

---

## Grade 6 | Alaska Mathematics Standards Correlation to *Eureka Math*<sup>2</sup>®

When the original *Eureka Math*<sup>®</sup> curriculum was released, it quickly became the most widely used K–5 mathematics curriculum in the country. Now, the Great Minds<sup>®</sup> teacher–writers have created *Eureka Math*<sup>2</sup>®, 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*<sup>2</sup> 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*<sup>2</sup> 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*<sup>2</sup> 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*<sup>2</sup> 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*<sup>2</sup> 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> <sup>2</sup>
<p><b>MP.1</b> 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><b>MP.2</b> 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><b>MP.3</b> 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><b>MP.4</b> 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><b>MP.5</b> 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><b>MP.6</b> 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><b>MP.7</b> 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><b>MP.8</b> 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>

## Ratios and Proportional Relationships

Understand ratio concepts and use ratio reasoning to solve problems.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.RP.1</b></p> <p>Write and describe the relationship in real life context between two quantities using ratio language.</p>	<p>6 M1 Lesson 2: Introduction to Ratios</p> <p>6 M1 Lesson 3: Ratios and Tape Diagrams</p> <p>6 M1 Lesson 4: Exploring Ratios by Making Batches</p> <p>6 M1 Lesson 5: Equivalent Ratios</p> <p>6 M1 Lesson 8: Addition Patterns in Ratio Relationships</p> <p>6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships</p> <p>6 M1 Lesson 11: Applications of Ratio Reasoning</p>
<p><b>6.RP.2</b></p> <p>Understand the concept of a unit rate (<math>\frac{a}{b}</math> associated with a ratio <math>a:b</math> with <math>b \neq 0</math>, and use rate language in the context of a ratio relationship) and apply it to solve real-world problems (e.g., unit pricing, constant speed).</p>	<p>6 M1 Lesson 15: The Value of the Ratio</p> <p>6 M1 Lesson 16: Speed</p> <p>6 M1 Lesson 17: Rates</p> <p>6 M1 Lesson 18: Comparing Rates</p> <p>6 M1 Lesson 19: Using Rates to Convert Units</p> <p>6 M1 Lesson 20: Solving Rate Problems</p>
<p><b>6.RP.3</b></p> <p>Use ratio and rate reasoning to solve real-world and mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations).</p>	<p>6 M1 Lesson 1: Jars of Jelly Beans</p> <p>6 M1 Lesson 3: Ratios and Tape Diagrams</p> <p>6 M1 Lesson 4: Exploring Ratios by Making Batches</p> <p>6 M1 Lesson 5: Equivalent Ratios</p> <p>6 M1 Lesson 6: Ratio Tables and Double Number Lines</p> <p>6 M1 Lesson 8: Addition Patterns in Ratio Relationships</p> <p>6 M1 Lesson 9: Multiplication Patterns in Ratio Relationships</p> <p>6 M1 Lesson 10: Multiplicative Reasoning in Ratio Relationships</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.RP.3</b> <i>continued</i></p>	<p>6 M1 Lesson 11: Applications of Ratio Reasoning</p> <p>6 M4 Lesson 22: Relationship Between Two Variables</p> <p>6 M4 Lesson 23: Graphs of Ratio Relationships</p>
<p><b>6.RP.3.a</b></p> <p>Make tables of equivalent ratios relating quantities with whole number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios, and understand equivalencies.</p>	<p>6 M1 Topic B: Collections of Equivalent Ratios</p> <p>6 M1 Topic C: Comparing Ratio Relationships</p> <p>6 M1 Lesson 16: Speed</p> <p>6 M1 Lesson 18: Comparing Rates</p>
<p><b>6.RP.3.b</b></p> <p>Solve unit rate problems including those involving unit pricing and constant speed.</p>	<p>6 M1 Topic D: Rates</p> <p>6 M5 Lesson 8: Areas of Composite Figures in Real-World Situations</p> <p>6 M5 Lesson 13: Surface Area in Real-World Situations</p>
<p><b>6.RP.3.c</b></p> <p>Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means <math>\frac{30}{100}</math> times the quantity); solve problems involving finding the whole, given a part and the percent.</p>	<p>6 M1 Topic E: Percents</p>
<p><b>6.RP.3.d</b></p> <p>Use ratio reasoning to convert measurement units between given measurement systems (e.g., convert kilometers to miles); manipulate and transform units appropriately when multiplying or dividing quantities.</p>	<p>6 M1 Lesson 19: Using Rates to Convert Units</p> <p>6 M1 Lesson 20: Solving Rate Problems</p> <p>6 M1 Lesson 21: Solving Multi-Step Rate Problems</p>

## The Number System

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.NS.1</b></p> <p>Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions (e.g., by using visual fraction models and equations to represent the problem).</p>	<p>6 M2 Topic B: Dividing Fractions</p> <p>6 M2 Topic C: Dividing Fractions Fluently</p>

## The Number System

Compute fluently with multi-digit numbers and find common factors and multiples.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.NS.2</b></p> <p>Fluently multiply and divide multi-digit whole numbers using the standard algorithm. Express the remainder as a whole number, decimal, or simplified fraction; explain or justify your choice based on the context of the problem.</p>	<p>6 M2 Topic E: Division of Multi-Digit Numbers</p>
<p><b>6.NS.3</b></p> <p>Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. Express the remainder as a terminating decimal, or a repeating decimal, or rounded to a designated place value.</p>	<p>6 M2 Topic D: Decimal Addition, Subtraction, and Multiplication</p> <p>6 M2 Topic F: Decimal Division</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.NS.4</b></p> <p>Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.</p>	<p>6 M2 Topic A: Factors, Multiples, and Divisibility</p> <p>6 M4 Lesson 13: The Distributive Property</p> <p>6 M4 Lesson 14: Using the Distributive Property to Factor Expressions</p>

## The Number System

Apply and extend previous understandings of numbers to the system of rational numbers.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.NS.5</b></p> <p>Understand that positive and negative numbers describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explain the meaning of 0 in each situation.</p>	<p>6 M3 Lesson 1: Positive and Negative Numbers</p> <p>6 M3 Lesson 4: Rational Numbers in Real-World Situations</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.NS.6</b></p> <p>Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p><b>6.NS.6.a</b></p> <p>Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; Recognize that the opposite of the opposite of a number is the number itself [e.g., <math>-(-3) = 3</math>] and that 0 is its own opposite.</p>	<p>6 M3 Lesson 2: Integers</p> <p>6 M3 Lesson 3: Rational Numbers</p> <p>6 M3 Lesson 4: Rational Numbers in Real-World Situations</p>
<p><b>6.NS.6.b</b></p> <p>Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.</p>	<p>6 M3 Lesson 10: The Four Quadrants of the Coordinate Plane</p> <p>6 M3 Lesson 11: Plotting Points in the Coordinate Plane</p> <p>6 M3 Lesson 12: Reflections in the Coordinate Plane</p> <p>6 M3 Lesson 13: Constructing the Coordinate Plane</p>
<p><b>6.NS.6.c</b></p> <p>Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.</p>	<p>6 M3 Lesson 3: Rational Numbers</p> <p>6 M3 Lesson 11: Plotting Points in the Coordinate Plane</p> <p>6 M3 Lesson 12: Reflections in the Coordinate Plane</p> <p>6 M3 Lesson 13: Constructing the Coordinate Plane</p> <p>6 M3 Topic D: Solving Problems in the Coordinate Plane</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.NS.7</b></p> <p>Understand ordering and absolute value of rational numbers.</p>	<p>6 M3 Lesson 5: Comparing Rational Numbers</p> <p>6 M3 Lesson 6: Ordering Rational Numbers</p> <p>6 M3 Lesson 8: Absolute Value and Order</p>
<p><b>6.NS.7.a</b></p> <p>Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram.</p>	<p>6 M3 Lesson 5: Comparing Rational Numbers</p> <p>6 M3 Lesson 6: Ordering Rational Numbers</p>
<p><b>6.NS.7.b</b></p> <p>Write, interpret, and explain statements of order for rational numbers in real-world contexts.</p>	<p>6 M3 Lesson 5: Comparing Rational Numbers</p> <p>6 M3 Lesson 6: Ordering Rational Numbers</p>
<p><b>6.NS.7.c</b></p> <p>Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.</p>	<p>6 M3 Lesson 7: Absolute Value</p>
<p><b>6.NS.7.d</b></p> <p>Distinguish comparisons of absolute value from statements about order.</p>	<p>6 M3 Lesson 8: Absolute Value and Order</p> <p>6 M3 Lesson 9: Interpreting Order and Distance in Real-World Situations</p>



<b>Alaska Mathematics Standards</b>	<b>Aligned Components of <i>Eureka Math</i><sup>2</sup></b>
<p><b>6.NS.8</b></p> <p>Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.</p>	<p>6 M3 Lesson 14: Modeling with the Coordinate Plane</p> <p>6 M3 Topic D: Solving Problems in the Coordinate Plane</p> <p>6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane</p>

## Expressions and Equations

Apply and extend previous understandings of arithmetic to algebraic expressions.

<b>Alaska Mathematics Standards</b>	<b>Aligned Components of <i>Eureka Math</i><sup>2</sup></b>
<p><b>6.EE.1</b></p> <p>Write and evaluate numerical expressions involving whole-number exponents.</p>	<p>6 M4 Topic A: Numerical Expressions</p>
<p><b>6.EE.2</b></p> <p>Write, read, and evaluate expressions in which letters stand for numbers.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p><b>6.EE.2.a</b></p> <p>Write expressions that record operations with numbers and with letters standing for numbers.</p>	<p>6 M4 Lesson 7: Algebraic Expressions with Addition and Subtraction</p> <p>6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division</p> <p>6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.EE.2.b</b></p> <p>Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity.</p>	<p>6 M4 Lesson 7: Algebraic Expressions with Addition and Subtraction</p> <p>6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division</p> <p>6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations</p> <p>6 M4 Lesson 11: Modeling Real-World Situations with Expressions</p>
<p><b>6.EE.2.c</b></p> <p>Evaluate expressions and formulas. Include formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order with or without parentheses. (Order of Operations)</p>	<p>6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division</p> <p>6 M4 Lesson 11: Modeling Real-World Situations with Expressions</p> <p>6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions</p> <p>6 M4 Lesson 17: Equations and Solutions</p> <p>6 M5 Lesson 1: The Area of a Parallelogram</p> <p>6 M5 Lesson 3: The Area of a Triangle</p> <p>6 M5 Lesson 12: From Nets to Surface Area</p> <p>6 M5 Lesson 13: Surface Area in Real-World Situations</p> <p>6 M5 Lesson 14: Designing a Box</p> <p>6 M5 Lesson 16: Applying Volume Formulas</p>
<p><b>6.EE.3</b></p> <p>Apply the properties of operations to generate equivalent expressions. Model (e.g., manipulatives, graph paper) and apply the distributive, commutative, identity, and inverse properties with integers and variables by writing equivalent expressions.</p>	<p>6 M4 Topic C: Equivalent Expressions Using the Properties of Operations</p> <p>6 M5 Lesson 4: Areas of Triangles in Real-World Situations</p> <p>6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane</p> <p>6 M5 Lesson 7: Area of Trapezoids and Other Polygons</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.EE.4</b></p> <p>Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).</p>	<p>6 M4 Topic C: Equivalent Expressions Using the Properties of Operations</p> <p>6 M5 Lesson 7: Area of Trapezoids and Other Polygons</p> <p>6 M5 Lesson 12: From Nets to Surface Area</p> <p>6 M5 Lesson 17: Problem Solving with Volume</p>

## Expressions and Equations

Reason about and solve one-variable equations and inequalities.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.EE.5</b></p> <p>Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.</p>	<p>6 M4 Lesson 17: Equations and Solutions</p> <p>6 M4 Lesson 18: Inequalities and Solutions</p> <p>6 M4 Lesson 19: Solving Equations with Addition and Subtraction</p> <p>6 M4 Lesson 20: Solving Equations with Multiplication and Division</p>
<p><b>6.EE.6</b></p> <p>Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.</p>	<p>6 M4 Lesson 9: Addition and Subtraction Expressions from Real-World Situations</p> <p>6 M4 Lesson 10: Multiplication and Division Expressions from Real-World Situations</p> <p>6 M4 Lesson 11: Modeling Real-World Situations with Expressions</p> <p>6 M4 Lesson 16: Equivalent Algebraic Expressions</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.EE.7</b></p> <p>Solve real-world and mathematical problems by writing and solving equations of the form <math>x + p = q</math> and <math>px = q</math> for cases in which <math>p</math>, <math>q</math> and <math>x</math> are all nonnegative rational numbers.</p>	<p>6 M4 Lesson 17: Equations and Solutions</p> <p>6 M4 Lesson 19: Solving Equations with Addition and Subtraction</p> <p>6 M4 Lesson 20: Solving Equations with Multiplication and Division</p> <p>6 M4 Lesson 21: Solving Problems with Equations</p> <p>6 M5 Lesson 2: The Area of a Right Triangle</p>
<p><b>6.EE.8</b></p> <p>Write an inequality of the form <math>x &gt; c</math> or <math>x &lt; c</math> to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form <math>x &gt; c</math> or <math>x &lt; c</math> have infinitely many solutions; represent solutions of such inequalities on number line diagrams.</p>	<p>6 M4 Lesson 18: Inequalities and Solutions</p>

## Expressions and Equations

Represent and analyze quantitative relationships between dependent and independent variables.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.EE.9</b></p> <p>Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation.</p>	<p>6 M4 Topic E: Relating Variables by Using Tables, Graphs, and Equations</p>

## Geometry

Solve real-world and mathematical problems involving area, surface area, and volume.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.G.1</b></p> <p>Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing or decomposing into other polygons (e.g., rectangles and triangles). Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6 M5 Topic A: Areas of Polygons</p> <p>6 M5 Topic B: Problem Solving with Area</p>

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.G.2</b></p> <p>Apply the standard formulas to find volumes of prisms. Use the attributes and properties (including shapes of bases) of prisms to identify, compare or describe three-dimensional figures including prisms and cylinders.</p>	<p>6 M5 Topic D: Volumes of Right Rectangular Prisms</p>
<p><b>6.G.3</b></p> <p>Draw polygons in the coordinate plane given coordinates for the vertices; determine the length of a side joining the coordinates of vertices with the same first or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane</p> <p>6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane</p>
<p><b>6.G.4</b></p> <p>Represent three-dimensional figures (e.g., prisms) using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>6 M5 Topic C: Nets and Surface Area</p> <p>6 M5 Lesson 19: Volume and Surface Area in Real-World Situations</p>
<p><b>6.G.5</b></p> <p>Identify, compare or describe attributes and properties of circles (radius and diameter).</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

**Statistics and Probability****Develop understanding of statistical variability.**

<b>Alaska Mathematics Standards</b>	<b>Aligned Components of <i>Eureka Math</i><sup>2</sup></b>
<p><b>6.SP.1</b></p> <p>Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.</p>	<p>6 M6 Lesson 1: Posing Statistical Questions</p> <p>6 M6 Lesson 6: Selecting a Data Display</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p>
<p><b>6.SP.2</b></p> <p>Understand that a set of data has a distribution that can be described by its center (mean, median, or mode), spread (range), and overall shape and can be used to answer a statistical question.</p>	<p>6 M6 Lesson 2: Describing a Data Distribution</p> <p>6 M6 Lesson 3: Creating a Dot Plot</p> <p>6 M6 Lesson 4: Creating a Histogram</p> <p>6 M6 Lesson 9: Variability in a Data Distribution</p> <p>6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p>
<p><b>6.SP.3</b></p> <p>Recognize that a measure of center (mean, median, or mode) for a numerical data set summarizes all of its values with a single number, while a measure of variation (range) describes how its values vary with a single number.</p>	<p>6 M6 Topic B: Mean and Mean Absolute Deviation</p> <p>6 M6 Lesson 12: Using the Median to Describe the Center</p> <p>6 M6 Lesson 13: Using the Interquartile Range to Describe Variability</p> <p>6 M6 Lesson 15: More Practice with Box Plots</p> <p>6 M6 Lesson 16: Interpreting Box Plots</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>

## Statistics and Probability

### Summarize and describe distributions.

Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.SP.4</b></p> <p>Display numerical data in plots on a number line, including dot or line plots, histograms and box (box and whisker) plots.</p>	<p>6 M6 Lesson 3: Creating a Dot Plot</p> <p>6 M6 Lesson 4: Creating a Histogram</p> <p>6 M6 Lesson 5: Comparing Data Displays</p> <p>6 M6 Lesson 6: Selecting a Data Display</p> <p>6 M6 Lesson 14: Using a Box Plot to Summarize a Distribution</p> <p>6 M6 Lesson 15: More Practice with Box Plots</p> <p>6 M6 Lesson 16: Interpreting Box Plots</p> <p>6 M6 Lesson 19: Comparing Data Distributions</p> <p>6 M6 Lesson 22: Presenting Statistical Projects</p>
<p><b>6.SP.5</b></p> <p>Summarize numerical data sets in relation to their context, such as by:</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p><b>6.SP.5.a</b></p> <p>Reporting the number of observations (occurrences).</p>	<p>6 M6 Lesson 2: Describing a Data Distribution</p>
<p><b>6.SP.5.b</b></p> <p>Describing the nature of the attribute under investigation, including how it was measured and its units of measurement.</p>	<p>6 M6 Lesson 1: Posing Statistical Questions</p> <p>6 M6 Lesson 5: Comparing Data Displays</p> <p>6 M6 Lesson 17: Developing a Statistical Project</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p>



Alaska Mathematics Standards	Aligned Components of <i>Eureka Math</i> <sup>2</sup>
<p><b>6.SP.5.c</b></p> <p>Giving quantitative measures of center (median and/or mean) and variability (interquartile range), as well as describing any overall pattern and any outliers with reference to the context in which the data were gathered.</p>	<p>6 M6 Lesson 7: Using the Mean to Describe the Center</p> <p>6 M6 Lesson 8: The Mean as a Balance Point</p> <p>6 M6 Lesson 10: The Mean Absolute Deviation</p> <p>6 M6 Lesson 11: Using the Mean and Mean Absolute Deviation</p> <p>6 M6 Lesson 12: Using the Median to Describe the Center</p> <p>6 M6 Lesson 13: Using the Interquartile Range to Describe Variability</p> <p>6 M6 Lesson 18: Connecting Graphical Representations and Summary Measures</p> <p>6 M6 Lesson 21: Comparing Measures of Variability</p>
<p><b>6.SP.5.d</b></p> <p>Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.</p>	<p>6 M6 Lesson 20: Choosing a Measure of Center</p>
<p><b>6.SP.6</b></p> <p>Analyze whether a game is mathematically fair or unfair by explaining the probability of all possible outcomes.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>
<p><b>6.SP.7</b></p> <p>Solve or identify solutions to problems involving possible combinations (e.g., if ice cream sundaes come in 3 flavors with 2 possible toppings, how many different sundaes can be made using only one flavor of ice cream with one topping?).</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>