Grade 6 | South Carolina College- and Career-Ready Mathematics Standards Correlation to *Eureka Math*®

About *Eureka Math*

Created by Great Minds®, a mission-driven Public Benefit Corporation, *Eureka Math*® 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.

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

Aligned

Great Minds offers detailed analyses that demonstrate how each grade of *Eureka Math* aligns with specific state standards. Access these free alignment studies at greatminds.org/state-studies.

Data

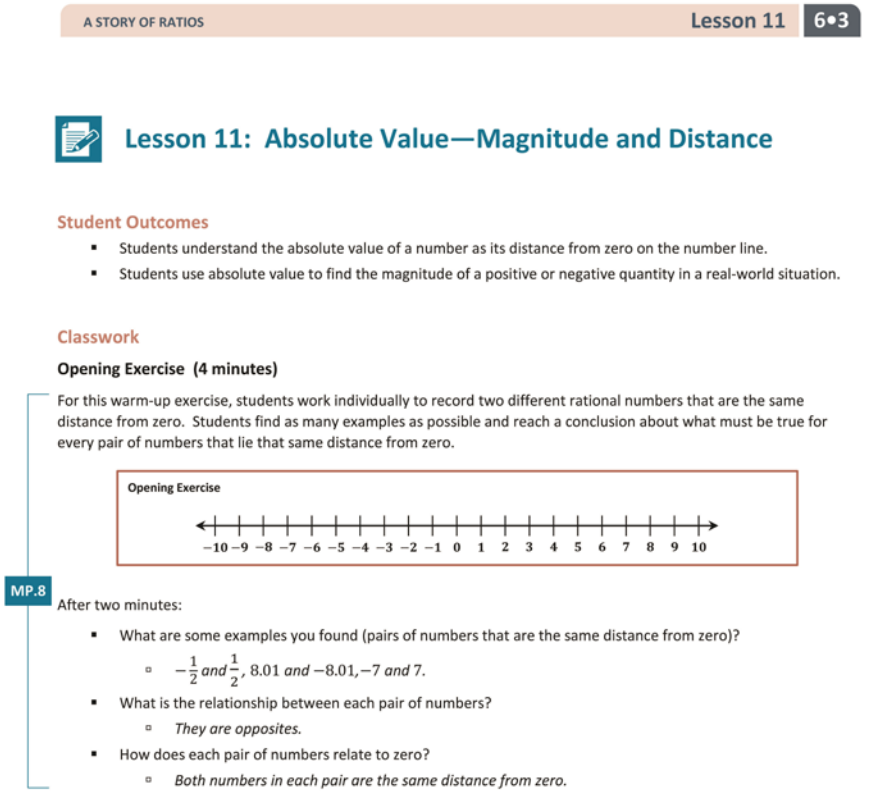
Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at greatminds.org/data.

Full Suite of Resources

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:

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

Mathematical Process Standards	Aligned Components of *Eureka Math*
MPS.PS.1 Make sense of problems and persevere in solving them strategically.	Lessons in every module engage students in mathematical processes. These are designated in the Module Overview and labeled in lessons. For example: 
MPS.RC.1 Explain ideas using precise and contextually appropriate mathematical language, tools, and models.	
MPS.C.1 Demonstrate a deep and flexible conceptual understanding of mathematical ideas, operations, and relationships while making real-world connections.	
MPS.AJ.1 Use critical thinking skills to reason both abstractly and quantitatively.	
MPS.SP.1 Identify and apply regularity in repeated reasoning to make generalizations.	

Data, Probability, and Statistical Reasoning

6.DPSR.1 Analyze data sets to identify their statistical elements.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.DPSR.1.1 Identify the sample size for a numerical set of data in mathematical and real-world situations.	G6 M6 Lesson 4: Creating a Histogram G6 M6 Lesson 5: Describing a Distribution Displayed in a Histogram G6 M6 Lesson 17: Developing a Statistical Project G6 M6 Lesson 18: Connecting Graphical Representations and Numerical Summaries G6 M6 Lesson 19: Comparing Data Distributions G6 M6 Lesson 20: Describing Center, Variability, and Shape of a Data Distribution from a Graphic Representation
6.DPSR.1.2 Create box plots to represent numerical data sets in mathematical and real-world situations.	G6 M6 Lesson 14: Summarizing a Distribution Using a Box Plot G6 M6 Lesson 15: More Practice with Box Plots G6 M6 Lesson 16: Understanding Box Plots G6 M6 Lesson 19: Comparing Data Distributions G6 M6 Lesson 20: Describing Center, Variability, and Shape of a Data Distribution from a Graphic Representation G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape G6 M6 Lesson 22: Presenting a Summary of a Statistical Project
6.DPSR.1.3 Use the shape of the graph to determine whether median or mode best describes the data set.	G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape G6 M6 Lesson 22: Presenting a Summary of a Statistical Project *Supplemental material is necessary to address mode.*

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.DPSR.1.4 Calculate and interpret the median, mode, range, interquartile range in mathematical and real-world situations.	G6 M6 Topic C: Summarizing a Distribution that is Skewed Using the Median and the Interquartile Range G6 M6 Lesson 18: Connecting Graphical Representations and Numerical Summaries G6 M6 Lesson 19: Comparing Data Distributions G6 M6 Lesson 20: Describing Center, Variability, and Shape of a Data Distribution from a Graphic Representation G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape G6 M6 Lesson 22: Presenting a Summary of a Statistical Project *Supplemental material is necessary to address mode.*

Data, Probability, and Statistical Reasoning

6.DPSR.2 Calculate and interpret probability.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.DPSR.2.1 Given the probability of a random event, expressed as a number from 0 to 1, state the likelihood of the event occurring.	G7 M5 Lesson 1: Chance Experiments
6.DPSR.2.2 Find the probability of simple events in mathematical and real-world situations. Limit denominators to 2, 4, 5, 8, 10, 25, 50, and 100.	G7 M5 Lesson 1: Chance Experiments G7 M5 Lesson 2: Estimating Probabilities by Collecting Data

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.DPSR.2.3 Given the probability of an event, identify and calculate the complement of that event.	*Supplemental material is necessary to address this standard.*

Measurement, Geometry, and Spatial Reasoning

6.MGSR.1 Determine the measurements of geometric figures.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.MGSR.1.1 Find the area of a triangle, square, rectangle, parallelogram, and trapezoid.	G6 M5 Topic A: Area of Triangles, Quadrilaterals, and Polygons G6 M5 Lesson 8: Drawing Polygons in the Coordinate Plane G6 M5 Lesson 9: Determining Perimeter and Area of Polygons on the Coordinate Plane
6.MGSR.1.2 Create nets to represent three-dimensional shapes.	G6 M5 Topic D: Nets and Surface Area
6.MGSR.1.3 Calculate the surface area of rectangular prisms, right triangular prisms, rectangular pyramids, and right triangular pyramids using two-dimensional nets.	G6 M5 Topic D: Nets and Surface Area

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.MGSR.1.4 Find the area of composite figures by decomposing them into triangles and rectangles to solve mathematical and real-world situations.	G6 M5 Topic A: Area of Triangles, Quadrilaterals, and Polygons G6 M5 Lesson 8: Drawing Polygons in the Coordinate Plane G6 M5 Lesson 9: Determining Perimeter and Area of Polygons on the Coordinate Plane
6.MGSR.1.5 Calculate the volume of a right rectangular prism using the formula ($V = Bh$) in mathematical and real-world situations.	G6 M5 Topic C: Volume of Right Rectangular Prisms G6 M5 Lesson 19: Surface Area and Volume in the Real World G6 M5 Lesson 20: Addendum Lesson for Modeling–Applying Surface Area and Volume to Aquariums

Measurement, Geometry, and Spatial Reasoning

6.MGSR.2 Determine angle and/or side relationships.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.MGSR.2.1 Determine if two angles are complementary or supplementary.	G7 M6 Lesson 1: Complementary and Supplementary Angles G7 M6 Lesson 2: Solving for Unknown Angles Using Equations G7 M6 Lesson 6: Drawing Geometric Shapes
6.MGSR.2.2 Determine the measure of angles using a protractor.	G7 M6 Lesson 1: Complementary and Supplementary Angles G7 M6 Lesson 3: Solving for Unknown Angles Using Equations G7 M6 Lesson 4: Solving for Unknown Angles Using Equations G7 M6 Lesson 6: Drawing Geometric Shapes *Supplemental material is necessary to fully address this standard.*

Measurement, Geometry, and Spatial Reasoning

6.MGSR.3 Graph on the coordinate plane.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.MGSR.3.1 Plot ordered pairs in all four quadrants and identify points on a graph by writing ordered pairs.	G6 M3 Topic C: Rational Numbers and the Coordinate Plane
6.MGSR.3.2 Graph a polygon on a coordinate plane given the coordinates of the vertices.	G6 M5 Topic B: Polygons on the Coordinate Plane

Numerical Reasoning

6.NR.1 Translate among multiple representations of rational numbers.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.NR.1.1 Convert positive rational numbers into equivalent forms among terminating decimals, fractions (including mixed numbers), and percentages. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	G6 M1 Topic D: Percent

Numerical Reasoning

6.NR.2 Utilize rational numbers in mathematical and real-world situations.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.NR.2.1 Compare two positive rational numbers and write statements using the symbols for *is equal to* (=), *is not equal to* (≠), *is less than* (<), and/or *is greater than* (>) in mathematical and real-world situations. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	G6 M3 Lesson 7: Ordering Integers and Other Rational Numbers G6 M3 Lesson 9: Comparing Integers and Other Rational Numbers
6.NR.2.2 Sort a set of positive rational numbers in ascending and/or descending order in mathematical and real-world situations. Limit sets to no more than 5 numbers. Limit fractions to denominators of 2, 4, 5, 8, 10, 20, 25, 50, 100, and 200.	G6 M3 Lesson 7: Ordering Integers and Other Rational Numbers G6 M3 Lesson 8: Ordering Integers and Other Rational Numbers G6 M3 Lesson 9: Comparing Integers and Other Rational Numbers G6 M3 Lesson 10: Writing and Interpreting Inequality Statements Involving Rational Numbers
6.NR.2.3 Represent quantities with integers in real-world situations and explain the meaning of zero.	G6 M3 Lesson 2: Real-World Positive and Negative Numbers and Zero G6 M3 Lesson 3: Real-World Positive and Negative Numbers and Zero G6 M3 Lesson 4: The Opposite of a Number G6 M3 Lesson 5: The Opposite of a Number's Opposite G6 M3 Lesson 13: Statements of Order in the Real World

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.NR.2.4 Identify and compare the opposite value and absolute value of positive and negative rational numbers.	G6 M3 Lesson 1: Positive and Negative Numbers on the Number Line—Opposite Direction and Value G6 M3 Lesson 4: The Opposite of a Number G6 M3 Lesson 5: The Opposite of a Number's Opposite G6 M3 Lesson 6: Rational Numbers on the Number Line G6 M3 Lesson 8: Ordering Integers and Other Rational Numbers G6 M3 Lesson 11: Absolute Value—Magnitude and Distance G6 M3 Lesson 12: The Relationship Between Absolute Value and Order G6 M3 Lesson 13: Statements of Order in the Real World

Patterns, Algebra, and Functional Reasoning

6.PAFR.1 Use tables, graphs, verbal descriptions, or equations to represent a function.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.PAFR.1.1 Use tables, graphs, verbal descriptions, and equations to represent the relationship between independent and dependent variables of functions.	G6 M4 Lesson 31: Problems in Mathematical Terms G6 M4 Lesson 32: Multi-Step Problems in the Real World
6.PAFR.1.2 Identify the independent and dependent variable of a function in mathematical and real-world situations.	G6 M4 Lesson 31: Problems in Mathematical Terms G6 M4 Lesson 32: Multi-Step Problems in the Real World

Patterns, Algebra, and Functional Reasoning

6.PAFR.2 Write, simplify, and evaluate algebraic expressions; write and solve algebraic equations and inequalities.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.PAFR.2.1 Identify parts of an algebraic expression using the mathematical terms *sum*, *difference*, *term*, *variable*, *product*, *factor*, *quotient*, *coefficient*, and *constant*.	G6 M4 Lesson 7: Replacing Letters with Numbers G6 M4 Topic D: Expanding, Factoring, and Distributing Expressions G6 M4 Topic E: Expressing Operations in Algebraic Form
6.PAFR.2.2 Write and evaluate numerical expressions containing powers. Limit to positive whole number bases and positive whole number exponents.	G6 M4 Topic B: Special Notations of Operations G6 M4 Lesson 16: Write Expressions in Which Letters Stand for Numbers
6.PAFR.2.3 Evaluate numerical expressions with positive whole number bases and positive whole number exponents using the Order of Operations.	G6 M4 Topic B: Special Notations of Operations G6 M4 Lesson 16: Write Expressions in Which Letters Stand for Numbers
6.PAFR.2.4 Write and evaluate expressions using variables to represent quantities in mathematical and real-world situations.	G6 M4 Topic C: Replacing Letters and Numbers G6 M4 Topic D: Expanding, Factoring, and Distributing Expressions G6 M4 Topic E: Expressing Operations in Algebraic Form G6 M4 Topic F: Writing and Evaluating Expressions and Formulas G6 M4 Topic G: Solving Equations G6 M4 Topic H: Applications of Equations

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.PAFR.2.5 Write and solve one-step equations and inequalities with one variable involving positive rational numbers in mathematical and real-world situations.	G6 M4 Topic G: Solving Equations G6 M4 Topic H: Applications of Equations
6.PAFR.2.6 Interpret the concept of a ratio as the relationship between two quantities, including part-to-part and part-to-whole.	G6 M1 Topic A: Representing and Reasoning About Ratios G6 M1 Topic B: Collections of Equivalent Ratios G6 M1 Topic C: Unit Rates G6 M1 Lesson 24: Percent and Rates per 100 G6 M1 Lesson 25: A Fraction as a Percent
6.PAFR.2.7 Explain the relationship between ratios and rates, including unit rates.	G6 M1 Topic C: Unit Rates
6.PAFR.2.8 Solve ratio and rate problems in real-world situations.	G6 M1 Lesson 3: Equivalent Ratios G6 M1 Lesson 4: Equivalent Ratios G6 M1 Lesson 5: Solving Problems by Finding Equivalent Ratios G6 M1 Lesson 6: Solving Problems by Finding Equivalent Ratios G6 M1 Lesson 7: Associated Ratios and the Value of a Ratio G6 M1 Lesson 8: Equivalent Ratios Defined Through the Value of a Ratio G6 M1 Topic B: Collections of Equivalent Ratios G6 M1 Topic C: Unit Rates

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6.PAFR.2.9 Use one-step dimensional analysis to convert units within the metric or customary systems.	G6 M1 Lesson 21: Getting the Job Done—Speed, Work, and Measurement Units G6 M1 Lesson 22: Getting the Job Done—Speed, Work, and Measurement Units G6 M1 Lesson 23: Problem-Solving Using Rates, Unit Rates, and Conversions

Patterns, Algebra, and Functional Reasoning

6.PAFR.3 Apply mathematical patterns, properties, and algorithms to the set of rational numbers to find sums, differences, products, and quotients and to write equivalent expressions.

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.PAFR.3.1 Represent the solutions of inequalities on a number line and explain that the solution set may contain an infinite number of solutions. Limited to the symbols for *is less than* (<) and *is greater than* (>).	G6 M4 Lesson 33: From Equations to Inequalities G6 M4 Lesson 34: Writing and Graphing Inequalities in Real-World Problems
6.PAFR.3.2 Identify the multiplicative inverse of a number and multiply multiplicative inverses to find their product is equal to 1.	G6 M2 Lesson 7: The Relationship Between Visual Fraction Models and Equations

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.PAFR.3.3 Identify the additive inverse of a number and add additive inverses to find their sum is equal to zero.	G7 M2 Lesson 1: Opposite Quantities Combine to Make Zero G7 M2 Lesson 2: Using the Number Line to Model the Addition of Integers G7 M2 Lesson 3: Understanding Addition of Integers G7 M2 Lesson 4: Efficiently Adding Integers and Other Rational Numbers G7 M2 Lesson 7: Addition and Subtraction of Rational Numbers G7 M2 Lesson 8: Applying the Properties of Operations to Add and Subtract Rational Numbers G7 M2 Lesson 9: Applying the Properties of Operations to Add and Subtract Rational Numbers
6.PAFR.3.4 Apply the properties of operations to create equivalent algebraic expressions and justify the properties used. Limit properties to the *Identity*, *Inverse*, *Commutative*, *Associative*, and *Distributive Properties*.	G6 M4 Topic A: Relationships of the Operations G6 M4 Lesson 9: Writing Addition and Subtraction Expressions G6 M4 Lesson 11: Factoring Expressions G6 M4 Lesson 12: Distributing Expressions
6.PAFR.3.5 Add, subtract, multiply, and divide integers in mathematical and real-world situations.	G7 M2 Lesson 1: Opposite Quantities Combine to Make Zero G7 M2 Lesson 2: Using the Number Line to Model the Addition of Integers G7 M2 Lesson 3: Understanding Addition of Integers G7 M2 Lesson 4: Efficiently Adding Integers and Other Rational Numbers G7 M2 Lesson 5: Understanding Subtraction of Integers and Other Rational Numbers G7 M2 Lesson 10: Understanding Multiplication of Integers G7 M2 Lesson 11: Develop Rules for Multiplying Signed Numbers G7 M2 Lesson 12: Division of Integers

South Carolina College- and Career-Ready Mathematics Standards	Aligned Components of *Eureka Math*
6.PAFR.3.6 Add, subtract, multiply, and divide positive fractions, including mixed numbers in mathematical and real-world situations.	G5 M3 Topic B: Making Like Units Pictorially G5 M3 Topic C: Making Like Units Numerically G5 M3 Topic D: Further Applications G5 M4 Topic C: Multiplication of a Whole Number by a Fraction G5 M4 Topic D: Fraction Expressions and Word Problems G5 M4 Topic E: Multiplication of a Fraction by a Fraction G5 M4 Topic F: Multiplication with Fractions and Decimals as Scaling and Word Problems G5 M4 Topic G: Division of Fractions and Decimal Fractions G5 M6 Topic E: Multi-Step Word Problems G6 M2 Topic A: Arithmetic Operations Including Dividing by a Fraction
6.PAFR.3.7 Add, subtract, multiply, and divide multi-digit positive decimals, up to the thousandths place, to solve problems in mathematical and real-world situations.	G6 M2 Topic B: Multi-Digit Decimal Operations—Adding, Subtracting, and Multiplying G6 M2 Lesson 14: The Division Algorithm—Converting Decimal Division into Whole Number Division Using Fractions G6 M2 Lesson 15: The Division Algorithm—Converting Decimal Division to Whole Number Division Using Mental Math