
Grade 4 | Arkansas 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.

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>

Number & Place Value

Place Value

Students understand the base ten place value system.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.NPV.1</p> <p>Recognize that a digit in a given place represents ten times what it represents in the place to its right.</p>	<p>4 M1 Lesson 6: Demonstrate that a digit represents 10 times the value of what it represents in the place to its right.</p>
<p>4.NPV.2</p> <p>Read and write whole numbers up to 1,000,000 using base ten numerals, word form, and a variety of expanded forms.</p>	<p>4 M1 Lesson 5: Organize, count, and represent a collection of objects.</p> <p>4 M1 Lesson 7: Write numbers to 1,000,000 in unit form and expanded form by using place value structure.</p> <p>4 M1 Lesson 8: Write numbers to 1,000,000 in standard form and word form.</p> <p>4 M1 Lesson 9: Compare numbers within 1,000,000 by using $>$, $=$, and $<$.</p> <p>4 M1 Lesson 10: Name numbers by using place value understanding.</p> <p>4 M1 Lesson 11: Find 1, 10, and 100 thousand more than and less than a given number.</p>
<p>4.NPV.3</p> <p>Use place value understanding to round five-digit and six-digit whole numbers to any place.</p>	<p>4 M1 Lesson 12: Round to the nearest thousand.</p> <p>4 M1 Lesson 13: Round to the nearest ten thousand and hundred thousand.</p> <p>4 M1 Lesson 14: Round multi-digit numbers to any place.</p> <p>4 M1 Lesson 15: Apply estimation to real-world situations by using rounding.</p>

Number & Place Value

Comparison

Students use place value understanding to compare numbers.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.NPV.4</p> <p>Compare two five-digit whole numbers and six-digit whole numbers, using symbols (<, =, >) to record the results of comparisons.</p>	<p>4 M1 Lesson 5: Organize, count, and represent a collection of objects.</p> <p>4 M1 Lesson 7: Write numbers to 1,000,000 in unit form and expanded form by using place value structure.</p> <p>4 M1 Lesson 8: Write numbers to 1,000,000 in standard form and word form.</p> <p>4 M1 Lesson 9: Compare numbers within 1,000,000 by using >, =, and <.</p> <p>4 M1 Lesson 10: Name numbers by using place value understanding.</p> <p>4 M1 Lesson 11: Find 1, 10, and 100 thousand more than and less than a given number.</p>
<p>4.NPV.5</p> <p>Compare two fractions with different numerators and different denominators using symbols (<, =, >) to record the results of comparisons (e.g., by creating common denominators or numerators or by comparing to a benchmark of 0, $\frac{1}{2}$, 1).</p>	<p>4 M4 Lesson 13: Compare fractions by using the benchmarks 0, $\frac{1}{2}$, and 1.</p> <p>4 M4 Lesson 14: Compare fractions with related denominators.</p> <p>4 M4 Lesson 15: Compare fractions with related numerators.</p> <p>4 M4 Lesson 16: Generate a common numerator or denominator to compare fractions.</p> <p>4 M4 Lesson 17: Apply fraction comparison strategies to compare fractions greater than 1.</p>
<p>4.NPV.6</p> <p>Compare two decimals to the hundredths place, using symbols (<, =, >) to record the results of comparisons.</p>	<p>4 M5 Lesson 9: Compare measurements expressed as decimal numbers.</p> <p>4 M5 Lesson 10: Use pictorial representations to compare decimal numbers.</p> <p>4 M5 Lesson 11: Compare and order decimal numbers.</p>

Number & Place Value

Fraction Foundations

Students develop a conceptual understanding of fractions.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.NPV.7</p> <p>Decompose fractions, including fractions greater than one and mixed numbers, into unit fractions, using concrete models, drawings, and/or the number line.</p>	<p>4 M4 Lesson 1: Decompose whole numbers into a sum of unit fractions.</p> <p>4 M4 Lesson 2: Decompose fractions into a sum of unit fractions.</p> <p>4 M4 Lesson 3: Decompose fractions into a sum of fractions.</p> <p>4 M4 Lesson 4: Represent fractions by using various fraction models.</p> <p>4 M4 Lesson 5: Rename fractions greater than 1 as mixed numbers.</p> <p>4 M4 Lesson 6: Rename mixed numbers as fractions greater than 1.</p> <p>4 M4 Lesson 7: Rename fractions as a sum of equivalent smaller unit fractions.</p> <p>4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks.</p> <p>4 M4 Lesson 19: Add and subtract fractions with like units.</p> <p>4 M4 Lesson 20: Subtract a fraction from a whole number.</p> <p>4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers.</p> <p>4 M4 Lesson 22: Add two fractions with related units.</p>

Number & Place Value

Equivalent Fractions

Students develop and apply equivalent fraction understanding.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.NPV.8</p> <p>Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{n \times a}{n \times b}$, using visual fraction models, generating equivalent fractions using the principle $\frac{a}{b} = \frac{n \times a}{n \times b}$.</p>	<p>4 M4 Lesson 8: Generate equivalent fractions with smaller units for unit fractions.</p> <p>4 M4 Lesson 9: Generate equivalent fractions with smaller units for non-unit fractions.</p> <p>4 M4 Lesson 10: Generate equivalent fractions with larger units.</p> <p>4 M4 Lesson 11: Represent equivalent fractions by using tape diagrams, number lines, and multiplication or division.</p> <p>4 M4 Lesson 12: Generate equivalent fractions for fractions greater than 1 and generate equivalent mixed numbers.</p>
<p>4.NPV.9</p> <p>Add two fractions with denominators of 10 and 100 by expressing the denominator of 10 as an equivalent fraction with a denominator of 100.</p>	<p>4 M5 Lesson 5: Decompose 1 one and express hundredths in fraction form and decimal form.</p> <p>4 M5 Lesson 6: Represent hundredths as a place value unit.</p> <p>4 M5 Lesson 7: Write mixed numbers in decimal form with hundredths.</p> <p>4 M5 Lesson 8: Represent decimal numbers in expanded form.</p> <p>4 M5 Lesson 12: Apply fraction equivalence to add tenths and hundredths.</p> <p>4 M5 Lesson 13: Apply fraction equivalence to add mixed numbers with tenths and hundredths.</p> <p>4 M5 Lesson 14: Solve word problems with tenths and hundredths.</p>
<p>4.NPV.10</p> <p>Apply decimal notation for fractions with denominators 10 or 100.</p>	<p>4 M5 Lesson 1: Organize, count, and represent a collection of money.</p> <p>4 M5 Lesson 2: Decompose 1 one and express tenths in fraction form and decimal form.</p> <p>4 M5 Lesson 3: Represent tenths as a place value unit.</p> <p>4 M5 Lesson 4: Write mixed numbers in decimal form with tenths.</p> <p>4 M5 Lesson 5: Decompose 1 one and express hundredths in fraction form and decimal form.</p> <p>4 M5 Lesson 6: Represent hundredths as a place value unit.</p> <p>4 M5 Lesson 7: Write mixed numbers in decimal form with hundredths.</p> <p>4 M5 Lesson 8: Represent decimal numbers in expanded form.</p>

Computation & Algebraic Reasoning

Operations & Properties

Students perform operations, using place value understanding and properties of operations.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.CAR.1</p> <p>Find the factor pairs for a given number in the range of 1–100, identifying whether a number is prime or composite; determine whether a given whole number in the range of 1–100 is a multiple of a given one-digit number.</p>	<p>4 M2 Lesson 21: Find factor pairs for numbers up to 100 and use factors to identify numbers as prime or composite.</p> <p>4 M2 Lesson 22: Use division and the associative property of multiplication to find factors.</p> <p>4 M2 Lesson 23: Determine whether a whole number is a multiple of another number.</p> <p>4 M2 Lesson 24: Recognize that a number is a multiple of each of its factors.</p> <p>4 M2 Lesson 25: Explore properties of prime and composite numbers up to 100 by using multiples.</p>
<p>4.CAR.2</p> <p>Use computational fluency to add and subtract whole numbers up to 1,000,000 by using strategies and algorithms, including the standard algorithm, with mastery by the end of fourth grade.</p>	<p>4 M1 Lesson 16: Add by using the standard algorithm.</p> <p>4 M1 Lesson 17: Solve multi-step addition word problems by using the standard algorithm.</p> <p>4 M1 Lesson 18: Subtract by using the standard algorithm, decomposing larger units once.</p> <p>4 M1 Lesson 19: Subtract by using the standard algorithm, decomposing larger units up to 3 times.</p> <p>4 M1 Lesson 20: Subtract by using the standard algorithm, decomposing larger units multiple times.</p> <p>4 M1 Lesson 21: Solve two-step word problems by using addition and subtraction.</p> <p>4 M1 Lesson 22: Solve multi-step word problems by using addition and subtraction.</p>
<p>4.CAR.3</p> <p>Use strategies based on place value and the properties of operations to multiply four-digit by one-digit whole numbers and two two-digit whole numbers.</p>	<p>4 M2 Lesson 1: Multiply multiples of 10 by one-digit numbers by using the associative property of multiplication.</p> <p>4 M2 Lesson 4: Multiply by using familiar strategies.</p> <p>4 M2 Lesson 5: Multiply by using place value strategies and the distributive property.</p> <p>4 M2 Lesson 6: Multiply with regrouping by using place value strategies and the distributive property.</p> <p>4 M2 Lesson 7: Multiply by using an area model and the distributive property.</p> <p>4 M2 Lesson 8: Multiply by applying the distributive property and write equations.</p> <p>4 M2 Lesson 9: Solve multiplication word problems.</p>

Arkansas Mathematics Standards

Aligned Components of *Eureka Math*²

<p>4.CAR.3 <i>continued</i></p>	<p>4 M2 Lesson 10: Multiply by applying simplifying strategies.</p> <p>4 M3 Lesson 2: Multiply by multiples of 100 and 1,000.</p> <p>4 M3 Lesson 3: Multiply a two-digit multiple of 10 by a two-digit multiple of 10.</p> <p>4 M3 Lesson 9: Apply place value strategies to multiply three-digit numbers by one-digit numbers.</p> <p>4 M3 Lesson 10: Apply place value strategies to multiply four-digit numbers by one-digit numbers.</p> <p>4 M3 Lesson 11: Represent multiplication by using partial products.</p> <p>4 M3 Lesson 12: Multiply by using various recording methods in vertical form.</p> <p>4 M3 Lesson 13: Multiply two-digit numbers by two-digit multiples of 10.</p> <p>4 M3 Lesson 14: Apply place value strategies to multiply two-digit numbers by two-digit numbers.</p> <p>4 M3 Lesson 15: Multiply with four partial products.</p> <p>4 M3 Lesson 16: Multiply with two partial products.</p> <p>4 M3 Lesson 17: Apply the distributive property to multiply.</p>
<p>4.CAR.4</p> <p>Use strategies based on place value, the properties of operations, and the relationship between multiplication and division to divide whole numbers with four-digits by one-digit divisors; quotients should be with and without whole number remainders.</p>	<p>4 M2 Lesson 2: Divide two- and three-digit multiples of 10 by one-digit numbers.</p> <p>4 M2 Lesson 11: Divide by using familiar strategies.</p> <p>4 M2 Lesson 12: Divide two-digit numbers by one-digit numbers by using an area model.</p> <p>4 M2 Lesson 13: Divide three-digit numbers by one-digit numbers by using an area model.</p> <p>4 M2 Lesson 14: Divide two-digit numbers by one-digit numbers by using place value strategies.</p> <p>4 M2 Lesson 15: Divide three-digit numbers by one-digit numbers by using place value strategies.</p> <p>4 M2 Lesson 16: Divide by using the break apart and distribute strategy.</p> <p>4 M3 Lesson 1: Divide multiples of 100 and 1,000.</p> <p>4 M3 Lesson 4: Apply place value strategies to divide hundreds, tens, and ones.</p> <p>4 M3 Lesson 5: Apply place value strategies to divide thousands, hundreds, tens, and ones.</p> <p>4 M3 Lesson 6: Connect pictorial representations of division to long division.</p> <p>4 M3 Lesson 7: Represent division by using partial quotients.</p>

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i>²
4.CAR.4 <i>continued</i>	4 M3 Lesson 8: Choose and apply a method to divide multi-digit numbers. 4 M3 Lesson 21: Find whole-number quotients and remainders. 4 M3 Lesson 22: Represent, estimate, and solve division word problems.
4.CAR.5 Add and subtract fractions, including mixed numbers, with like denominators, using visual fraction models and equations.	4 M4 Lesson 23: Add a fraction to a mixed number. 4 M4 Lesson 24: Add a mixed number to a mixed number. 4 M4 Lesson 25: Subtract a fraction from a mixed number, part 1. 4 M4 Lesson 26: Subtract a fraction from a mixed number, part 2. 4 M4 Lesson 27: Subtract a mixed number from a mixed number.
4.CAR.6 Multiply a fraction by a whole number using visual fraction models and equations.	4 M4 Lesson 31: Decompose non-unit fractions into a product of a whole number and a unit fraction. 4 M4 Lesson 32: Multiply a fraction by a whole number by using the associative property. 4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number. 4 M4 Lesson 34: Multiply a mixed number by a whole number by using the distributive property.

Computation & Algebraic Reasoning

Problem Solving

Students solve real-world problems.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i>²
4.CAR.7 Solve real-world problems involving multiplicative comparison, using drawings and/or equations with a symbol for the unknown number, and distinguish between multiplicative comparison and additive comparison.	4 M1 Lesson 1: Interpret multiplication as multiplicative comparison. 4 M1 Lesson 2: Solve multiplicative comparison problems with unknowns in various positions. 4 M1 Lesson 3: Describe relationships between measurements by using multiplicative comparison. 4 M1 Lesson 4: Represent the composition of larger units of money by using multiplicative comparison. 4 M1 Lesson 6: Demonstrate that a digit represents 10 times the value of what it represents in the place to its right. 4 M2 Lesson 9: Solve multiplication word problems. 4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.CAR.8</p> <p>Solve multi-step, real-world problems posed with whole numbers and having whole-number answers, using addition, subtraction, multiplication, and division; include problems in which remainders must be interpreted and represent these problems using equations with symbols standing for the unknown quantity.</p>	<p>4 M1 Lesson 15: Apply estimation to real-world situations by using rounding.</p> <p>4 M1 Lesson 16: Add by using the standard algorithm.</p> <p>4 M1 Lesson 17: Solve multi-step addition word problems by using the standard algorithm.</p> <p>4 M1 Lesson 21: Solve two-step word problems by using addition and subtraction.</p> <p>4 M1 Lesson 22: Solve multi-step word problems by using addition and subtraction.</p> <p>4 M3 Lesson 21: Find whole-number quotients and remainders.</p> <p>4 M3 Lesson 22: Represent, estimate, and solve division word problems.</p> <p>4 M3 Lesson 23: Solve multi-step word problems and interpret remainders.</p> <p>4 M3 Lesson 24: Solve multi-step word problems and assess the reasonableness of solutions.</p>
<p>4.CAR.9</p> <p>Solve real-world problems involving the addition and subtraction of fractions; include mixed numbers with like denominators, using visual fraction models or equations.</p>	<p>4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks.</p> <p>4 M4 Lesson 20: Subtract a fraction from a whole number.</p> <p>4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers.</p> <p>4 M4 Lesson 24: Add a mixed number to a mixed number.</p> <p>4 M4 Lesson 27: Subtract a mixed number from a mixed number.</p> <p>4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations.</p>
<p>4.CAR.10</p> <p>Solve real-world problems involving the multiplication of a fraction by a whole number using visual fraction models or equations.</p>	<p>4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number.</p>

Computation & Algebraic Reasoning

Algebraic Concepts

Students develop and apply an understanding of foundational algebraic concepts.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.CAR.11</p> <p>Generate a number or shape pattern that follows a given rule, identifying apparent features of the pattern that are not explicit in the rule itself.</p>	<p>4 M2 Lesson 26: Use relationships within a pattern to find an unknown term in the sequence.</p>

Geometry & Measurement

Shapes

Students expand knowledge of shapes by analyzing sides and angles.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.GM.1</p> <p>Identify angles as geometric shapes that are formed where two rays share a common endpoint, understanding that angles are measured with reference to a circle so that an angle that turns through a $\frac{1}{360}$ of a circle is called a “one-degree angle” and an angle that turns through n one-degree angles is said to have an angle measure of n degree.</p>	<p>4 M6 Lesson 7: Explore angles as fractional turns through a circle.</p> <p>4 M6 Lesson 8: Use a circular protractor to recognize a 1° angle as a turn through $\frac{1}{360}$ of a circle.</p> <p>4 M6 Lesson 9: Identify and measure angles as turns and recognize them in various contexts.</p> <p>4 M6 Lesson 10: Use 180° protractors to measure angles.</p> <p>4 M6 Lesson 11: Estimate and measure angles with a 180° protractor.</p> <p>5 M5 Lesson 22: Find the volumes of right rectangular prisms by using the area of the base.</p> <p>5 M5 Lesson 23: Find the volumes of right rectangular prisms by multiplying the edge lengths.</p>

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.GM.2</p> <p>Measure angles in whole-number degrees, using a protractor, drawing angles of specified measure.</p>	<p>4 M6 Lesson 8: Use a circular protractor to recognize a 1° angle as a turn through $\frac{1}{360}$ of a circle.</p> <p>4 M6 Lesson 10: Use 180° protractors to measure angles.</p> <p>4 M6 Lesson 11: Estimate and measure angles with a 180° protractor.</p> <p>4 M6 Lesson 12: Use a protractor to draw angles up to 180°.</p>
<p>4.GM.3</p> <p>Solve real-world problems finding unknown angle measures, using addition and subtraction when an angle is decomposed into non-overlapping parts.</p>	<p>4 M6 Lesson 13: Decompose angles by using pattern blocks.</p> <p>4 M6 Lesson 14: Find unknown angle measures within right and straight angles.</p> <p>4 M6 Lesson 15: Find unknown angle measures within a decomposed angle of up to 180°.</p> <p>4 M6 Lesson 16: Find unknown angle measures around a point.</p>
<p>4.GM.4</p> <p>Identify and draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines, identifying these in quadrilaterals and triangles.</p>	<p>4 M6 Lesson 1: Identify and draw points, lines, line segments, rays, and angles.</p> <p>4 M6 Lesson 2: Identify right, acute, obtuse, and straight angles.</p> <p>4 M6 Lesson 3: Draw right, acute, obtuse, and straight angles.</p> <p>4 M6 Lesson 4: Identify, define, and draw perpendicular lines.</p> <p>4 M6 Lesson 5: Identify, define, and draw parallel lines.</p> <p>4 M6 Lesson 6: Relate geometric figures to a real-world context.</p> <p>4 M6 Lesson 10: Use 180° protractors to measure angles.</p> <p>4 M6 Lesson 11: Estimate and measure angles with a 180° protractor.</p> <p>4 M6 Lesson 12: Use a protractor to draw angles up to 180°.</p> <p>4 M6 Lesson 18: Analyze and classify triangles based on side length, angle measures, or both.</p> <p>4 M6 Lesson 19: Construct and classify triangles based on given attributes.</p> <p>4 M6 Lesson 20: Sort polygons based on a given rule.</p>

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i>²
<p>4.GM.5</p> <p>Classify two-dimensional figures based on the presence or absence of parallel lines, perpendicular lines, or angles of a specified size, involving quadrilaterals and triangles.</p>	<p>4 M6 Lesson 18: Analyze and classify triangles based on side length, angle measures, or both.</p> <p>4 M6 Lesson 19: Construct and classify triangles based on given attributes.</p> <p>4 M6 Lesson 20: Sort polygons based on a given rule.</p>
<p>4.GM.6</p> <p>Identify and/or draw lines of symmetry for a two-dimensional figure.</p>	<p>4 M6 Lesson 17: Recognize, identify, and draw lines of symmetry.</p>

Geometry & Measurement

Perimeter, Area, & Volume

Students calculate the perimeter of polygons, area of rectangles, and liquid volume.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i>²
<p>4.GM.7</p> <p>Apply the area and perimeter formulas for rectangles and figures composed of two or more rectangles in real-world situations.</p>	<p>4 M2 Lesson 3: Investigate and use a formula for the area of a rectangle.</p> <p>4 M2 Lesson 7: Multiply by using an area model and the distributive property.</p> <p>4 M2 Lesson 18: Investigate and use formulas for the perimeter of a rectangle.</p> <p>4 M2 Lesson 19: Apply area and perimeter formulas to solve problems.</p> <p>4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.</p>

Geometry & Measurement

Time, Money, & Conversions

Students apply measurement knowledge to solve real-world problems.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.GM.8</p> <p>Convert measurements of length, weight/mass, and liquid volume within the same system of measurement, metric and customary, expressing measurements from a larger unit in terms of a smaller unit.</p>	<p>4 M1 Lesson 23: Express metric measurements of length in terms of smaller units.</p> <p>4 M1 Lesson 24: Express metric measurements of mass and liquid volume in terms of smaller units.</p> <p>4 M2 Lesson 17: Express measurements of length in terms of smaller units.</p> <p>4 M3 Lesson 18: Express units of time in terms of smaller units.</p> <p>4 M3 Lesson 19: Express customary measurements of weight in terms of smaller units.</p> <p>4 M3 Lesson 20: Express customary measurements of liquid volume in terms of smaller units.</p>
<p>4.GM.9</p> <p>Solve real-world problems involving time intervals that may cross the hour.</p>	<p>4 M2 Lesson 17: Express measurements of length in terms of smaller units.</p> <p>4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.</p> <p>4 M3 Lesson 18: Express units of time in terms of smaller units.</p> <p>4 M3 Lesson 19: Express customary measurements of weight in terms of smaller units.</p> <p>4 M3 Lesson 20: Express customary measurements of liquid volume in terms of smaller units.</p> <p>4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks.</p> <p>4 M4 Lesson 20: Subtract a fraction from a whole number.</p> <p>4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers.</p> <p>4 M4 Lesson 24: Add a mixed number to a mixed number.</p> <p>4 M4 Lesson 27: Subtract a mixed number from a mixed number.</p> <p>4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations.</p> <p>4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number.</p> <p>4 M5 Lesson 14: Solve word problems with tenths and hundredths.</p>

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i> ²
<p>4.GM.10</p> <p>Solve real-world problems involving addition and subtraction of money, including the ability to make change.</p>	<p>4 M2 Lesson 17: Express measurements of length in terms of smaller units.</p> <p>4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.</p> <p>4 M3 Lesson 18: Express units of time in terms of smaller units.</p> <p>4 M3 Lesson 19: Express customary measurements of weight in terms of smaller units.</p> <p>4 M3 Lesson 20: Express customary measurements of liquid volume in terms of smaller units.</p> <p>4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks.</p> <p>4 M4 Lesson 20: Subtract a fraction from a whole number.</p> <p>4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers.</p> <p>4 M4 Lesson 24: Add a mixed number to a mixed number.</p> <p>4 M4 Lesson 27: Subtract a mixed number from a mixed number.</p> <p>4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations.</p> <p>4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number.</p> <p>4 M5 Lesson 14: Solve word problems with tenths and hundredths.</p>
<p>4.GM.11</p> <p>Solve real-world problems involving distances, liquid volume, and masses of objects, including problems that require expressing measurements given in a larger unit in terms of a smaller unit.</p>	<p>4 M2 Lesson 17: Express measurements of length in terms of smaller units.</p> <p>4 M2 Lesson 20: Solve word problems involving additive and multiplicative comparisons.</p> <p>4 M3 Lesson 18: Express units of time in terms of smaller units.</p> <p>4 M3 Lesson 19: Express customary measurements of weight in terms of smaller units.</p> <p>4 M3 Lesson 20: Express customary measurements of liquid volume in terms of smaller units.</p> <p>4 M4 Lesson 18: Estimate sums and differences of fractions by using benchmarks.</p> <p>4 M4 Lesson 20: Subtract a fraction from a whole number.</p> <p>4 M4 Lesson 21: Solve addition and subtraction word problems and estimate the reasonableness of the answers.</p> <p>4 M4 Lesson 24: Add a mixed number to a mixed number.</p>

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i>²
4.GM.11 <i>continued</i>	<p>4 M4 Lesson 27: Subtract a mixed number from a mixed number.</p> <p>4 M4 Lesson 28: Represent and solve word problems with mixed numbers by using drawings and equations.</p> <p>4 M4 Lesson 33: Solve word problems involving multiplication of a fraction by a whole number.</p> <p>4 M5 Lesson 14: Solve word problems with tenths and hundredths.</p>

Data Analysis

Charts, Graphs, & Tables

Students organize and analyze data.

Arkansas Mathematics Standards	Aligned Components of <i>Eureka Math</i>²
<p>4.DA.1</p> <p>Collect and interpret data from observations, surveys, and experiments; represent data using frequency tables and scaled bar graphs.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p>4.DA.2</p> <p>Use a line plot to display a data set of measurements in fractions of a unit, solving problems involving addition and subtraction of fractions with like denominators using data presented in line plots.</p>	<p>4 M4 Lesson 29: Solve problems by using data from a line plot.</p> <p>4 M4 Lesson 30: Represent data on a line plot.</p>