1.c $\quad$ Math 1 M3 Topic A: Functions and Their Graphs

Understand that the graph of a function labeled as $f$ is the set of all ordered pairs $(x, y)$ that satisfy the equation $y=f(x)$.

## A1.FIF. 2

Evaluate functions and interpret the meaning of expressions involving function notation from a mathematical perspective and in terms of the context when the function describes a real-world situation.

## A2.FIF. 3

Define functions recursively and recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers.

## Math 1 M3 Lesson 2: Interpreting and Using Function Notation

Math 1 M3 Lesson 3: Representing, Naming, and Evaluating Functions
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
Math 1 M3 Topic A: Functions and Their Graphs

Math 1 M3 Topic A: Functions and Their Graphs

Math 1 M5 Topic A: Arithmetic and Geometric Sequences

## South Carolina College and Career Ready Standards for Mathematics

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

## A1.FIF. 4

Interpret key features of a function that models the relationship between two quantities when given in graphical or tabular form. Sketch the graph of a function from a verbal description showing key features. Key features include intercepts; intervals where the function is increasing, decreasing, constant, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity.

## A1.FIF. 5

Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes.

## A1.FIF. 6

Given a function in graphical, symbolic, or tabular form, determine the average rate of change of the function over a specified interval. Interpret the meaning of the average rate of change in a given context.

Math 1 M3 Lesson 4: The Graph of a Function
Math 1 M3 Lesson 13: Modeling Elevation as a Function of Time

## Math 1 M5 Lesson 17: Average Rate of Change

Math 1 M5 Lesson 18: Analyzing Exponential Growth
Math 1 M5 Lesson 19: Comparing Growth of Functions
Math 1 M5 Lesson 23: Modeling an Invasive Species Population

## South Carolina College and Career Ready Standards for Mathematics

## Aligned Components of Eureka Math²

## A1.FIF. 7

Graph functions from their symbolic representations. Indicate key features including intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior and periodicity. Graph simple cases by hand and use technology for complicated cases.

## PC.FIF.7.c

Graph exponential and logarithmic functions, showing intercepts and end behavior.

Math 1 M3 Lesson 5: The Graph of the Equation $y=f(x)$
Math 1 M3 Lesson 6: Using Pseudocode to Compare Graphs of Functions and Graphs of Equations
Math 1 M3 Lesson 7: Representations of 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 M3 Lesson 11: Comparing Functions

## Functions

Linear, Quadratic, and Exponential

## South Carolina College and Career Ready Standards for Mathematics

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

## A1.FLQE. 1

Distinguish between situations that can be modeled with linear functions or exponential functions by recognizing situations in which one quantity changes at a constant rate per unit interval as opposed to those in which a quantity changes by a constant percent rate per unit interval.

Math 1 M5 Lesson 13: Calculating Interest
Math 1 M5 Lesson 16: Modeling Populations
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
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

Math 1 M5 Lesson 18: Analyzing Exponential Growth

Math 1 M5 Lesson 20: World Population Prediction
Math 1 M5 Lesson 21: A Closer Look at Populations

| South Carolina College and Career <br> Ready Standards for Mathematics |
| :--- |
| A1.FLQE.2 <br> Create symbolic representations of linear <br> and exponential functions, including <br> arithmetic and geometric sequences, <br> given graphs, verbal descriptions, <br> and tables. |
| Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs <br> Math 1 M5 Lesson 14: Exponential Growth <br> Math 1 M5 Lesson 15: Exponential Decay <br> A1.FLQE.3 |
| Math 1 M5 Topic D: Comparing Linear and Exponential Models <br> Observe using graphs and tables that <br> a quantity increasing exponentially <br> eventually exceeds a quantity increasing <br> linearly, quadratically, or more generally <br> as a polynomial function. |
| Math 1 M6 Lesson 3: Analyzing Paint Splatters |
| Math 1 M6 Lesson 8: The Deal |
| A1.FLQE.5 <br> Interpret the parameters in a linear <br> or exponential function in terms <br> of the context. |

## Number and Quantity

Quantities

## South Carolina College and Career Ready Standards for Mathematics

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

| A1.NQ. 1 | Math 1 M1 Lesson 1: A Powerful Trio |
| :---: | :---: |
| Use units of measurement to guide the solution of multi-step tasks. Choose and interpret appropriate labels, units, and scales when constructing graphs and other data displays. | Math 1 M3 Lesson 14: Comparing Models for Situations Math 1 M6 Lesson 9: Solar System Models Math 1 M6 Lesson 10: Designing a Fundraiser Math 1 M6 Lesson 11: A Vanishing Sea |
| A1.NQ. 2 <br> Label and define appropriate quantities in descriptive modeling contexts. | Math 1 M1 Lesson 1: A Powerful Trio <br> Math 1 M3 Lesson 14: Comparing Models for Situations <br> Math 1 M6 Lesson 3: Analyzing Paint Splatters <br> Math 1 M6 Lesson 9: Solar System Models <br> Math 1 M6 Lesson 10: Designing a Fundraiser |
| A1.NQ. 3 <br> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities in context. | Math 1 M6 Lesson 9: Solar System Models Math 1 M6 Lesson 11: A Vanishing Sea |

## Geometry

## Congruence

## South Carolina College and Career Ready Standards for Mathematics

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

## G.GCO. 1

Define angle, perpendicular line, parallel line, line segment, ray, circle, and skew in terms of the undefined notions of point, line, and plane. Use geometric figures to represent and describe real-world objects.

## G.GCO. 2

Represent translations, reflections, rotations, and dilations of objects in the plane by using paper folding, sketches, coordinates, function notation, and dynamic geometry software, and use various representations to help understand the effects of simple transformations and their compositions.

## G.GCO. 3

Describe rotations and reflections that carry a regular polygon onto itself and identify types of symmetry of polygons, including line, point, rotational, and self-congruence, and use symmetry to analyze mathematical situations.

Math 1 M4 Lesson 2: Translations of the Coordinate Plane
Math 1 M4 Lesson 3: Rotations of the Coordinate Plane

Math 1 M4 Lesson 1: Geometric Transformations

Math 1 M4 Lesson 12: Reflective Symmetry and Rotational Symmetry

| South Carolina College and Career Ready Standards for Mathematics | Aligned Components of Eureka Math² |
| :---: | :---: |
| G.GCO. 4 <br> Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments. | Math 1 M4 Lesson 2: Translations of the Coordinate Plane <br> Math 1 M4 Lesson 3: Rotations of the Coordinate Plane <br> Math 1 M4 Lesson 4: Reflections of the Coordinate Plane <br> Math 1 M4 Lesson 5: Proving the Perpendicular Criterion <br> Math 1 M4 Lesson 8: Reflections of the Plane <br> Math 1 M4 Lesson 9: Rotations of the Plane <br> Math 1 M4 Lesson 10: Rotations of the Plane with Bisected and Copied Angles <br> Math 1 M4 Lesson 11: Translations of the Plane |
| G.GCO. 5 <br> Predict and describe the results of transformations on a given figure using geometric terminology from the definitions of the transformations, and describe a sequence of transformations that maps a figure onto its image. | Math 1 M4 Lesson 2: Translations of the Coordinate Plane <br> Math 1 M4 Lesson 3: Rotations of the Coordinate Plane <br> Math 1 M4 Lesson 4: Reflections of the Coordinate Plane <br> Math 1 M4 Lesson 5: Proving the Perpendicular Criterion <br> Math 1 M4 Lesson 13: Sequences of Basic Rigid Motions <br> Math 1 M4 Lesson 14: Transformations of the Coordinate Plane <br> Math 1 M4 Lesson 15: Designs with Rigid Motions <br> Math 1 M4 Lesson 16: Congruent Figures |
| G.GCO. 6 <br> Demonstrate that triangles and quadrilaterals are congruent by identifying a combination of translations, rotations, and reflections in various representations that move one figure onto the other. | Math 1 M4 Lesson 17: Congruent Triangles |

## South Carolina College and Career <br> Ready Standards for Mathematics

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

| G.GCO. 7 | Math 1 M4 Lesson 18: Side-Angle-Side |
| :---: | :---: |
| Prove two triangles are congruent by applying the Side-Angle-Side, Angle-Side-Angle, Angle-Angle-Side, and Hypotenuse-Leg congruence conditions. | Math 1 M4 Lesson 19: Angle-Angle-Angle and Side-Side-Side <br> Math 1 M4 Lesson 20: Angle-Side-Angle <br> Math 1 M4 Lesson 21: Side-Side-Angle and Hypotenuse-Leg |
| G.GCO. 11 <br> Construct geometric figures using a variety of tools, including a compass, a straightedge, dynamic geometry software, and paper folding, and use these constructions to make conjectures about geometric relationships. | Math 1 M4 Lesson 6: Compass and Straightedge Constructions <br> Math 1 M4 Lesson 7: Constructing Perpendicular Lines <br> Math 1 M4 Lesson 8: Reflections of the Plane <br> Math 1 M4 Lesson 10: Rotations of the Plane with Bisected and Copied Angles <br> Math 1 M4 Lesson 11: Translations of the Plane <br> Math 1 M4 Lesson 22: Validating Triangle and Angle Constructions <br> Math 1 M4 Lesson 23: Validating Perpendicular Line Constructions <br> Math 1 M4 Lesson 26: Sierpinski Triangle |

## Geometry

## Expressing Geometric Properties with Equations

## South Carolina College and Career Ready Standards for Mathematics

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

## G.GGPE. 4

Use coordinates to prove simple geometric theorems algebraically.
Math 1 M2 Lesson 4: Proving Conditional Statements
Math 1 M2 Lesson 5: Proving Biconditional Statements
Math 1 M2 Lesson 6: Proving the Parallel Criterion
Math 1 M2 Lesson 19: The Distance Formula
Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically

Math 1 M2 Lesson 4: Proving Conditional Statements
Math 1 M2 Lesson 5: Proving Biconditional Statements
Math 1 M2 Lesson 6: Proving the Parallel Criterion

Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically

## South Carolina College and Career

Ready Standards for Mathematics

## G.GGPE. 5

Analyze slopes of lines to determine whether lines are parallel, perpendicular, or neither. Write the equation of a line passing through a given point that is parallel or perpendicular to a given line. Solve geometric and real-world problems involving lines and slope.

## G.GGPE. 7

Use the distance and midpoint formulas to determine distance and midpoint in a coordinate plane, as well as areas of triangles and rectangles, when given coordinates.

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

## Math 1 M2 Lesson 6: Proving the Parallel Criterion

Math 1 M2 Lesson 7: Equations of Parallel and Perpendicular Lines
Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically
Math 1 M4 Lesson 5: Proving the Perpendicular Criterion

Math 1 M2 Lesson 21: Using Coordinates to Determine Perimeters and Areas of Figures
Math 1 M6 Lesson 11: A Vanishing Sea

## Statistics and Probability

## Interpreting Data

## South Carolina College and Career <br> Ready Standards for Mathematics

## Aligned Components of Eureka Math²

## PS.SPID. 1

Select and create an appropriate display, including dot plots, histograms, and box plots, for data that includes only real numbers.
Math 1 M1 Lesson 17: Distributions and Their Shapes
Math 1 M1 Lesson 18: Describing the Center of a Distribution
Math 1 M6 Lesson 1: Using Data to Edit Digital Photography

## South Carolina College and Career <br> Ready Standards for Mathematics

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

## PS.SPID. 2

Use statistics appropriate to the shape of the data distribution to compare center and spread of two or more different data sets that include all real numbers.

## PS.SPID. 3

Summarize and represent data from a single data set. Interpret differences in shape, center, and spread in the context of the data set, accounting for possible effects of extreme data points (outliers).

## PS.SPID. 5

Analyze bivariate categorical data using two-way tables and identify possible associations between the two categories using marginal, joint, and conditional frequencies.

Math 1 M1 Topic D: Univariate Data
Math 1 M6 Lesson 1: Using Data to Edit Digital Photography

Math 1 M1 Topic D: Univariate Data

Math 1 M6 Topic B: Modeling with Categorical Data

## South Carolina College and Career <br> Ready Standards for Mathematics

## Aligned Components of Eureka Math²

## A1.SPID. 6

Using technology, create scatterplots and analyze those plots to compare the fit of linear, quadratic, or exponential models to a given data set. Select the appropriate model, fit a function to the data set, and use the function to solve problems in the context of the data.

Math 1 M2 Lesson 22: Relationships Between Quantitative Variables
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
Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative 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

Math 1 M2 Lesson 24: Modeling Relationships with a Line
Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data

Math 1 M2 Lesson 27: Interpreting Correlation
Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data

## South Carolina College and Career <br> Ready Standards for Mathematics

## Aligned Components of Eureka Math²

## PS.SPID. 9

Differentiate between correlation and causation when describing the relationship between two variables. Identify potential lurking variables which may explain an association between two variables.

## PS.SPID. 10

Create residual plots and analyze those plots to compare the fit of linear, quadratic, and exponential models to a given data set. Select the appropriate model and use it for interpolation.

## Math 1 M2 Lesson 27: Interpreting Correlation

Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data

## Math 1 M2 Lesson 25: Calculating and Analyzing Residuals

Math 1 M2 Lesson 26: Analyzing Residuals
Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data
Math 1 M6 Lesson 3: Analyzing Paint Splatters

