
Grade 7 | Pennsylvania Core Standards Mathematics 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.

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>

Numbers and Operations

CC.2.1.7.D Ratios and Proportional Relationships

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>CC.2.1.7.D.1</p> <p>Analyze proportional relationships and use them to model and solve real-world and mathematical problems.</p>	<ul style="list-style-type: none"> 7 M1 Topic A: Understanding Proportional Relationships 7 M1 Topic B: Working with Proportional Relationships 7 M1 Lesson 14: Extreme Bicycles 7 M1 Lesson 16: Using a Scale Factor 7 M1 Lesson 18: Relating Areas of Scale Drawings 7 M5 Topic A: Proportion and Percent 7 M5 Topic B: Part of 100 7 M5 Lesson 10: Percent Increase 7 M5 Lesson 11: Percent Decrease 7 M5 Lesson 12: More Discounts 7 M5 Lesson 13: What Is the Best Deal? 7 M5 Topic D: Applications of Percent 7 M5 Lesson 20: Making Money, Day 1 7 M5 Lesson 21: Making Money, Day 2 7 M5 Lesson 22: Making Mixtures 7 M5 Lesson 23: Percents of Percents

Numbers and Operations

CC.2.1.7.E The Number System

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>CC.2.1.7.E.1</p> <p>Apply and extend previous understandings of operations with fractions to operations with rational numbers.</p>	<p>7 M2 Topic A: Adding Rational Numbers</p> <p>7 M2 Topic B: Subtracting Rational Numbers</p> <p>7 M2 Topic C: Multiplying Rational Numbers</p> <p>7 M2 Topic D: Dividing Rational Numbers</p> <p>7 M2 Lesson 24: Order of Operations with Rational Numbers</p> <p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p>

Algebraic Concepts

CC.2.2.7.B Expressions and Equations

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<p>CC.2.2.7.B.1</p> <p>Apply properties of operations to generate equivalent expressions.</p>	<p>7 M3 Topic A: Equivalent Expressions</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M5 Lesson 10: Percent Increase</p> <p>7 M5 Lesson 11: Percent Decrease</p> <p>7 M5 Lesson 12: More Discounts</p> <p>7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease</p> <p>7 M5 Lesson 15: Tips and Taxes</p> <p>7 M5 Lesson 16: Markups and Discounts</p> <p>7 M5 Lesson 23: Percents of Percents</p>

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i>²
<p>CC.2.2.7.B.3</p> <p>Model and solve real-world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.</p>	<p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Topic B: Unknown Angle Measurements</p> <p>7 M3 Topic C: Solving Equations</p> <p>7 M3 Topic D: Inequalities</p>

Geometry

CC.2.3.7.A Geometry

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i>²
<p>CC.2.3.7.A.1</p> <p>Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.</p>	<p>7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures</p> <p>7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p> <p>7 M4 Lesson 10: The Outside of a Circle</p> <p>7 M4 Lesson 11: The Inside of a Circle</p> <p>7 M4 Lesson 12: Exploring the Area and Circumference of a Circle</p> <p>7 M4 Lesson 13: Finding Areas of Circular Regions</p> <p>7 M4 Lesson 14: Composite Figures with Circular Regions</p> <p>7 M4 Lesson 15: Watering a Lawn</p> <p>7 M4 Lesson 16: Solving Area Problems by Composition and Decomposition</p> <p>7 M4 Lesson 17: Surface Area of Right Rectangular and Right Triangular Prisms</p> <p>7 M4 Lesson 18: Surface Area of Right Prisms</p> <p>7 M4 Lesson 20: Surface Area of Right Pyramids</p>

**Pennsylvania Core Standards
Mathematics**

Aligned Components of *Eureka Math*²

<p>CC.2.3.7.A.1 <i>continued</i></p>	<p>7 M4 Lesson 21: Surface Area of Other Solids</p> <p>7 M4 Lesson 24: Volume of Prisms</p> <p>7 M4 Lesson 25: Volume of Composite Solids</p> <p>7 M4 Lesson 26: Designing a Fish Tank</p>
<p>CC.2.3.7.A.2</p> <p>Visualize and represent geometric figures and describe the relationships between them.</p>	<p>7 M1 Lesson 15: Scale Drawings</p> <p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 17: Finding Actual Distances from a Scale Drawing</p> <p>7 M1 Lesson 18: Relating Areas of Scale Drawings</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M1 Lesson 20: Creating Multiple Scale Drawings</p> <p>7 M4 Topic A: Constructing Geometric Figures</p> <p>7 M4 Topic B: Constructing Triangles</p> <p>7 M4 Lesson 9: Constructing a Circle</p> <p>7 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease</p>

Measurement, Data, and Probability

CC.2.4.7.B Statistics and Probability

Pennsylvania Core Standards Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>CC.2.4.7.B.1</p> <p>Draw inferences about populations based on random sampling concepts.</p>	<p>7 M6 Topic C: Random Sampling</p>
<p>CC.2.4.7.B.2</p> <p>Draw informal comparative inferences about two populations.</p>	<p>7 M6 Topic D: Comparing Populations</p>
<p>CC.2.4.7.B.3</p> <p>Investigate chance processes and develop, use, and evaluate probability models.</p>	<p>7 M6 Topic A: Calculating and Interpreting Probabilities</p> <p>7 M6 Topic B: Estimating Probabilities</p>