
Grade 7 | Indiana Academic Standards for Mathematics (2023) Correlation to *Eureka Math*²® (2027)

*Eureka Math*² is a research-proven math curriculum that empowers teachers to center instructional techniques on student success. Teachers can foster more “aha!” learning moments by providing the support needed for all learners to build a more confident math mindset.

This *Eureka Math*² edition builds on a strong foundation of effective instruction. It provides teachers with guidance on delivering rigorous instruction that honors student choice and encourages confident problem-solving.

*Eureka Math*² carefully sequences mathematical content to maximize vertical alignment from kindergarten through high school. This kind of sequencing has proven to be essential in students’ mastery of math.

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 into the teacher materials.

Accessibility

*Eureka Math*² incorporates Universal Design for Learning (UDL) principles so all learners can access the mathematics and take on challenging math concepts. UDL, Differentiation, and Multilingual Learner supports are built into the instructional design and are clearly identified in the *Teach* book.

The curriculum also carries a focus on readability. By eliminating unnecessary words and using 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.

Math Confidence

*Eureka Math*² fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students’ curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop a strong, positive mathematical identity.

Mathematical Process Standards

Aligned Components of *Eureka Math*²

<p>PS.1</p> <p>Make sense of problems and persevere in solving them.</p>	<p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>7 M2 Lesson 4: KAKOOMA[®]</p> <p>7 M2 Lesson 11: Subtracting Rational Numbers, Part 2</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 15: Solving Equations Fluently</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 M5 Lesson 6: Finding Commission</p> <p>7 M5 Lesson 7: Finding Discounts</p> <p>7 M5 Lesson 9: Tax as a Fee</p> <p>7 M5 Lesson 13: What Is the Best Deal?</p> <p>7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease</p> <p>7 M5 Lesson 21: Making Money, Day 2</p> <p>7 M6 Lesson 9: Probability Simulations</p> <p>7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size</p>
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Mathematical Process Standards**Aligned Components of *Eureka Math*²**

Mathematical Process Standards	Aligned Components of <i>Eureka Math</i>²
<p>PS.2</p> <p>Reason abstractly and quantitatively.</p>	<p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions</p> <p>7 M1 Lesson 10: Applying Proportional Reasoning</p> <p>7 M2 Lesson 8: Subtracting Integers, Part 1</p> <p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M3 Lesson 5: Factoring Expressions</p> <p>7 M3 Lesson 12: Solving Problems Algebraically and Arithmetically</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 21: Solving Two-Step Inequalities</p> <p>7 M3 Lesson 23: Inequalities vs. Equations</p> <p>7 M4 Lesson 3: Side Lengths of a Triangle</p> <p>7 M5 Lesson 10: Percent Increase</p> <p>7 M5 Lesson 11: Percent Decrease</p> <p>7 M5 Lesson 13: What Is the Best Deal?</p> <p>7 M5 Lesson 19: Applying Percent Error</p> <p>7 M5 Lesson 23: Percents of Percents</p> <p>7 M6 Lesson 1: What Is Probability?</p> <p>7 M6 Lesson 3: Outcomes of Chance Experiments</p> <p>7 M6 Lesson 8: Picking Blue</p> <p>7 M6 Lesson 12: Selecting a Sample</p> <p>7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean</p>

Mathematical Process Standards**Aligned Components of *Eureka Math*²**

<p>PS.3</p> <p>Construct viable arguments and critique the reasoning of others.</p>	<p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 20: Creating Multiple Scale Drawings</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>7 M2 Lesson 14: Understanding the Product of Two Negative Numbers</p> <p>7 M3 Lesson 1: Equivalent Expressions</p> <p>7 M3 Lesson 2: The Distributive Property and the Tabular Model</p> <p>7 M4 Lesson 4: Angles of a Triangle</p> <p>7 M4 Lesson 6: Unique Triangles</p> <p>7 M4 Lesson 7: Two Angles and One Side</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 8: Determining Fees</p> <p>7 M6 Lesson 17: Comparing Sample Means</p>
<p>PS.4</p> <p>Model with mathematics.</p>	<p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M4 Lesson 15: Watering a Lawn</p> <p>7 M4 Lesson 26: Designing a Fish Tank</p> <p>7 M5 Lesson 20: Making Money, Day 1</p> <p>7 M6 Lesson 19: Memory Games</p>

Mathematical Process Standards**Aligned Components of *Eureka Math*²**

<p>PS.5</p> <p>Use appropriate tools strategically.</p>	<p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>7 M2 Lesson 6: Adding Rational Numbers</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p> <p>7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures</p> <p>7 M4 Lesson 1: Sketching, Drawing, and Constructing Geometric Figures</p> <p>7 M5 Lesson 3: Percent as a Rate per 100</p> <p>7 M5 Lesson 5: Common Denominators or Common Numerators</p> <p>7 M6 Lesson 10: Simulations with Random Number Tables</p>
<p>PS.6</p> <p>Attend to precision.</p>	<p>7 M1 Lesson 17: Finding Actual Distances from a Scale Drawing</p> <p>7 M2 Lesson 12: The Integer Game</p> <p>7 M2 Lesson 16: Exponential Expressions with Rational Numbers</p> <p>7 M2 Lesson 24: Order of Operations with Rational Numbers</p> <p>7 M3 Lesson 3: The Distributive Property and Combining Like Terms</p> <p>7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 18: Understanding Inequalities and Their Solutions</p> <p>7 M3 Lesson 22: Solving Problems Involving Inequalities</p> <p>7 M4 Lesson 2: Constructing Parallelograms and Other Quadrilaterals</p> <p>7 M4 Lesson 9: Constructing a Circle</p> <p>7 M4 Lesson 17: Surface Area of Right Rectangular and Right Triangular Prisms</p> <p>7 M4 Lesson 20: Surface Area of Right Pyramids</p> <p>7 M4 Lesson 21: Surface Area of Other Solids</p> <p>7 M5 Lesson 12: More Discounts</p>

Mathematical Process Standards**Aligned Components of *Eureka Math*²**

PS.6 <i>continued</i>	<p>7 M5 Lesson 24: Counting Problems</p> <p>7 M6 Lesson 2: Empirical Probability</p> <p>7 M6 Lesson 4: Theoretical Probability</p> <p>7 M6 Lesson 11: Populations and Samples</p> <p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion</p>
<p>PS.7</p> <p>Look for and make use of structure.</p>	<p>7 M1 Lesson 8: Relating Representations of Proportional Relationships</p> <p>7 M1 Lesson 9: Comparing Proportional Relationships</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p> <p>7 M1 Lesson 15: Scale Drawings</p> <p>7 M2 Lesson 7: What Subtraction Means</p> <p>7 M2 Lesson 10: Subtracting Rational Numbers, Part 1</p> <p>7 M2 Lesson 15: Multiplying Rational Numbers</p> <p>7 M2 Lesson 17: Understanding Negative Dividends</p> <p>7 M2 Lesson 18: Understanding Negative Divisors</p> <p>7 M2 Lesson 22: Multiplication and Division Expressions</p> <p>7 M2 Lesson 23: Properties of Operations with Rational Numbers</p> <p>7 M3 Lesson 4: Adding and Subtracting Expressions</p> <p>7 M3 Lesson 6: Comparing Expressions</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 13: Solving Equations—Puzzles</p> <p>7 M3 Lesson 14: Solving Equations—Scavenger Hunt</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p> <p>7 M3 Lesson 19: Using Equations to Solve Inequalities</p>

Mathematical Process Standards**Aligned Components of *Eureka Math*²****PS.7 *continued***

7 M4 Lesson 11: The Inside of a Circle

7 M4 Lesson 12: Exploring the Area and Circumference of a Circle

7 M4 Lesson 13: Finding Areas of Circular Regions

7 M4 Lesson 14: Composite Figures with Circular Regions

7 M4 Lesson 18: Surface Area of Right Prisms

7 M4 Lesson 22: Understanding Planes and Cross Sections

7 M4 Lesson 23: Cross Section Scavenger Hunt

7 M4 Lesson 24: Volume of Prisms

7 M4 Lesson 25: Volume of Composite Solids

7 M5 Lesson 2: Racing for Percents

7 M5 Lesson 15: Tips and Taxes

7 M5 Lesson 16: Markups and Discounts

7 M5 Lesson 17: Simple Interest and Proportionality

7 M5 Lesson 22: Making Mixtures

7 M6 Lesson 5: Multistage Experiments

7 M6 Lesson 6: Outcomes That Are Not Equally Likely

7 M6 Lesson 18: Comparing Population Means

Mathematical Process Standards**Aligned Components of *Eureka Math*²**

PS.8	
Look for and express regularity in repeated reasoning.	<p>7 M1 Lesson 1: An Experiment with Ratios and Rates</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p> <p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 18: Relating Areas of Scale Drawings</p> <p>7 M2 Lesson 1: Combining Opposites</p> <p>7 M2 Lesson 2: Adding Integers</p> <p>7 M2 Lesson 3: Adding Integers Efficiently</p> <p>7 M2 Lesson 9: Subtracting Integers, Part 2</p> <p>7 M2 Lesson 19: Rational Numbers as Decimals, Part 1</p> <p>7 M3 Lesson 20: Preserving and Reversing</p> <p>7 M4 Lesson 5: Constructing Quadrilaterals and Triangles</p> <p>7 M4 Lesson 8: Two Sides and One Angle</p> <p>7 M4 Lesson 10: The Outside of a Circle</p> <p>7 M4 Lesson 19: Surface Area of Cylinders</p> <p>7 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 18: Simple Interest—Solving for Unknown Values</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p>

Number Sense

Students connect earlier learning to express the prime factorization of whole numbers using exponents, understand the inverse relationship between perfect squares and square roots, and use number lines to compare and order rational and irrational numbers

Indiana Academic Standards for Mathematics

Aligned Components of *Eureka Math*²

<p>7.NS.1</p> <p>Show on a number line that a number and its opposite have a sum of 0 (are additive inverses). Find and interpret sums of rational numbers in real-world contexts.</p>	<p>7 M2 Lesson 1: Combining Opposites</p> <p>7 M2 Lesson 2: Adding Integers</p> <p>7 M2 Lesson 3: Adding Integers Efficiently</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>7 M2 Lesson 6: Adding Rational Numbers</p> <p>7 M2 Lesson 8: Subtracting Integers, Part 1</p> <p>7 M2 Lesson 12: The Integer Game</p>
<p>7.NS.2</p> <p>Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.</p>	<p>7 M2 Lesson 7: What Subtraction Means</p> <p>7 M2 Lesson 8: Subtracting Integers, Part 1</p> <p>7 M2 Lesson 9: Subtracting Integers, Part 2</p> <p>7 M2 Lesson 10: Subtracting Rational Numbers, Part 1</p> <p>7 M2 Lesson 11: Subtracting Rational Numbers, Part 2</p>
<p>7.NS.3</p> <p>Use the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. (E)</p>	<p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M2 Lesson 14: Understanding the Product of Two Negative Numbers</p> <p>7 M2 Lesson 15: Multiplying Rational Numbers</p> <p>7 M2 Lesson 16: Exponential Expressions with Rational Numbers</p>

**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

<p>7.NS.4</p> <p>Explain that if p and q are integers, then $-\left(\frac{p}{q}\right) = \frac{-p}{q} = \frac{p}{-q}$ for all nonzero integers. (E)</p>	<p>7 M2 Lesson 18: Understanding Negative Divisors</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p>
<p>7.NS.5</p> <p>Find the prime factorization of whole numbers and write the results using exponents.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p>7.NS.6</p> <p>Apply the inverse relationship between squaring and finding the square root of a perfect square whole number. Find square roots of perfect square whole numbers.</p>	<p>8 M1 Lesson 16: Perfect Squares and Perfect Cubes</p> <p>8 M1 Lesson 17: Solving Equations with Squares and Cubes</p> <p>8 M1 Lesson 20: Square Roots</p> <p>8 M1 Lesson 22: Familiar and Not So Familiar Numbers</p> <p>8 M1 Lesson 24: Revisiting Equations with Squares and Cubes</p>
<p>7.NS.7</p> <p>Compute fluently with rational numbers using an algorithmic approach. (E)</p>	<p>7 M2 Lesson 4: KAKOOMA®</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>7 M2 Lesson 6: Adding Rational Numbers</p> <p>7 M2 Lesson 9: Subtracting Integers, Part 2</p> <p>7 M2 Lesson 10: Subtracting Rational Numbers, Part 1</p> <p>7 M2 Lesson 11: Subtracting Rational Numbers, Part 2</p> <p>7 M2 Lesson 12: The Integer Game</p> <p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M2 Lesson 14: Understanding the Product of Two Negative Numbers</p> <p>7 M2 Lesson 15: Multiplying Rational Numbers</p> <p>7 M2 Lesson 16: Exponential Expressions with Rational Numbers</p>

**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

<p>7.NS.7 <i>continued</i></p>	<p>7 M2 Lesson 17: Understanding Negative Dividends</p> <p>7 M2 Lesson 18: Understanding Negative Divisors</p> <p>7 M2 Lesson 22: Multiplication and Division Expressions</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>
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Ratios and Proportional Reasoning

Students continue to use ratio and rate language, compute using unit rates, and use proportional relationships to solve real-world problems involving ratios and percents.

**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

<p>7.RP.1</p> <p>Identify the unit rate or constant of proportionality in tables, graphs, equations, and verbal descriptions of proportional relationships.</p>	<p>7 M1 Lesson 1: An Experiment with Ratios and Rates</p> <p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p> <p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions</p> <p>7 M1 Lesson 8: Relating Representations of Proportional Relationships</p> <p>7 M1 Lesson 9: Comparing Proportional Relationships</p> <p>7 M1 Lesson 10: Applying Proportional Reasoning</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p>
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**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

7.RP.1 <i>continued</i>	<p>7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 18: Relating Areas of Scale Drawings</p> <p>7 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 5: Common Denominators or Common Numerators</p>
<p>7.RP.2</p> <p>Use proportional relationships to solve ratio and percent problems with multiple operations (e.g., simple interest, tax, markups, markdowns, gratuities, conversions within and across measurement systems, and percent increase and decrease). (E)</p>	<p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 10: Applying Proportional Reasoning</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p> <p>7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2</p> <p>7 M5 Lesson 2: Racing for Percents</p> <p>7 M5 Lesson 3: Percent as a Rate per 100</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 5: Common Denominators or Common Numerators</p> <p>7 M5 Lesson 6: Finding Commission</p> <p>7 M5 Lesson 7: Finding Discounts</p> <p>7 M5 Lesson 8: Determining Fees</p> <p>7 M5 Lesson 9: Tax as a Fee</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>

**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

7.RP.2 <i>continued</i>	<p>7 M5 Lesson 13: What Is the Best Deal?</p> <p>7 M5 Lesson 15: Tips and Taxes</p> <p>7 M5 Lesson 16: Markups and Discounts</p> <p>7 M5 Lesson 17: Simple Interest and Proportionality</p> <p>7 M5 Lesson 18: Simple Interest—Solving for Unknown Values</p> <p>7 M5 Lesson 19: Applying Percent Error</p> <p>7 M5 Lesson 20: Making Money, Day 1</p> <p>7 M5 Lesson 21: Making Money, Day 2</p> <p>7 M5 Lesson 22: Making Mixtures</p> <p>7 M5 Lesson 23: Percents of Percents</p>
<p>7.RP.3</p> <p>Represent real-world and other mathematical situations that involve proportional relationships. Write equations and draw graphs to represent these proportional relationships. Apply the definition of unit rate to $y = mx$. (E)</p>	<p>7 M1 Lesson 1: An Experiment with Ratios and Rates</p> <p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p> <p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>8 M4 Lesson 15: Comparing Proportional Relationships</p> <p>8 M4 Lesson 16: Proportional Relationships and Slope</p>

Algebra and Functions

Students use two variable equations, as well as graphs and tables, to model real-world proportional relationships and connect the constant of proportionality to the idea of slope.

Indiana Academic Standards for Mathematics

Aligned Components of *Eureka Math*²

<p>7.AF.1</p> <p>Apply the properties of operations (e.g., identity, inverse, commutative, associative, distributive properties) to create equivalent linear expressions, including situations that involve factoring out a common number (e.g., given $2x - 10$, create an equivalent expression $2(x - 5)$). Justify each step in the process. (E)</p>	<p>7 M3 Lesson 1: Equivalent Expressions</p> <p>7 M3 Lesson 2: The Distributive Property and the Tabular Model</p> <p>7 M3 Lesson 3: The Distributive Property and Combining Like Terms</p> <p>7 M3 Lesson 4: Adding and Subtracting Expressions</p> <p>7 M3 Lesson 5: Factoring Expressions</p> <p>7 M3 Lesson 6: Comparing Expressions</p>
<p>7.AF.2</p> <p>Solve real-world problems with rational numbers by using one or two operations. (E)</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 Lesson 2: The Distributive Property and the Tabular Model</p> <p>7 M3 Lesson 4: Adding and Subtracting Expressions</p> <p>7 M3 Lesson 5: Factoring Expressions</p> <p>7 M3 Lesson 6: Comparing Expressions</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p> <p>7 M5 Lesson 10: Percent Increase</p> <p>7 M5 Lesson 11: Percent Decrease</p>

Indiana Academic Standards for Mathematics

Aligned Components of *Eureka Math*²

<p>7.AF.2 <i>continued</i></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>
<p>7.AF.3</p> <p>Solve equations of the form $px + q = r$ and $p(x + q) = r$ fluently, where p, q, and r are specific rational numbers. Represent real-world problems using equations of these forms and solve such problems. (E)</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 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 12: Solving Equations Algebraically and Arithmetically</p> <p>7 M3 Lesson 13: Solving Equations—Puzzles</p> <p>7 M3 Lesson 14: Solving Equations—Scavenger Hunt</p> <p>7 M3 Lesson 15: Solving Equations Fluently</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p> <p>7 M3 Lesson 18: Understanding Inequalities and Their Solutions</p> <p>7 M3 Lesson 19: Using Equations to Solve Inequalities</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>

Indiana Academic Standards for Mathematics

Aligned Components of *Eureka Math*²

<p>7.AF.4</p> <p>Solve inequalities of the form $px + q (> \text{ or } \geq) r$ or $px + q (< \text{ or } \leq) r$, where p, q, and r are specific rational numbers. Represent real-world problems using inequalities of these forms and solve such problems. Graph the solution set of the inequality and interpret it in the context of the problem.</p>	<p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 12: Solving Equations Algebraically and Arithmetically</p> <p>7 M3 Lesson 13: Solving Equations—Puzzles</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p> <p>7 M3 Lesson 18: Understanding Inequalities and Their Solutions</p> <p>7 M3 Lesson 19: Using Equations to Solve Inequalities</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>7.AF.5</p> <p>Define slope as vertical change for each unit of horizontal change, and apply that a constant rate of change or constant slope describes a linear function. Identify and describe situations with constant or varying rates of change.</p>	<p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 9: Comparing Proportional Relationships</p> <p>8 M3 Lesson 17: Similar Triangles on a Line</p> <p>8 M4 Lesson 15: Comparing Proportional Relationships</p> <p>8 M4 Lesson 16: Proportional Relationships and Slope</p> <p>8 M4 Lesson 17: Slopes of Rising Lines</p> <p>8 M4 Lesson 18: Slopes of Falling Lines</p> <p>8 M4 Lesson 19: Using Coordinates to Find Slope</p> <p>8 M4 Lesson 20: Slope-Intercept Form of the Equation of a Line</p>

Indiana Academic Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>7.AF.6</p> <p>Graph a line given its slope and a point on the line. Find the slope of a line given its graph. (E)</p>	<p>8 M3 Lesson 17: Similar Triangles on a Line</p> <p>8 M4 Lesson 16: Proportional Relationships and Slope</p> <p>8 M4 Lesson 17: Slopes of Rising Lines</p> <p>8 M4 Lesson 18: Slopes of Falling Lines</p> <p>8 M4 Lesson 19: Using Coordinates to Find Slope</p> <p>8 M4 Lesson 20: Slope-Intercept Form of the Equation of a Line</p>

Geometry and Measurement

Students use scale drawings, the area and circumference of circles, and the volume of cylinders and other three-dimensional solids to solve real-world problems.

Indiana Academic Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>7.GM.1</p> <p>Solve real-world and other mathematical problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing. Create a scale drawing by using proportional reasoning.</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 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease</p>

**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

<p>7.GM.2</p> <p>Understand the formulas for area and circumference of a circle and use them to solve real-world and other mathematical problems; give an informal derivation of the relationship between circumference and area of a circle.</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.GM.3</p> <p>Solve real-world and other mathematical problems involving volume of cylinders and three-dimensional objects composed of right rectangular prisms. (E)</p>	<p>7 M4 Lesson 14: Composite Figures with Circular Regions</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 Areas of Right Pyramids</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>

Data Analysis, Statistics, and Probability

Students make inferences about populations through sampling and learn about the importance of representative samples.

Indiana Academic Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>7.DSP.1</p> <p>Understand that statistics can be used to gain information about a population by examining a sample of the population. Understand that conclusions and generalizations about a population from a sample are valid only if the sample is representative of that population and that random sampling tends to produce representative samples and support valid inferences. (E)</p>	<p>7 M6 Lesson 11: Populations and Samples</p> <p>7 M6 Lesson 12: Selecting a Sample</p> <p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean</p> <p>7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size</p> <p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion</p>
<p>7.DSP.2</p> <p>Find, use, and interpret measures of central tendency (mean and median) and measures of spread (range, interquartile range, and mean absolute deviation) for numerical data from random samples to draw comparative inferences about two populations. (E)</p>	<p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p> <p>7 M6 Lesson 19: Memory Games</p>
<p>7.DSP.3</p> <p>Make observations about the degree of visual overlap of two numerical data distributions represented in line plots or box plots. Describe how data, particularly outliers, added to a data set may affect the mean and/or median.</p>	<p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p> <p>7 M6 Lesson 19: Memory Games</p>

**Indiana Academic Standards
for Mathematics**

Aligned Components of *Eureka Math*²

<p>7.DSP.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. Understand that a probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. Understand that a probability of 1 indicates an event certain to occur and a probability of 0 indicates an event impossible to occur. Identify probabilities of events as impossible, unlikely, equally likely, likely, or certain. (E)</p>	<p>7 M6 Lesson 1: What Is Probability?</p>
<p>7.DSP.5</p> <p>Develop probability models that include the sample space and probabilities of outcomes to represent simple events with equally likely outcomes. Predict the approximate relative frequency of the event based on the model. Compare probabilities from the model to observed frequencies, evaluate the level of agreement, and explain possible sources of discrepancy. (E)</p>	<p>7 M6 Lesson 2: Empirical Probability</p> <p>7 M6 Lesson 3: Outcomes of Chance Experiments</p> <p>7 M6 Lesson 4: Theoretical Probability</p> <p>7 M6 Lesson 6: Outcomes That Are Not Equally Likely</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p> <p>7 M6 Lesson 8: Picking Blue</p>

Integrated STEM

Communication and Collaboration

Indiana Academic Standards: Integrated STEM

Aligned Components of *Eureka Math*²

Indiana Academic Standards: Integrated STEM	Aligned Components of <i>Eureka Math</i> ²
<p>7.CC.1</p> <p>Collect and document evidence to share information with others in multiple media forms.</p>	<p>7 M1 Lesson 1: An Experiment with Ratios and Rates</p> <p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 15: Scale Drawings</p> <p>7 M2 Lesson 2: Adding Integers</p> <p>7 M2 Lesson 8: Subtracting Integers, Part 1</p> <p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M2 Lesson 17: Understanding Negative Dividends</p> <p>7 M3 Lesson 2: The Distributive Property and the Tabular Model</p> <p>7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 18: Understanding Inequalities and Their Solutions</p> <p>7 M4 Lesson 1: Sketching, Drawing, and Constructing Geometric Figures</p> <p>7 M4 Lesson 5: Constructing Quadrilaterals and Triangles</p> <p>7 M4 Lesson 8: Two Sides and One Angle</p> <p>7 M4 Lesson 11: The Inside of a Circle</p> <p>7 M4 Lesson 15: Watering a Lawn</p> <p>7 M4 Lesson 23: Cross Section Scavenger Hunt</p> <p>7 M5 Lesson 2: Racing for Percents</p> <p>7 M5 Lesson 14: Scale Factor—Percent Increase and Decrease</p> <p>7 M5 Lesson 19: Applying Percent Error</p> <p>7 M5 Lesson 22: Making Mixtures</p> <p>7 M6 Lesson 3: Outcomes of Chance Experiments</p> <p>7 M6 Lesson 8: Picking Blue</p> <p>7 M6 Lesson 19: Memory Games</p>

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.CC.2</p> <p>Communicate the solution(s) of a problem/analysis either orally, visually, or in writing, including process steps, findings, or conclusions.</p>	<p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p> <p>7 M2 Lesson 1: Combining Opposites</p> <p>7 M2 Lesson 3: Adding Integers Efficiently</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>7 M2 Lesson 7: What Subtraction Means</p> <p>7 M2 Lesson 11: Subtracting Rational Numbers, Part 2</p> <p>7 M2 Lesson 16: Exponential Expressions with Rational Numbers</p> <p>7 M2 Lesson 18: Understanding Negative Divisors</p> <p>7 M2 Lesson 20: Rational Numbers as Decimals, Part 2</p> <p>7 M2 Lesson 22: Multiplication and Division Expressions</p> <p>7 M2 Lesson 23: Properties of Operations with Rational Numbers</p> <p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M3 Lesson 1: Equivalent Expressions</p> <p>7 M3 Lesson 3: The Distributive Property and Combining Like Terms</p> <p>7 M3 Lesson 4: Adding and Subtracting Integers</p> <p>7 M3 Lesson 5: Factoring Expressions</p> <p>7 M3 Lesson 6: Comparing Expressions</p> <p>7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 12: Solving Problems Algebraically and Arithmetically</p>
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**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

7.CC.2 <i>continued</i>	<p>7 M3 Lesson 13: Solving Equations—Puzzles</p> <p>7 M3 Lesson 20: Preserving and Reversing</p> <p>7 M3 Lesson 23: Inequalities vs. Equations</p> <p>7 M4 Lesson 1: Sketching, Drawing, and Constructing Geometric Figures</p> <p>7 M4 Lesson 2: Constructing Parallelograms and Other Quadrilaterals</p> <p>7 M4 Lesson 3: Side Lengths of a Triangle</p> <p>7 M4 Lesson 4: Angles of a Triangle</p> <p>7 M4 Lesson 7: Two Angles and One Side</p> <p>7 M4 Lesson 9: Constructing 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 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 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>7 M5 Lesson 3: Percent as a Rate per 100</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 6: Finding Commission</p> <p>7 M5 Lesson 8: Determining Fees</p> <p>7 M5 Lesson 9: Tax as a Fee</p> <p>7 M5 Lesson 10: Percent Increase</p>

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.CC.2 <i>continued</i></p>	<p>7 M5 Lesson 12: More Discounts</p> <p>7 M5 Lesson 13: What Is the Best Deal?</p> <p>7 M5 Lesson 17: Simple Interest and Proportionality</p> <p>7 M5 Lesson 18: Simple Interest—Solving for Unknown Values</p> <p>7 M5 Lesson 19: Apply Percent Error</p> <p>7 M5 Lesson 20: Making Money, Day 1</p> <p>7 M5 Lesson 21: Making Money, Day 2</p> <p>7 M6 Lesson 1: What is Probability?</p> <p>7 M6 Lesson 2: Empirical Probability</p> <p>7 M6 Lesson 6: Outcomes That Are Not Equally Likely</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p> <p>7 M6 Lesson 10: Simulations with Random Number Tables</p> <p>7 M6 Lesson 12: Selecting a Sample</p> <p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size</p> <p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion</p> <p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Populations Means</p>
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**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.CC.3</p> <p>Identify, implement, and assign roles and responsibilities to collaborate in various group settings (i.e., online, onsite and/or hybrid) and situations.</p>	<p>7 M1 Lesson 20: Creating Multiple Scale Drawings</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to make Addition More Efficient</p> <p>7 M2 Lesson 9: Subtracting Integers, Part 2</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 3: The Distributive Property and Combining Like Terms</p> <p>7 M4 Lesson 4: Angles of a Triangle</p> <p>7 M4 Lesson 14: Composite Figures with Circular Regions</p> <p>7 M4 Lesson 25: Volume of Composite Solids</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 8: Determining Fees</p> <p>7 M5 Lesson 18: Simple Interest—Solving for Unknown Values</p> <p>7 M5 Lesson 20: Making Money, Day 1</p> <p>7 M6 Lesson 2: Empirical Probability</p>
<p>7.CC.4</p> <p>Communicate specific constraints and criteria established for an investigation.</p>	<p>7 Data Investigation: A Typical Day</p> <p>7 Data Investigation: National Park Visitors</p> <p>7 Data Investigation: Language Diversity</p> <p><i>Supplemental material is necessary to fully address this standard.</i></p>

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.CC.5</p> <p>Evaluate competing solutions or arguments in a systematic way based on qualitative and/or quantitative evidence.</p>	<p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 20: Creating Multiple Scale Drawings</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to make Addition More Efficient</p> <p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M2 Lesson 22: Multiplication and Division Expressions</p> <p>7 M4 Lesson 4: Angles of a Triangle</p> <p>7 M4 Lesson 6: Unique Triangles</p> <p>7 M4 Lesson 14: Composite Figures with Circular Regions</p> <p>7 M5 Lesson 8: Determining Fees</p> <p>7 M5 Lesson 10: Percent Increase</p> <p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p>
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Integrated STEM

Data Analysis and Measurement

Indiana Academic Standards: Integrated STEM

Aligned Components of *Eureka Math*²

<p>7.DM.1</p> <p>Use multiple systems of measurement (i.e., standard and metric) and data sets (e.g., plots, tables, graphs, charts) defined in grade level content standards to analyze real-world scenarios and the mathematical relationships represented by the data.</p>	<p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 8: Relating Representations of Proportional Relationships</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p> <p>7 M2 Lesson 22: Multiplication and Division Expressions</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p> <p>7 M3 Lesson 19: Using Equations to Solve Inequalities</p> <p>7 M3 Lesson 22: Solving Problems Involving Inequalities</p> <p>7 M4 Lesson 3: Side Lengths of a Triangle</p> <p>7 M4 Lesson 9: Constructing a Circle</p> <p>7 M4 Lesson 10: The Outside 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 16: Solving Area Problems by Composition and Decomposition</p>

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.DM.1 <i>continued</i></p>	<p>7 M4 Lesson 17: Surface Area of Right Rectangular and Right Triangular Prisms</p> <p>7 M4 Lesson 19: Surface Area of Cylinders</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>7 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 3: Percent as a Rate per 100</p> <p>7 M5 Lesson 23: Percents of Percents</p>
<p>7.DM.2</p> <p>Construct visual representations (e.g., bar graphs, charts) to determine patterns or statistical analysis (e.g., mean, median) defined in grade level content standards.</p>	<p>7 M2 Lesson 7: What Subtraction Means</p> <p>7 M2 Lesson 8: Subtracting Integers, Part 1</p> <p>7 M2 Lesson 9: Subtracting Integers, Part 2</p> <p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M6 Lesson 12: Selecting a Sample</p> <p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean</p> <p>7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size</p> <p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion</p> <p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p> <p>7 M6 Lesson 19: Memory Games</p>

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.DM.3</p> <p>Use approximations and evaluate reasonableness of observations, results, and solutions throughout processes.</p>	<p>7 M1 Lesson 10: Applying Proportional Reasoning</p> <p>7 M2 Lesson 6: Adding Rational Numbers</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p> <p>7 M4 Lesson 10: The Outside 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 the Lawn</p> <p>7 M4 Lesson 16: Solve Area Problems by Composition and Decomposition</p> <p>7 M4 Lesson 19: Surface Area of Cylinders</p> <p>7 M5 Lesson 19: Applying Percent Error</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p> <p>7 M6 Lesson 8: Picking Blue</p> <p>7 M6 Lesson 9: Probability Simulations</p> <p>7 M6 Lesson 10: Simulations with Random Number Tables</p> <p>7 M6 Lesson 11: Populations and Samples</p> <p>7 M6 Lesson 12: Selecting a Sample</p> <p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean</p> <p>7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size</p> <p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion</p> <p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p>
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**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.DM.4</p> <p>Choose data sets and analysis methods to support the inquiry process.</p>	<p>7 Data Investigation: A Typical Day</p> <p>7 Data Investigation: National Park Visitors</p> <p>7 Data Investigation: Language Diversity</p> <p><i>Supplemental material is necessary to fully address this standard.</i></p>
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Integrated STEM

Inquiry-Based Approaches and Problem Solving

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.IPS.1</p> <p>Conduct or extend an original investigation, analyze results, iterate, and revise to improve the design.</p>	<p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M2 Lesson 1: Adding Integers</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M4 Lesson 15: Watering a Lawn</p> <p>7 M4 Lesson 26: Designing a Fish Tank</p> <p>7 M5 Lesson 13: What Is the Best Deal?</p> <p>7 M5 Lesson 20: Making Money, Day 1</p> <p>7 M5 Lesson 21: Making Money, Day 2</p>
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**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.IPS.2</p> <p>Determine one or more viable solutions using data and information to resolve a scenario given criteria and constraints.</p>	<p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 14: Extreme Bicycles</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M2 Lesson 1: Adding Integers</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M4 Lesson 15: Watering a Lawn</p> <p>7 M4 Lesson 26: Designing a Fish Tank</p> <p>7 M5 Lesson 13: What Is the Best Deal?</p> <p>7 M5 Lesson 20: Making Money, Day 1</p> <p>7 M5 Lesson 21: Making Money, Day 2</p>
<p>7.IPS.3</p> <p>Integrate processes and methodologies across disciplines based on content specific standards to incorporate multiple sources of evidence to support defining a solution.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

Integrated STEM

Applications and Modeling

Indiana Academic Standards: Integrated STEM

Aligned Components of *Eureka Math*²

<p>7.AM.1</p> <p>Interpret and evaluate relationships among sets of data (e.g., distance-time graph).</p>	<p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 13: Writing Equations for Proportional Relationships</p> <p>7 M4 Lesson 10: The Outside 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 M5 Lesson 17: Simple Interest and Proportionality</p> <p>7 M5 Lesson 18: Simple Interest—Solving for Unknown Values</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p> <p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Populations Means</p>
<p>7.AM.2</p> <p>Use coordinate planes or number lines to examine information and represent solutions.</p>	<p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 9: Comparing Proportional Relationships</p> <p>7 M1 Lesson 10: Applying Proportional Relationships</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M2 Lesson 1: Combining Opposites</p> <p>7 M2 Lesson 2: Adding Integers</p> <p>7 M2 Lesson 3: Adding Integers Efficiently</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>7 M2 Lesson 6: Adding Rational Numbers</p>

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

7.AM.2 <i>continued</i>	
	7 M2 Lesson 7: What Subtraction Means
	7 M2 Lesson 8: Subtracting Integers, Part 1
	7 M2 Lesson 9: Subtracting Integers, Part 2
	7 M2 Lesson 10: Subtracting Rational Numbers, Part 1
	7 M2 Lesson 13: Understanding Multiples of Negative Numbers
	7 M2 Lesson 17: Understanding Negative Dividends
	7 M2 Lesson 21: Comparing and Ordering Rational Numbers
	7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1
	7 M3 Lesson 18: Understanding Inequalities and Their Solutions
	7 M3 Lesson 19: Using Equations to Solve Inequalities
	7 M3 Lesson 20: Preserving and Reversing
	7 M3 Lesson 21: Solving Two-Step Inequalities
	7 M5 Lesson 3: Percent as a Rate per 100
	7 M5 Lesson 6: Finding Commission
	7 M5 Lesson 17: Simple Interest and Proportionality
	7 M5 Lesson 18: Simple Interest—Solving for Unknown Values
	7 M6 Lesson 1: What is Probability?
	7 M6 Lesson 2: Empirical Probability
	7 M6 Lesson 7: The Law of Large Numbers
	7 M6 Lesson 12: Selecting a Sample
	7 M6 Lesson 13: Variability Between Samples
	7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean
	7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size

**Indiana Academic Standards:
Integrated STEM**

Aligned Components of *Eureka Math*²

<p>7.AM.2 <i>continued</i></p>	<p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion 7 M6 Lesson 17: Comparing Sample Means 7 M6 Lesson 18: Comparing Population Means 7 M6 Lesson 19: Memory Games</p>
<p>7.AM.3 Use models to compare and contrast different systems and explain the factors that influence them.</p>	<p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships 7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions 7 M1 Lesson 9: Comparing Proportional Relationships 7 M1 Lesson 10: Applying Proportional Relationships</p>
<p>7.AM.4 Use and revise models to describe, test, and predict phenomena or solutions.</p>	<p>7 Data Investigation: A Typical Day 8 Data Investigation: Obstacles to Leisure Reading 8 Data Investigation: Crash Impact <i>Supplemental material is necessary to fully address this standard.</i></p>

Integrated STEM

Information and Digital Literacy

Indiana Academic Standards: Integrated STEM	Aligned Components of <i>Eureka Math</i> ²
<p>7.IDL.1</p> <p>Identify and evaluate the impact of technology when selecting tools to solve a problem in order to determine the most effective solution.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p>7.IDL.2</p> <p>Review and compile information from multiple sources to solve a problem.</p>	<p>7 Data Investigation: A Typical Day 7 Data Investigation: National Park Visitors 7 Data Investigation: Language Diversity</p> <p><i>Supplemental material is necessary to fully address this standard.</i></p>
<p>7.IDL.3</p> <p>Describe how solutions or technologies are adapted to meet the changing needs and wants of individuals or communities.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>