
Grade 7 | Oregon Mathematics Standards 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 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.

Algebraic Reasoning: Expressions and Equations

7.AEE.A Use properties of operations to generate equivalent expressions.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.AEE.A.1</p> <p>Identify and write equivalent expressions with rational numbers by applying associative, commutative, and distributive properties.</p>	<p>M3 L1: Equivalent Expressions</p> <p>M3 L2: The Distributive Property and the Tabular Model</p> <p>M3 L3: The Distributive Property and Combining Like Terms</p> <p>M3 L4: Adding and Subtracting Expressions</p> <p>M3 L5: Factoring Expressions</p> <p>M3 L6: Comparing Expressions</p>
<p>7.AEE.A.2</p> <p>Understand that rewriting an expression in different forms in a contextual problem can show how quantities are related.</p>	<p>M3 L2: The Distributive Property and the Tabular Model</p> <p>M3 L3: The Distributive Property and Combining Like Terms</p> <p>M3 L5: Factoring Expressions</p> <p>M3 L6: Comparing Expressions</p> <p>M3 L9: Solving Equations to Determine Unknown Angle Measures</p> <p>M5 L10: Percent Increase</p> <p>M5 L11: Percent Decrease</p> <p>M5 L12: More Discounts</p> <p>M5 L14: Scale Factor—Percent Increase and Decrease</p> <p>M5 L15: Tips and Taxes</p> <p>M5 L16: Markups and Discounts</p> <p>M5 L23: Percents of Percents</p>

Algebraic Reasoning: Expressions and Equations

7.AEE.B Solve mathematical problems in authentic contexts using numerical and algebraic expressions and equations.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.AEE.B.3</p> <p>Write and solve problems in authentic contexts using expressions and equations with positive and negative rational numbers in any form. Contexts can be limited to those that can be solved with one- or two-step linear equations.</p>	<p>M2 L25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>M2 L26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>M3 L9: Solving Equations to Determine Unknown Angle Measures</p> <p>M3 L10: Problem Solving with Unknown Angle Measures</p> <p>M3 L11: Dominoes and Dominoes</p> <p>M3 L16: Using Equations to Solve Rate Problems</p> <p>M3 L17: Using Equations to Solve Problems</p>
<p>7.AEE.B.4</p> <p>Use variables to represent quantities and construct one- and two-step linear inequalities with positive rational numbers to solve authentic problems by reasoning about the quantities.</p>	<p>M3 L7: Angle Relationships and Unknown Angle Measures</p> <p>M3 L8: Strategies to Determine Unknown Angle Measures</p> <p>M3 L11: Dominoes and Dominoes</p> <p>M3 L12: Solving Problems Algebraically and Arithmetically</p> <p>M3 L13: Solving Equations—Puzzles</p> <p>M3 L14: Solving Equations—Scavenger Hunt</p> <p>M3 L15: Solving Equations Fluently</p> <p>M3 L16: Using Equations to Solve Rate Problems</p> <p>M3 L17: Using Equations to Solve Problems</p> <p>M3 L18: Understanding Inequalities and their Solutions</p> <p>M3 L19: Using Equations to Solve Inequalities</p> <p>M3 L21: Solving Two-Step Inequalities</p> <p>M3 L22: Solving Problems Involving Inequalities</p> <p>M3 L23: Inequalities vs. Equations</p>

Proportional Reasoning: Ratios and Proportions

7.RP.A Analyze proportional relationships and use them to solve mathematical problems in authentic contexts.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.RP.A.1</p> <p>Solve problems in authentic contexts involving unit rates associated with ratios of fractions.</p>	<p>M1 L1: An Experiment with Ratios and Rates</p> <p>M1 L2: Exploring Tables of Proportional Relationships</p> <p>M1 L3: Identifying Proportional Relationships in Tables</p>
<p>7.RP.A.2</p> <p>Recognize and represent proportional relationships between quantities in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. Identify the constant of proportionality (unit rate) within various representations.</p>	<p>M1 L1: An Experiment with Ratios and Rates</p> <p>M1 L2: Exploring Tables of Proportional Relationships</p> <p>M1 L3: Identifying Proportional Relationships in Tables</p> <p>M1 L4: Exploring Graphs of Proportional Relationships</p> <p>M1 L5: Analyzing Graphs of Proportional Relationships</p> <p>M1 L6: Identifying Proportional Relationships in Written Descriptions</p> <p>M1 L8: Relating Representations of Proportional Relationships</p> <p>M1 L9: Comparing Proportional Relationships</p> <p>M1 L10: Applying Proportional Reasoning</p> <p>M1 L11: Constant Rates</p> <p>M1 L12: Multi-Step Ratio Problems, Part 1</p> <p>M1 L13: Multi-Step Ratio Problems, Part 2</p> <p>M1 L14: Extreme Bicycles</p> <p>M1 L16: Using a Scale Factor</p> <p>M1 L18: Relating Areas of Scale Drawings</p> <p>M5 L1: Proportionality and Scale Factor</p> <p>M5 L4: Proportion and Percent</p> <p>M5 L5: Common Denominators or Common Numerators</p>

Oregon Mathematics Standards**Aligned Components of *Eureka Math*²****7.RP.A.3**

Use proportional relationships to solve ratio and percent problems in authentic contexts.

M1 L7: Handstand Sprint
 M1 L10: Applying Proportional Reasoning
 M1 L11: Constant Rates
 M1 L12: Multi-Step Ratio Problems, Part 1
 M1 L13: Multi-Step Ratio Problems, Part 2
 M5 L2: Racing for Percents
 M5 L3: Percent as a Rate per 100
 M5 L4: Proportion and Percent
 M5 L5: Common Denominators or Common Numerators
 M5 L6: Finding Commission
 M5 L7: Finding Discounts
 M5 L8: Determining Fees
 M5 L9: Tax as a Fee
 M5 L10: Percent Increase
 M5 L11: Percent Decrease
 M5 L12: More Discounts
 M5 L13: What is the Best Deal?
 M5 L15: Tips and Taxes
 M5 L16: Markups and Discounts
 M5 L17: Simple Interest and Proportionality
 M5 L18: Simple Interest—Solving for Unknown Values
 M5 L19: Applying Percent Error
 M5 L20: Making Money, Day 1
 M5 L21: Making Money, Day 2
 M5 L22: Making Mixtures
 M5 L23: Percents of Percents

Proportional Reasoning: Ratios and Proportions

7.RP.B Investigate chance processes and develop, use, and evaluate probability models.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.RP.B.4</p> <p>Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Represent probabilities as fractions, decimals, and percents.</p>	<p>M6 L1: What Is Probability?</p>
<p>7.RP.B.5</p> <p>Use experimental data and theoretical probability to make predictions. Understand the probability predictions may not be exact.</p>	<p>M6 L2: Empirical Probability</p> <p>M6 L3: Outcomes of Chance Experiments</p> <p>M6 L6: Outcomes that are Not Equally Likely</p> <p>M6 L8: Picking Blue</p>
<p>7.RP.B.6</p> <p>Develop a probability model and use it to find probabilities of events. Compare theoretical and experimental probabilities and explain possible sources of discrepancy if any exists.</p>	<p>M6 L4: Theoretical Probability</p> <p>M6 L7: The Law of Large Numbers</p> <p>M6 L8: Picking Blue</p>
<p>7.RP.B.7</p> <p>Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p>	<p>M6 L5: Multistage Experiments</p> <p>M6 L9: Probability Simulations</p> <p>M6 L10: Simulations with Random Number Tables</p>

Numeric Reasoning: Number Systems

7.NS.A Apply and extend previous understandings of operations with fractions.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.NS.A.1</p> <p>Apply and extend previous understandings of addition, subtraction, and absolute value to add and subtract rational numbers in authentic contexts. Understand subtraction as adding the additive inverse, $p - q = p + (-q)$.</p>	<p>M2 L1: Combining Opposites</p> <p>M2 L2: Adding Integers</p> <p>M2 L3: Adding Integers Efficiently</p> <p>M2 L4: KAKOOMA®</p> <p>M2 L5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>M2 L6: Adding Rational Numbers</p> <p>M2 L7: What Subtraction Means</p> <p>M2 L8: Subtracting Integers, Part 1</p> <p>M2 L9: Subtracting Integers, Part 2</p> <p>M2 L10: Subtracting Rational Numbers, Part 1</p> <p>M2 L11: Subtracting Rational Numbers, Part 2</p> <p>M2 L12: The Integer Game</p>
<p>7.NS.A.2</p> <p>Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. Interpret operations of rational numbers solving problems in authentic contexts.</p>	<p>M2 L13: Understanding Multiples of Negative Numbers</p> <p>M2 L14: Understanding the Product of Two Negative Numbers</p> <p>M2 L15: Multiplying Rational Numbers</p> <p>M2 L16: Exponential Expressions with Rational Numbers</p> <p>M2 L17: Understanding Negative Dividends</p> <p>M2 L18: Understanding Negative Divisors</p> <p>M2 L19: Rational Numbers as Decimals, Part 1</p> <p>M2 L20: Rational Numbers as Decimals, Part 2</p> <p>M2 L21: Comparing and Ordering Rational Numbers</p> <p>M2 L22: Multiplication and Division Expressions</p> <p>M2 L24: Order of Operations with Rational Numbers</p>

Oregon Mathematics Standards

Aligned Components of *Eureka Math*²

<p>7.NS.A.3</p> <p>Understand that equivalent rational numbers can be written as fractions, decimals, and percents.</p>	<p>M2 L25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>M2 L26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p>
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Geometric Reasoning and Measurement

7.GM.A Draw, construct, and describe geometrical figures and describe the relationships between them.

Oregon Mathematics Standards

Aligned Components of *Eureka Math*²

<p>7.GM.A.1</p> <p>Solve problems involving scale drawings of geometric figures. Reproduce a scale drawing at a different scale and compute actual lengths and areas from a scale drawing.</p>	<p>M1 L15: Scale Drawings</p> <p>M1 L16: Using a Scale Factor</p> <p>M1 L17: Finding Actual Distances from a Scale Drawing</p> <p>M1 L18: Relating Areas of Scale Drawings</p> <p>M1 L19: Scale and Scale Factor</p> <p>M1 L20: Creating Multiple Scale Drawings</p> <p>M5 L1: Proportionality and Scale Factor</p> <p>M5 L14: Scale Factor—Percent Increase and Decrease</p>
<p>7.GM.A.2</p> <p>Draw triangles from three measures of angles or sides. Understand the possible side lengths and angle measures that determine a unique triangle, more than one triangle, or no triangle.</p>	<p>M4 L1: Sketching, Drawing, and Constructing Geometric Figures</p> <p>M4 L2: Constructing Parallelograms and Other Quadrilaterals</p> <p>M4 L3: Side Lengths of a Triangle</p> <p>M4 L4: Angles of a Triangle</p> <p>M4 L5: Constructing Quadrilaterals and Triangles</p> <p>M4 L6: Unique Triangles</p> <p>M4 L7: Two Angles and One Side</p> <p>M4 L8: Two Sides and One Angle</p> <p>M4 L9: Constructing a Circle</p>

Geometric Reasoning and Measurement

7.GM.B Solve mathematical problems in authentic contexts involving angle measure, area, surface area, and volume.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.GM.B.3</p> <p>Understand the relationship between area and circumference of circles. Choose and use the appropriate formula to solve problems with radius, diameter, circumference, and area of circles.</p>	<p>M4 L10: The Outside of a Circle</p> <p>M4 L11: The Inside of a Circle</p> <p>M4 L12: Exploring the Area and Circumference of a Circle</p> <p>M4 L13: Finding Areas of Circular Regions</p> <p>M4 L14: Composite Figures with Circular Regions</p> <p>M4 L15: Watering a Lawn</p>
<p>7.GM.B.4</p> <p>Apply facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to determine an unknown angle in a figure.</p>	<p>M3 L7: Angle Relationships and Unknown Angle Measures</p> <p>M3 L8: Strategies to Determine Unknown Angle Measures</p> <p>M3 L10: Problem Solving with Unknown Angle Measures</p>
<p>7.GM.B.5</p> <p>Solve problems in authentic contexts involving two- and three-dimensional figures. Given formulas, calculate area, volume, and surface area.</p>	<p>M4 L14: Composite Figures with Circular Regions</p> <p>M4 L16: Solving Area Problems by Decomposition and Composition</p> <p>M4 L17: Surface Area of Right Rectangular and Right Triangular Prisms</p> <p>M4 L18: Surface Area of Right Prisms</p> <p>M4 L19: Surface Area of Cylinders</p> <p>M4 L20: Surface Areas of Right Pyramids</p> <p>M4 L21: Surface Area of Other Solids</p> <p>M4 L24: Volume of Prisms</p> <p>M4 L25: Volume of Composite Solids</p> <p>M4 L26: Designing a Fish Tank</p>

Data Reasoning

7.DR.A Formulate statistical investigative questions.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.DR.A.1</p> <p>Formulate summary, comparative investigative questions to gain information about a population and that a sample is valid only if the sample is representative of that population.</p>	<p>M6 L11: Populations and Samples</p> <p>M6 L12: Selecting a Sample</p> <p>M6 L13: Variability Between Samples</p> <p>M6 L14: Sampling Variability When Estimating a Population Mean</p>

Data Reasoning

7.DR.B Collect and consider data.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.DR.B.2</p> <p>Collect or consider data from a random sample to compare and draw inferences about a population with an unknown characteristic of interest.</p>	<p>M6 L13: Variability Between Samples</p> <p>M6 L14: Sampling Variability When Estimating a Population Mean</p> <p>M6 L15: Sampling Variability and the Effect of Sample Size</p> <p>M6 L16: Sampling Variability When Estimating a Population Proportion</p>

Data Reasoning

7.DR.C Analyze, summarize, and describe data.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.DR.C.3</p> <p>Analyze two data distributions visually to compare multiple measures of center and variability.</p>	<p>M6 L17: Comparing Sample Means</p> <p>M6 L18: Comparing Population Means</p> <p>M6 L19: Memory Games</p>

Data Reasoning

7.DR.D Interpret data and answer investigative questions.

Oregon Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>7.DR.D.4</p> <p>Interpret measures of center and measures of variability for numerical data from random samples to compare between two populations, and to answer investigative questions.</p>	<p>M6 L17: Comparing Sample Means</p> <p>M6 L18: Comparing Population Means</p> <p>M6 L19: Memory Games</p>