
Grade 8 | Wyoming Mathematics Content and Performance Standards (2023 Emended 2025) Correlation to *Eureka Math*²®

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 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 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 Math*² incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the *Teach* book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the *Eureka Math*² teacher–writers have created one of the most readable mathematics curricula on the market. The curriculum’s readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Digital Engagement

The digital elements of *Eureka Math*² add to students’ engagement with the math. The curriculum provides teachers with 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 <i>Eureka Math</i> ²
<p>MP.1 Make sense of problems and persevere in solving them.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.2 Reason abstractly and quantitatively.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.3 Construct viable arguments and critique the reasoning of others.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.4 Model with mathematics.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.5 Use appropriate tools strategically.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.6 Attend to precision.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.7 Look for and make use of structure.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>
<p>MP.8 Look for and express regularity in repeated reasoning.</p>	<p>Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.</p>

The Number System

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

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<p>8.NS.1</p> <p>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.</p>	<p>8 M4 Lesson 5: An Interesting Application of Linear Equations, Part 1</p> <p>8 M4 Lesson 6: An Interesting Application of Linear Equations, Part 2</p>
<p>8.NS.1A</p> <p>Make comparisons between rational and irrational numbers.</p>	<p>8 M1 Lesson 22: Familiar and Not So Familiar Numbers</p>
<p>8.NS.1B</p> <p>Understand that all real numbers have a decimal expansion.</p>	<p>8 M4 Lesson 5: An Interesting Application of Linear Equations, Part 1</p> <p>8 M4 Lesson 6: An Interesting Application of Linear Equations, Part 2</p>
<p>8.NS.1C</p> <p>Model the hierarchy of the real number system, including natural, whole, integer, rational, and irrational numbers.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p>8.NS.1D</p> <p>Convert repeating decimals to fractions.</p>	<p>8 M4 Lesson 5: An Interesting Application of Linear Equations, Part 1</p> <p>8 M4 Lesson 6: An Interesting Application of Linear Equations, Part 2</p>

Expressions and Equations

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

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<p>8.EE.5</p> <p>Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.</p>	<p>8 M4 Lesson 15: Comparing Proportional Relationships</p> <p>8 M4 Lesson 16: Proportional Relationships and Slope</p>

Expressions and Equations

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

Wyoming Mathematics Content and Performance Standards	Aligned Components of <i>Eureka Math</i> ²
<p>8.EE.7</p> <p>Extend concepts of linear equations and inequalities in one variable to more complex multi-step equations and inequalities in real-world and mathematical situations.</p>	<p>8 M4 Lesson 2: Solving Linear Equations</p> <p>8 M4 Lesson 3: Solving Linear Equations with Rational Coefficients</p> <p>8 M4 Lesson 4: Using Linear Equations to Solve Problems</p> <p>8 M4 Lesson 10: Using Linear Equations to Solve Real-World Problems</p> <p>8 M4 Lesson 11: Planning a Trip</p>
<p>8.EE.7A</p> <p>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.</p>	<p>7 M3 Lesson 20: Preserving and Reversing</p> <p>7 M3 Lesson 21: Solving Two-Step Inequalities</p> <p>7 M3 Lesson 22: Solving Problems Involving Inequalities</p> <p>7 M3 Lesson 23: Inequalities vs. Equations</p> <p>8 M4 Lesson 1: Equations</p> <p>8 M4 Lesson 2: Solving Linear Equations</p>

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<p>8.EE.7A <i>continued</i></p>	<p>8 M4 Lesson 3: Solving Linear Equations with Rational Coefficients</p> <p>8 M4 Lesson 5: An Interesting Application of Linear Equations, Part 1</p> <p>8 M4 Lesson 6: An Interesting Application of Linear Equations, Part 2</p> <p>8 M4 Lesson 7: Linear Equations with More Than One Solution</p> <p>8 M4 Lesson 8: Another Possible Number of Solutions</p> <p>8 M4 Lesson 10: Using Linear Equations to Solve Real-World Problems</p> <p>8 M4 Lesson 11: Planning a Trip</p>
<p>8.EE.7B</p> <p>Recognize the three types of solutions to linear equations: one solution, infinitely many solutions, or no solutions.</p>	<p>8 M4 Lesson 7: Linear Equations with More Than One Solution</p> <p>8 M4 Lesson 8: Another Possible Number of Solutions</p> <p>8 M4 Lesson 9: Writing Linear Equations</p> <p>8 M4 Lesson 10: Using Linear Equations to Solve Real-World Problems</p>
<p>8.EE.8</p> <p>Analyze and solve pairs of simultaneous linear equations.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>8.EE.8A</p> <p>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.</p>	<p>8 M5 Topic A: Solving Systems of Linear Equations Graphically</p> <p>8 M5 Lesson 7: The Substitution Method</p> <p>8 M5 Lesson 10: Choosing a Solution Method</p> <p>8 M5 Lesson 14: Back to the Coordinate Plane</p>

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<p>8.EE.8B</p> <p>Solve systems of two linear equations in two variables with integer solutions by graphing the equations.</p>	<p>8 M5 Lesson 1: Solving Problems with Equations and Their Graphs</p> <p>8 M5 Lesson 3: Identifying Solutions</p> <p>8 M5 Lesson 4: More Than One Solution</p> <p>8 M5 Lesson 5: Estimating Solutions</p> <p>8 M5 Topic B: Solving Systems of Equations Algebraically</p> <p>8 M5 Topic C: Writing and Solving Systems of Linear Equations</p>
<p>8.EE.8C</p> <p>Solve simple real-world and mathematical problems leading to two linear equations in two variables given $y = mx + b$ form with integer solutions.</p>	<p>8 M5 Lesson 1: Solving Problems with Equations and Their Graphs</p> <p>8 M5 Topic C: Writing and Solving Systems of Linear Equations</p>

Functions

Define, evaluate, and compare functions.

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<p>8.F.2</p> <p>Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).</p>	<p>8 M6 Lesson 7: Interpreting Rate of Change and Initial Value</p> <p>8 M6 Lesson 8: Comparing Functions</p>
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Functions

Use functions to model relationships between quantities.

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<p>8.F.4</p> <p>Apply the concepts of linear functions to real-world and mathematical situations.</p> <p>A. Understand that the slope is the constant rate of change and the y-intercept is the point where $x = 0$.</p> <p>B. Determine the slope and the y-intercept of a linear function given multiple representations, including two points, tables, graphs, equations, and verbal descriptions.</p> <p>C. Construct a function in slope-intercept form that models a linear relationship between two quantities.</p> <p>D. Interpret the meaning of the slope and the y-intercept of a linear function in the context of the situation.</p>	<p>8 M6 Lesson 6: Linear Functions and Rate of Change</p> <p>8 M6 Lesson 7: Interpreting Rate of Change and Initial Value</p> <p>8 M6 Lesson 25: Applications of Volume</p>

Geometry

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

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<p>8.G.2</p> <p>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.</p>	<p>8 M2 Topic B: Rigid Motions and Congruent Figures</p> <p>8 M2 Lesson 12: Lines Cut by a Transversal</p>
<p>8.G.5</p> <p>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.</p>	<p>8 M2 Topic C: Angle Relationships</p> <p>8 M3 Lesson 12: Exploring Angles in Similar Triangles</p> <p>8 M3 Lesson 13: Similar Triangles</p> <p>8 M3 Lesson 14: Using Similar Figures to Find Unknown Side Lengths</p> <p>8 M3 Lesson 15: Applications of Similar Figures</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>

Geometry

Understand and apply the Pythagorean Theorem.

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<p>8.G.7</p> <p>Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems.</p>	<p>8 M1 Lesson 18: The Pythagorean Theorem</p> <p>8 M1 Lesson 19: Using the Pythagorean Theorem</p> <p>8 M1 Lesson 20: Square Roots</p> <p>8 M2 Lesson 19: Using the Pythagorean Theorem and Its Converse</p> <p>8 M2 Lesson 21: Applying the Pythagorean Theorem</p> <p>8 M2 Lesson 22: On the Right Path</p> <p>8 M3 Lesson 16: Similar Right Triangles</p>
<p>8.G.8</p> <p>Apply the Pythagorean Theorem to find the distance between two points in a coordinate system.</p>	<p>8 M2 Lesson 20: Distance in the Coordinate Plane</p> <p>8 M2 Lesson 22: On the Right Path</p>

Statistics and Probability

Investigate patterns of association in bivariate data.

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<p>8.SP.3</p> <p>Use an equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept.</p>	<p>8 M6 Lesson 6: Linear Functions and Rate of Change</p> <p>8 M6 Lesson 7: Interpreting Rate of Change and Initial Value</p> <p>8 M6 Lesson 14: Determining an Equation of a Line Fit to Data</p> <p>8 M6 Lesson 15: Linear Models</p> <p>8 M6 Lesson 16: Using the Investigative Process</p> <p>8 M6 Lesson 17: Analyzing the Model</p>
<p>8.SP.4</p> <p>Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table.</p> <p>A. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects.</p> <p>B. Use relative frequencies calculated for rows or columns to describe possible association between the two variables.</p>	<p>8 M6 Topic D: Bivariate Categorical Data</p>