7–8 | Wyoming Mathematics Content and Performance Standards (2023 Emended 2025) Correlation to *Eureka Math²®*

When the original *Eureka Math®* curriculum was released, it quickly became the most widely used K–5 mathematics curriculum in the country. Now, the Great Minds® teacher–writers have created *Eureka Math²®*, 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 Math²* 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 Math² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built right into the teacher materials.

Accessibility

Eureka Math² incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the *Teach* book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the *Eureka Math²* teacher–writers have created one of the most readable mathematics curricula on the market. The curriculum's readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Digital Engagement

The digital elements of *Eureka Math²* add to students' engagement with the math. The curriculum provides teachers with downloadable 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 and provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

Standards for Mathematical Practice	Aligned Components of *Eureka Math²*
MP.1 Make sense of problems and persevere in solving them.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.2 Reason abstractly and quantitatively.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.3 Construct viable arguments and critique the reasoning of others.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.4 Model with mathematics.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.5 Use appropriate tools strategically.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.6 Attend to precision.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.7 Look for and make use of structure.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.8 Look for and express regularity in repeated reasoning.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.

Ratios and Proportional Relationships

Analyze proportional relationships and use them to solve real-world and mathematical problems.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.RP.2 Recognize and represent proportional relationships between quantities.	*This standard is fully addressed by the lessons aligned to its subsections.*
7.RP.2A Decide whether two quantities in a table or graph are in a proportional relationship.	7–8 M2 Lesson 12: An Experiment with Ratios and Rates 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
7.RP.2B Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions 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.RP.2C Represent proportional relationships with equations.	7–8 M2 Lesson 13: Exploring Tables 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 7–8 M2 Lesson 19: Proportional Reasoning and Percents

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.RP.2D Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.	7–8 M2 Lesson 14: Exploring Graphs of Proportional Relationships 7–8 M2 Lesson 15: Relating Representations of Proportional Relationships
7.RP.3 Solve multistep real world and mathematical problems involving ratios and percentages.	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 7–8 M2 Topic D: Percents and Proportional Relationships

The Number System

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.NS.3 Solve real-world and mathematical problems involving the four arithmetic operations with 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

The Number System

Know that there are numbers that are not rational, and approximate them by rational numbers.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.NS.1 Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. Explore the real number system and its appropriate usage in real-world situations.	7–8 M1 Lesson 20: Using the Pythagorean Theorem 7–8 M1 Lesson 22: Rational and Irrational Numbers 7–8 M1 Lesson 23: Revisiting Equations with Squares and Cubes 7–8 M2 Lesson 6: Expressing Repeating Decimals as Fractions *Supplemental material is necessary to address the real number system in real-world situations.*
8.NS.1A Make comparisons between rational and irrational numbers.	7–8 M1 Lesson 22: Rational and Irrational Numbers
8.NS.1B Understand that all real numbers have a decimal expansion.	7–8 M1 Lesson 22: Rational and Irrational Numbers
8.NS.1C Model the hierarchy of the real number system, including natural, whole, integer, rational, and irrational numbers.	7–8 M1 Lesson 22: Rational and Irrational Numbers *Supplemental material is necessary to fully address the hierarchy of real numbers.*
8.NS.1D Convert repeating decimals to fractions.	7–8 M2 Lesson 6: Expressing Repeating Decimals as Fractions

Expressions and Equations

Use properties of operations to generate equivalent expressions.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	7–8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations

Expressions and Equations

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.EE.4 Apply the concepts of linear equations and inequalities in one variable to real-world and mathematical situations.	7–8 M2 Lesson 3: Solving Equations 7–8 M2 Lesson 4: Using Equations to Solve Inequalities 7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
7.EE.4A Write and fluently solve linear equations of the form $ax + b = c$ and $a(x + b) = c$ where a, b, and c are rational numbers.	7–8 M2 Lesson 1: Finding Unknown Angle Measures 7–8 M2 Lesson 3: Solving Equations 7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.EE.4B Write and solve multi-step linear equations that include the use of the distributive property and combining like terms. Exclude equations that contain variables on both sides.	7–8 M2 Lesson 1: Finding Unknown Angle Measures 7–8 M2 Lesson 3: Solving Equations 7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
7.EE.4C Write and solve two-step linear inequalities. Graph the solution set on a number line and interpret its meaning.	7–8 M2 Lesson 4: Using Equations to Solve Inequalities 7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
7.EE.4D Identify and justify the steps for solving multi-step linear equations and two-step linear inequalities.	7–8 M2 Lesson 1: Finding Unknown Angle Measures 7–8 M2 Lesson 7: Solving Multi-Step Equations 7–8 M2 Lesson 8: Solving Equations with Rational Coefficients *Supplementary material is needed to address justifying the steps for solving linear inequalities.*

Expressions and Equations

Understand the connections between proportional relationships, lines, and linear equations.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.EE.5 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.	7–8 M4 Lesson 4: Comparing Proportional Relationships 7–8 M4 Lesson 5: Proportional Relationships and Slope

Expressions and Equations

Analyze and solve linear equations and pairs of simultaneous linear equations.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.EE.7 Extend concepts of linear equations and inequalities in one variable to more complex multi-step equations and inequalities in real-world and mathematical situations.	*This standard is fully addressed by the lessons aligned to its subsections.*
8.EE.7A Solve linear equations and inequalities with rational number coefficients that include the use of the distributive property, combining like terms, and variable terms on both sides.	7–8 M2 Lesson 6: Expressing Repeating Decimals as Fractions 7–8 M2 Topic B: Multi-Step Equations and Their Solutions A1 M1 Lesson 13: Solving Linear Inequalities in One Variable
8.EE.7B Recognize the three types of solutions to linear equations: one solution, infinitely many solutions, or no solutions.	7–8 M2 Lesson 8: Solving Equations with Rational Coefficients 7–8 M2 Lesson 9: Linear Equations with More Than One Solution 7–8 M2 Lesson 10: Another Possible Number of Solutions
8.EE.8 Analyze and solve pairs of simultaneous linear equations.	*This standard is fully addressed by the lessons aligned to its subsections.*

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.EE.8A Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.	7–8 M4 Lesson 11: Introduction to Systems of Linear Equations 7–8 M4 Lesson 12: Identifying Solutions 7–8 M4 Lesson 13: More Than One Solution 7–8 M4 Lesson 16: Choosing a Solution Method 7–8 M4 Lesson 19: Back to the Coordinate Plane 7–8 M4 Lesson 20: Modeling a Real-World Problem
8.EE.8B Solve systems of two linear equations in two variables with integer solutions by graphing the equations.	7–8 M4 Lesson 11: Introduction to Systems of Linear Equations 7–8 M4 Lesson 12: Identifying Solutions 7–8 M4 Lesson 13: More Than One Solution
8.EE.8C Solve simple real-world and mathematical problems leading to two linear equations in two variables given $y = mx + b$ form with integer solutions.	7–8 M4 Lesson 16: Choosing a Solution Method 7–8 M4 Lesson 19: Back to the Coordinate Plane 7–8 M4 Lesson 20: Modeling a Real-World Problem

Geometry

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.G.4 Investigate the concept of circles.	*This standard is fully addressed by the lessons aligned to its subsections.*
7.G.4A Demonstrate an understanding of the proportional relationships between diameter, radius, and circumference of a circle.	7–8 M3 Lesson 3: Exploring and Constructing Circles
7.G.4B Understand that pi is defined by the constant of proportionality between the circumference and diameter.	7–8 M3 Lesson 3: Exploring and Constructing Circles
7.G.4C Given the formulas for circumference and area of circles, solve real-world and mathematical problems.	7–8 M3 Lesson 3: Exploring and Constructing Circles 7–8 M3 Lesson 4: Area and Circumference of a Circle 7–8 M3 Lesson 5: Area and Circumference of Circular Regions 7–8 M3 Lesson 6: Watering a Lawn
7.G.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.	7–8 M2 Lesson 1: Finding Unknown Angle Measures 7–8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations 7–8 M2 Lesson 7: Solving Multi-Step Equations

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.G.6 Solve real-world and mathematical problems involving A. area and surface area of objects composed of triangles and quadrilaterals; B. volume of objects composed only of right prisms having triangular or quadrilateral bases.	7–8 M5 Lesson 11: Surface Areas of Prisms and Pyramids 7–8 M5 Lesson 16: Volume of Prisms 7–8 M5 Lesson 18: Designing a Fish Tank 7–8 M5 Lesson 21: Volume of Composite Solids

Geometry

Understand congruence and similarity using physical models, transparencies, or geometry software.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.G.2 Recognize through visual comparison that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	7–8 M3 Lesson 10: Sequencing the Rigid Motions 7–8 M3 Lesson 11: Showing Figures Are Congruent 7–8 M3 Lesson 12: Lines Cut by a Transversal

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.G.5 Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles.	7–8 M3 Lesson 12: Lines Cut by a Transversal 7–8 M3 Lesson 13: Angle Sum of a Triangle 7–8 M3 Lesson 14: Exterior Angles of Triangles 7–8 M3 Lesson 28: Exploring Angles in Similar Triangles 7–8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths

Geometry

Understand and apply the Pythagorean Theorem.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.G.7 Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems.	7–8 M1 Lesson 19: The Pythagorean Theorem 7–8 M3 Lesson 16: Proving the Converse of the Pythagorean Theorem 7–8 M3 Lesson 17: Applications of the Pythagorean Theorem 7–8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths 7–8 M5 Lesson 19: Volumes of Pyramids and Cones
8.G.8 Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.	7–8 M3 Lesson 17: Applications of the Pythagorean Theorem

Statistics and Probability

Use random sampling to draw inferences about a population.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.SP.1 Solve real-world and mathematical problems involving: A. Understand that a sample is a subset of a population. B. Differentiate between random and non-random sampling. C. Understand that generalizations from a sample are valid only if the sample is representative of the population. D. Understand that random sampling is used to gather a representative sample and tends to support valid inferences about the population.	7–8 M6 Lesson 10: Populations and Samples 7–8 M6 Lesson 11: Selecting a Sample 7–8 M6 Lesson 12: Sampling Variability When Estimating a Population Mean

Statistics and Probability

Draw informal comparative inferences about two populations.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.SP.4 Given measures of center and variability (mean, median and/or mode; range, interquartile range, and/or standard deviation), for numerical data from random samples, draw appropriate informal comparative inferences about two populations.	7–8 M6 Topic D: Comparing Populations *Supplemental material is necessary to address standard deviation.*

Statistics and Probability

Investigate chance processes and develop, use, and evaluate probability models.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
7.SP.5 Find and interpret the probability of a random event. Understand that the probability of a random event is a number between, and including, 0 and 1 that expresses the likelihood of the event occurring.	7–8 M6 Lesson 1: What Is Probability?
7.SP.6 Collect multiple samples to compare the relationship between theoretical and experimental probabilities for simple events.	7–8 M6 Lesson 1: What Is Probability? 7–8 M6 Lesson 2: Outcomes of Chance Experiments 7–8 M6 Lesson 5: Outcomes That Are Not Equally Likely 7–8 M6 Lesson 7: Picking Blue

Statistics and Probability

Investigate patterns of association in bivariate data.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.SP.3 Use an equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.	7–8 M6 Lesson 20: Informally Fitting a Line to Data 7–8 M6 Lesson 21: Linear Models
8.SP.4 Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. A. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. B. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.	7–8 M6 Topic F: Bivariate Categorical Data

Functions

Define, evaluate, and compare functions.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).	7–8 M5 Lesson 7: Interpreting Rate of Change and Initial Value 7–8 M5 Lesson 8: Comparing Functions

Functions

Use functions to model relationships between quantities.

Wyoming Mathematics Content and Performance Standards	Aligned Components of *Eureka Math²*
8.F.4 Apply the concepts of linear functions to real-world and mathematical situations. A. Understand that the slope is the constant rate of change and the y-intercept is the point where $x = 0$. B. Determine the slope and the y-intercept of a linear function given multiple representations, including two points, tables, graphs, equations, and verbal descriptions. C. Construct a function in slope-intercept form that models a linear relationship between two quantities. D. Interpret the meaning of the slope and the y-intercept of a linear function in the context of the situation.	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