## EUREKA MATH<sup>™</sup>

Teachers and students using Eureka Math find the trademark "Aha!" moments in Eureka Math to be a source of joy and inspiration, lesson after lesson, year after year.ALIGNEDEureka Math is the only curriculum found by EdReports.org to align fully with the Common Core State Standards for Mathematics for all grades, Kindergarten through Grade 8. Great Minds offers detailed analyses which demonstrate how each grade of Eureka Math aligns with specific state standards. Access these free alignment studies at greatminds.org/state-studies.DATASchools and districts nationwide are experiencing student growth and impressive test scores after using Eureka Math. See their stories and data at greatminds.org/data.FULL SUITE OF RESOURCESAs a nonprofit, Great Minds offers the Eureka Math curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at greatminds.org/math/curriculum.The teacher-writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following: 	ABOUT EUREKA MATH	Created by the nonprofit Great Minds, <i>Eureka Math</i> helps teachers deliver unparalleled math instruction that provides students with a deep understanding and fluency in math. Crafted by teachers and math scholars, the curriculum carefully sequences the mathematical progressions to maximize coherence from Prekindergarten through Precalculus—a principle tested and proven to be essential in students' mastery of math.	
Common Core State Standards for Mathematics for all grades, Kindergarten through Grade 8. Great Minds offers detailed analyses which demonstrate how each grade of <i>Eureka Math</i> aligns with specific state standards. Access these free alignment studies at greatminds.org/state-studies.DATASchools and districts nationwide are experiencing student growth and impressive test scores after using <i>Eureka Math</i> . See their stories and data at greatminds.org/data.FULL SUITE OF RESOURCESAs a nonprofit, Great Minds offers the <i>Eureka Math</i> curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at greatminds.org/math/curriculum.The teacher–writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following:Printed material in English and Spanish Digital resourcesDigital resourcesProfessional development Classroom tools and manipulatives			
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• Parent resources

## South Carolina College- and Career-Ready Standards for Mathematics Correlation to *Eureka Math*™

## ALGEBRA 1

The majority of the Algebra 1 South Carolina College- and Career-Ready Standards for Mathematics are fully covered by the Algebra I *Eureka Math* curriculum. The areas where the Algebra 1 South Carolina College- and Career-Ready Standards for Mathematics and Algebra I *Eureka Math* do not align will require the use of *Eureka Math* content from another course. A detailed analysis of alignment is provided in the table below.

## **INDICATORS**

Green indicates that the South Carolina standard is fully addressed in *Eureka Math*.

Yellow indicates that the South Carolina standard may not be completely addressed in *Eureka Math*.

Red indicates that the South Carolina standard is not addressed in *Eureka Math*.

Blue indicates there is a discrepancy between the grade level at which this standard is addressed in the South Carolina standards and in *Eureka Math*.

Mathematical Process Standards	Aligned Components of Eureka Math	
<ul> <li>1: Make sense of problems and persevere in solving them.</li> <li>a. Relate a problem to prior knowledge.</li> <li>b. Recognize there may be multiple entry points to a problem and more than one path to a solution.</li> </ul>	Lessons in every module engage students in making sense of problems and persevering in solving them as required by this standard. This process standard is analogous to the CCSSM Standards for Mathematical Practice 1, which is specifically addressed in the following modules:	
<ul> <li>c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.</li> <li>d. Evaluate the success of an approach to solve a problem and refine it if necessary.</li> </ul>	<ul> <li>Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs</li> <li>Algebra I M2: Descriptive Statistics</li> <li>Algebra I M3: Linear and Exponential Functions</li> <li>Algebra I M4: Polynomial and Quadratic Expressions, Equations, and Functions</li> <li>Algebra I M5: A Synthesis of Modeling with Equations and Functions</li> </ul>	

Mathematical Process Standards	Aligned Components of Eureka Math
<ul> <li>2: Reason both contextually and abstractly.</li> <li>a. Make sense of quantities and their relationships in mathematical and real-world situations.</li> <li>b. Describe a given situation using multiple mathematical representations.</li> <li>c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.</li> <li>d. Connect the meaning of mathematical operations to the context of a given situation.</li> </ul>	<ul> <li>Lessons in every module engage students in reasoning abstractly and quantitatively as required by this standard. This process standard is analogous to the CCSSM Standards for Mathematical Practice 2, which is specifically addressed in the following modules:</li> <li>Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs</li> <li>Algebra I M2: Descriptive Statistics</li> <li>Algebra I M3: Linear and Exponential Functions</li> <li>Algebra I M4: Polynomial and Quadratic Expressions, Equations, and Functions</li> <li>Algebra I M5: A Synthesis of Modeling with Equations and Functions</li> </ul>
<ul> <li>3: Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.</li> <li>a. Construct and justify a solution to a problem.</li> <li>b. Compare and discuss the validity of various reasoning strategies.</li> <li>c. Make conjectures and explore their validity.</li> <li>d. Reflect on and provide thoughtful responses to the reasoning of others.</li> </ul>	Lessons in every module engage students in constructing viable arguments and critiquing the reasoning of others as required by this standard. This process standard is analogous to the CCSSM Standards for Mathematical Practice 3, which is specifically addressed in the following modules: Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs Algebra I M2: Descriptive Statistics

Mathematical Process Standards	Aligned Components of Eureka Math
4: Connect mathematical ideas and real-world situations through modeling.	Lessons in every module engage students in modeling with mathematics as required by this standard. This
a. Identify relevant quantities and develop a model to describe their relationships.	process standard is analogous to the CCSSM Standards for Mathematical Practice 4, which is specifically addressed in the
b. Interpret mathematical models in the context of the situation.	following modules:
c. Make assumptions and estimates to simplify complicated situations.	Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs
d. Evaluate the reasonableness of a model and refine if necessary.	Algebra I M2: Descriptive Statistics
	Algebra I M3: Linear and Exponential Functions
	Algebra I M4: Polynomial and Quadratic Expressions, Equations, and Functions
	Algebra I M5: A Synthesis of Modeling with Equations and Functions

Mathematical Process Standards	Aligned Components of Eureka Math	
<ul> <li>5: Use a variety of mathematical tools effectively and strategically.</li> <li>a. Select and use appropriate tools when solving a mathematical problem.</li> <li>b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.</li> </ul>	<ul> <li>Lessons in every module engage students in using appropriate tools strategically as required by this standard. This process standard is analogous to the CCSSM Standards for Mathematical Practice 5, which is specifically addressed in the following modules:</li> <li>Algebra I M2: Descriptive Statistics</li> <li>Algebra I M4: Polynomial and Quadratic Expressions, Equations, and Functions</li> <li>Algebra I M5: A Synthesis of Modeling with Equations and Functions</li> </ul>	
<ul> <li>6: Communicate mathematically and approach mathematical situations with precision.</li> <li>a. Express numerical answers with the degree of precision appropriate for the context of a situation.</li> <li>b. Represent numbers in an appropriate form according to the context of the situation.</li> <li>c. Use appropriate and precise mathematical language.</li> <li>d. Use appropriate units, scales, and labels.</li> </ul>	<ul> <li>Lessons in every module engage students in attending to precision as required by this standard. This process standard is analogous to the CCSSM Standards for Mathematical Practice 6, which is specifically addressed in the following modules:</li> <li>Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs</li> <li>Algebra I M2: Descriptive Statistics</li> <li>Algebra I M4: Polynomial and Quadratic Expressions, Equations, and Functions</li> <li>Algebra I M5: A Synthesis of Modeling with Equations and Functions</li> </ul>	

Mathematical Process Standards	Aligned Components of Eureka Math
<ul> <li>7: Identify and utilize structure and patterns.</li> <li>a. Recognize complex mathematical objects as being composed of more than one simple object.</li> <li>b. Recognize mathematical repetition in order to make generalizations.</li> </ul>	Lessons in every module engage students in looking for and making use of structure as required by this standard. This process standard is analogous to the CCSSM Standards for Mathematical Practice 7 and 8, which are specifically addressed in the following modules:
c. Look for structures to interpret meaning and develop solution strategies.	<ul> <li>Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs</li> <li>Algebra I M3: Linear and Exponential Functions</li> <li>Algebra I M4: Polynomial and Quadratic Expressions, Equations, and Functions</li> </ul>

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
Arithmetic with Polynomials and Rational Expressions	A1.AAPR.1 Add, subtract, and multiply polynomials and understand that polynomials are closed under these operations. (Limit to linear; quadratic.)	Algebra I M1 Topic B: The Structure of ExpressionsAlgebra I M4 Lessons 1–2: Multiplying and Factoring Polynomial ExpressionsAlgebra I M4 Lessons 3–4: Advanced Factoring Strategies for Quadratic Expressions
<b>Creating</b> <b>Equations</b>	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. (Limit to linear; quadratic; exponential with integer exponents.)	<ul> <li>Algebra I M1 Lesson 18: Equations Involving a Variable Expression in the Denominator</li> <li>Algebra I M1 Topic D: Creating Equations to Solve Problems</li> <li>Algebra I M4 Lesson 6: Solving Basic One-Variable Quadratic Equations</li> <li>Algebra I M4 Lesson 7: Creating and Solving Quadratic Equations in One Variable</li> <li>Algebra I M5 Lesson 6: Modeling a Context from Data</li> <li>Algebra I M5 Lesson 9: Modeling a Context from a Verbal Description</li> </ul>

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	A1.ACE.2	Algebra I M1 Lesson 5: Two Graphing Stories
	Create equations in two or more variables to represent relationships between quantities. Graph the equations on coordinate axes using	Algebra I M1 Lesson 20: Solution Sets to Equations with Two Variables
	appropriate labels, units, and scales. (Limit to linear; quadratic; exponential with integer exponents; direct and indirect variation.)	Algebra I M1 Lesson 23: Solution Sets to Simultaneous Equations
		Algebra I M1 Lesson 24: Applications of Systems of Equations and Inequalities
		Algebra I M1 Lesson 28: Federal Income Tax
		Algebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, $f(x) = a(x - m)(x - n)$
		Algebra I M4 Lesson 12: Completing the Square
		Algebra I M4 Lesson 16: Graphing Quadratic Equations from the Vertex Form, $y = a(x - h)^2 + k$
		Algebra I M4 Lessons 23–24: Modeling with Quadratic Functions
		Algebra I M5: A Synthesis of Modeling with Equations and Functions
	A1.ACE.4	Algebra I M1 Lesson 19: Rearranging Formulas
	Solve literal equations and formulas for a specified variable including equations and formulas that arise in a variety of disciplines.	
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Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
Reasoning with Equations and Inequalities	<b>A1.AREI.1</b> 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.	Algebra I M1 Lesson 12: Solving EquationsAlgebra I M1 Lesson 13: Some Potential Dangers when Solving EquationsAlgebra I M1 Lesson 17: Equations Involving Factored ExpressionsAlgebra I M1 Lesson 18: Equations Involving a Variable Expression in the Denominator
	<b>A1.AREI.3</b> Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs
	<b>A1.AREI.4</b> Solve mathematical and real-world problems involving quadratic equations in one variable.	
	a. Use the method of completing the square to transform any quadratic equation in <i>x</i> into an equation of the form $(x - h)^2 = k$ that has the same solutions. Derive the quadratic formula from this form.	Algebra I M4 Lesson 13: Solving Quadratic Equations by Completing the Square Algebra I M4 Lesson 14: Deriving the Quadratic Formula

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	b. Solve quadratic equations by inspection, taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as <i>a</i> + <i>bi</i> for real numbers <i>a</i> and <i>b</i> . (Limit to non-complex roots.)	Algebra I M4 Lesson 5: The Zero Product PropertyAlgebra I M4 Lesson 6: Solving Basic One-Variable Quadratic EquationsAlgebra I M4 Lesson 7: Creating and Solving Quadratic Equations in One VariableAlgebra I M4 Lesson 13: Solving Quadratic Equations by Completing the SquareAlgebra I M4 Lesson 14: Deriving the Quadratic FormulaAlgebra I M4 Lesson 15: Using the Quadratic Formula
	<b>A1.AREI.5</b> 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.	Algebra I M1 Lesson 23: Solution Sets to Simultaneous Equations
	<b>A1.AREI.6</b> Solve systems of linear equations algebraically and graphically focusing on pairs of linear equations in two variables.	
	a. Solve systems of linear equations using the substitution method.	Algebra II M1 Lesson 31: Systems of Equations Algebra II M1 Lesson 32: Graphing Systems of Equations Algebra II M1 Lesson 36: Overcoming a Third Obstacle to Factoring—What If There Are No Real Number Solutions?

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	b. Solve systems of linear equations using linear combination.	Algebra I M1 Lesson 23: Solution Sets to Simultaneous Equations
	<b>A1.AREI.10</b> Explain that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane.	Algebra I M1 Lesson 20: Solution Sets to Equations with Two Variables
	A1.AREI.11 Solve an equation of the form $f(x) = g(x)$ graphically by identifying the <i>x</i> -coordinate(s) of the point(s) of intersection of the graphs of y = f(x) and $y = g(x)$ . (Limit to linear; quadratic; exponential.)	<ul> <li>Algebra I M3 Lesson 16: Graphs Can Solve Equations Too</li> <li>Algebra II M1 Lesson 36: Overcoming a Third Obstacle to Factoring—What If There Are No Real Number Solutions?</li> <li>Algebra II M3 Lesson 24: Solving Exponential Equations</li> </ul>
	<b>A1.AREI.12</b> Graph the solutions to a linear inequality in two variables.	Algebra I M1 Lesson 21: Solution Sets to Inequalities with Two Variables
Structure and Expressions	<b>A1.ASE.1</b> Interpret the meanings of coefficients, factors, terms, and expressions based on their real-world contexts. Interpret complicated expressions as being composed of simpler expressions. (Limit to linear; quadratic; exponential.)	Algebra I M1 Topic D: Creating Equations to Solve ProblemsAlgebra I M3 Topic A: Linear and Exponential SequencesAlgebra I M4 Topic A: Quadratic Expressions, Equations, Functions, and Their Connection to RectanglesAlgebra I M4 Lesson 12: Completing the SquareAlgebra I M4 Lesson 17: Graphing Quadratic Functions from the Standard Form, $f(x) = ax^2 + bx + c$

Key Concepts	Content Standards for Mathematics	Aligned Components of Eureka Math
	A1.ASE.2	Algebra I M1 Topic B: The Structure of Expressions
	Analyze the structure of binomials, trinomials, and other polynomials in order to rewrite equivalent expressions.	Algebra I M1 Lesson 17: Equations Involving Factored Expressions
		Algebra I M4 Topic A: Quadratic Expressions, Equations, Functions, and Their Connection to Rectangles
		Algebra I M4 Lessons 11–12: Completing the Square
	A1.ASE.3	
	Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.	
	a. Find the zeros of a quadratic function by rewriting it in equivalent factored form and explain the connection between the zeros of the function, its linear factors, the <i>x</i> -intercepts of its graph, and the solutions to the corresponding quadratic equation.	Algebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, $f(x) = a(x - m)(x - n)$ Algebra I M4 Lesson 15: Using the Quadratic Formula

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
Building Functions	A1.FBF.3 Describe the effect of the transformations $kf(x), f(x) + k, f(x + k)$ , 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. (Limit to linear; quadratic; exponential with integer exponents; vertical shift and vertical stretch.)	Algebra I M3 Topic C: Transformations of FunctionsAlgebra I M4 Lesson 19: Translating Graphs of FunctionsAlgebra I M4 Lesson 20: Stretching and Shrinking Graphs of FunctionsAlgebra I M4 Lesson 21: Transformations of the Quadratic Parent Function, $f(x) = x^2$
Interpreting Functions	A1.FIF.1 Extend previous knowledge of a function to apply to general behavior and features of a function. a. Understand that a function from one set	Algebra I M3 Lesson 1: Integer Sequences—Should You
	(called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.	Believe in Patterns? Algebra I M3 Lesson 12: The Graph of the Equation $y = f(x)$
	b. Represent a function using function notation and explain that $f(x)$ denotes the output of function $f$ that corresponds to the input $x$ .	Algebra I M3: Linear and Exponential Functions
	c. Understand that the graph of a function labeled as $f$ is the set of all ordered pairs (x, y) that satisfy the equation $y = f(x)$ .	Algebra I M1 Lesson 20: Solution Sets to Equations with Two Variables

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	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.	Algebra I M3: Linear and Exponential Functions
	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. (Limit to linear; quadratic; exponential.)	Algebra I M3 Lesson 13: Interpreting the Graph of a FunctionAlgebra I M3 Lesson 14: Linear and Exponential Models— Comparing Growth RatesAlgebra I M3 Topic D: Using Functions and Graphs to Solve ProblemsAlgebra I M4 Lesson 8: Exploring the Symmetry in Graphs of Quadratic FunctionsAlgebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, $f(x) = a(x - m)(x - n)$ Algebra I M4 Lesson 10: Interpreting Quadratic Functions from Graphs and TablesAlgebra I M4 Lesson 17: Graphing Quadratic Functions from the Standard Form, $f(x) = ax^2 + bx + c$ Algebra I M4 Lesson 22: Comparing Quadratic, Square Root, and Cube Root Functions Represented in Different WaysAlgebra I M5: A Synthesis of Modeling with Equations and Functions

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	A1.FIF.5	Algebra I M3 Topic B: Functions and Their Graphs
	Relate the domain and range of a function to its graph and, where applicable, to the quantitative relationship it describes. (Limit to linear; quadratic; exponential.)	Algebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, $f(x) = a(x - m)(x - n)$ Algebra I M5 Lesson 1: Analyzing a Graph
		Algebra I M5 Lesson 4: Modeling a Context from a Graph
	A1.FIF.6	Algebra I M3 Lesson 6: Exponential Growth—U.S. Population and World Population
tabular fo change of Interpret change in	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. (Limit to linear; quadratic; exponential.)	Algebra I M3 Topic D: Using Functions and Graphs to Solve Problems
		Algebra I M4 Lesson 8: Exploring the Symmetry in Graphs of Quadratic Functions
		Algebra I M4 Lesson 10: Interpreting Quadratic Functions from Graphs and Tables
		Algebra I M4 Lesson 17: Graphing Quadratic Functions from the Standard Form, $f(x) = ax^2 + bx + c$
		Algebra I M4 Lesson 22: Comparing Quadratic, Square Root, and Cube Root Functions Represented in Different Ways
		Algebra I M5 Lesson 4: Modeling a Context from a Graph

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	A1.FIF.7	Algebra I M3: Linear and Exponential Functions
	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. (Limit to linear; quadratic; exponential only in the form $y = a^x + k$ .)	Algebra I M4 Lesson 8: Exploring the Symmetry in Graphs of Quadratic Functions Algebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, $f(x) = a(x - m)(x - n)$ Algebra I M4 Lesson 16: Graphing Quadratic Equations from the Vertex Form, $y = a(x - h)^2 + k$ Algebra I M4 Lesson 17: Graphing Quadratic Functions from the Standard Form, $f(x) = ax^2 + bx + c$ Algebra I M4 Topic C: Function Transformations and Modeling
	<b>A1.FIF.8</b> Translate between different but equivalent forms of a function equation to reveal and explain different properties of the function. (Limit to linear; quadratic; exponential.)	
	a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context.	Algebra I M4 Lesson 9: Graphing Quadratic Functions from Factored Form, $f(x) = a(x - m)(x - n)$ Algebra I M4 Topic B: Using Different Forms for Quadratic Functions Algebra I M4 Lesson 21: Transformations of the Quadratic Parent Function, $f(x) = x^2$ Algebra I M4 Lesson 23: Modeling with Quadratic Functions

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	A1.FIF.9 Compare properties of two functions given in different representations such as algebraic, graphical, tabular, or verbal. (Limit to linear; quadratic; exponential.)	Algebra I M4 Lesson 22: Comparing Quadratic, Square Root, and Cube Root Functions Represented in Different Ways
Linear, Quadratic, and Exponential	<b>A1.FLQE.1</b> 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.	
	a. Prove that linear functions grow by equal differences over equal intervals and that exponential functions grow by equal factors over equal intervals.	Algebra I M3 Lesson 14: Linear and Exponential Models— Comparing Growth Rates
	A1.FLQE.2 Create symbolic representations of linear and exponential functions, including arithmetic and geometric sequences, given graphs, verbal descriptions, and tables. (Limit to linear; exponential.)	<ul> <li>Algebra I M3: Linear and Exponential Functions</li> <li>Algebra I M5: A Synthesis of Modeling with Equations and Functions</li> <li>Algebra II M3 Lesson 1: Integer Exponents</li> </ul>

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	<b>A1.FLQE.3</b> Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or more generally as a polynomial function.	<ul> <li>Algebra I M3 Lesson 5: The Power of Exponential Growth</li> <li>Algebra I M3 Lesson 6: Exponential Growth–U.S. Population and World Population</li> <li>Algebra I M3 Lesson 14: Linear and Exponential Models– Comparing Growth Rates</li> <li>Algebra I M3 Lesson 21: Comparing Linear and Exponential Models Again</li> </ul>
	A1.FLQE.5 Interpret the parameters in a linear or exponential function in terms of the context. (Limit to linear.)	Algebra I M3 Topic D: Using Functions and Graphs to Solve Problems
Quantities	<b>A1.NQ.1</b> 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.	Algebra I M1: Relationships Between Quantities and Reasoning with Equations and Their Graphs
	<b>A1.NQ.2</b> Label and define appropriate quantities in descriptive modeling contexts.	Algebra I M1 Topic A: Introduction to Functions Studied this Year—Graphing Stories Algebra I M5: A Synthesis of Modeling with Equations and Functions
	<b>A1.NQ.3</b> Choose a level of accuracy appropriate to limitations on measurement when reporting quantities in context.	Algebra I M1 Topic A: Introduction to Functions Studied this Year—Graphing StoriesAlgebra I M5: A Synthesis of Modeling with Equations and Functions

Real Number System	<b>A1.NRNS.1</b> Rewrite expressions involving simple radicals and rational exponents in different forms.	Algebra II M3 Topic A: Real Numbers
	<b>A1.NRNS.2</b> Use the definition of the meaning of rational exponents to translate between rational exponent and radical forms.	Algebra II M3 Topic A: Real Numbers
	<b>A1.NRNS.3</b> Explain why the sum or product of rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.	Algebra I M4 Lesson 13: Solving Quadratic Equations by Completing the Square
Interpreting Data	<b>A1.SPID.6</b> 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.	Algebra I M2 Lessons 12–13: Relationships Between Two Numerical Variables Algebra I M2 Lesson 19: Interpreting Correlation Algebra I M2 Lesson 20: Analyzing Data Collected on Two Variables Algebra I M5 Lesson 7: Modeling a Context from Data

Key Concepts	<b>Content Standards for Mathematics</b>	Aligned Components of Eureka Math
	A1.SPID.7	Algebra I M2 Lesson 18: Analyzing Residuals
	Create a linear function to graphically model data from a real-world problem and interpret	Algebra I M2 Lesson 19: Interpreting Correlation
	the meaning of the slope and intercept(s) in the context of the given problem.	Algebra I M2 Lesson 20: Analyzing Data Collected on Two Variables
		Algebra I M5 Lesson 7: Modeling a Context from Data
	A1.SPID.8	Algebra I M2 Lesson 19: Interpreting Correlation
	Using technology, compute and interpret the correlation coefficient of a linear fit.	Algebra I M2 Lesson 20: Analyzing Data Collected on Two Variables
		Algebra I M5 Lesson 7: Modeling a Context from Data