
Grade 6 | New York Next Generation Mathematics Learning Standards Correlation to *Eureka Math*[®]

About *Eureka Math*

Created by Great Minds[®], a mission-driven Public Benefit Corporation, *Eureka Math*[®] helps teachers deliver unparalleled math instruction that provides students with a deep understanding and fluency in math. Crafted by teachers and math scholars, the curriculum carefully sequences the mathematical progressions to maximize coherence from Prekindergarten through Precalculus—a principle tested and proven to be essential in students’ mastery of math.

Teachers and students using *Eureka Math* find the trademark “Aha!” moments in *Eureka Math* to be a source of joy and inspiration, lesson after lesson, year after year.

Aligned

Great Minds offers detailed analyses that demonstrate how each grade of *Eureka Math* aligns with specific state standards. Access these free alignment studies at greatminds.org/state-studies.

Data


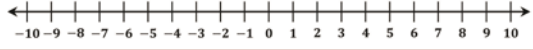
Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at greatminds.org/data.

Full Suite of Resources

Great Minds offers the *Eureka Math* curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at greatminds.org/math/curriculum.

The teacher-writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following:

- Printed material in English and Spanish
- Digital resources
- Professional development
- Classroom tools and manipulatives
- Teacher support materials
- Parent resources

Standards for Mathematical Practice	Aligned Components of <i>Eureka Math</i>
<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 designated in the Module Overview and labeled in lessons. For example:</p>
<p>MP.2 Reason abstractly and quantitatively.</p>	<p>A STORY OF RATIOS Lesson 11 6•3</p>
<p>MP.3 Construct viable arguments and critique the reasoning of others.</p>	<p> Lesson 11: Absolute Value—Magnitude and Distance</p>
<p>MP.4 Model with mathematics.</p>	<p>Student Outcomes</p> <ul style="list-style-type: none"> Students understand the absolute value of a number as its distance from zero on the number line. Students use absolute value to find the magnitude of a positive or negative quantity in a real-world situation.
<p>MP.5 Use appropriate tools strategically.</p>	<p>Classwork Opening Exercise (4 minutes)</p> <p>For this warm-up exercise, students work individually to record two different rational numbers that are the same distance from zero. Students find as many examples as possible and reach a conclusion about what must be true for every pair of numbers that lie that same distance from zero.</p>
<p>MP.6 Attend to precision.</p>	<div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p style="text-align: center; margin: 0;">Opening Exercise</p>  </div>
<p>MP.7 Look for and make use of structure.</p>	<p>MP.8 After two minutes:</p> <ul style="list-style-type: none"> What are some examples you found (pairs of numbers that are the same distance from zero)? <ul style="list-style-type: none"> $-\frac{1}{2}$ and $\frac{1}{2}$, 8.01 and -8.01, -7 and 7. What is the relationship between each pair of numbers? <ul style="list-style-type: none"> They are opposites. How does each pair of numbers relate to zero? <ul style="list-style-type: none"> Both numbers in each pair are the same distance from zero.
<p>MP.8 Look for and express regularity in repeated reasoning.</p>	

Ratios and Proportional Relationships

Understand ratio concepts and use ratio reasoning to solve problems.

New York Next Generation Mathematics Learning Standards	Aligned Components of <i>Eureka Math</i>
<p>NY-6.RP.1</p> <p>Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.</p>	<p>G6 M1 Topic A: Representing and Reasoning About Ratios</p> <p>G6 M1 Topic B: Collections of Equivalent Ratios</p> <p>G6 M1 Topic C: Unit Rates</p> <p>G6 M1 Lesson 24: Percent and Rates per 100</p> <p>G6 M1 Lesson 25: A Fraction as a Percent</p>
<p>NY-6.RP.2</p> <p>Understand the concept of a unit rate $\frac{a}{b}$ associated with a ratio $a:b$ with $b \neq 0$ (b not equal to zero), and use rate language in the context of a ratio relationship.</p>	<p>G6 M1 Topic C: Unit Rates</p>
<p>NY-6.RP.3</p> <p>Use ratio and rate reasoning to solve real-world and mathematical problems.</p>	<p>G6 M1 Lesson 3: Equivalent Ratios</p> <p>G6 M1 Lesson 4: Equivalent Ratios</p> <p>G6 M1 Lesson 5: Solving Problems by Finding Equivalent Ratios</p> <p>G6 M1 Lesson 6: Solving Problems by Finding Equivalent Ratios</p> <p>G6 M1 Lesson 7: Associated Ratios and the Value of a Ratio</p> <p>G6 M1 Lesson 8: Equivalent Ratios Defined Through the Value of a Ratio</p> <p>G6 M1 Topic B: Collections of Equivalent Ratios</p> <p>G6 M1 Lesson 16: From Ratios to Rates</p> <p>G6 M1 Lesson 17: From Rates to Ratios</p> <p>G6 M1 Lesson 18: Finding a Rate by Dividing Two Quantities</p> <p>G6 M1 Lesson 19: Comparison Shopping—Unit Price and Related Measurement Conversions</p> <p>G6 M1 Lesson 20: Comparison Shopping—Unit Price and Related Measurement Conversions</p>

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<p>NY-6.RP.3.a</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.</p>	<p>G6 M1 Topic A: Representing and Reasoning About Ratios</p>
<p>NY-6.RP.3.b</p> <p>Solve unit rate problems.</p>	<p>G6 M1 Topic C: Unit Rates</p> <p>G6 M1 Lesson 21: Getting the Job Done—Speed, Work, and Measurement Units</p> <p>G6 M1 Lesson 22: Getting the Job Done—Speed, Work, and Measurement Units</p> <p>G6 M1 Lesson 23: Problem-Solving Using Rates, Unit Rates, and Conversions</p>
<p>NY-6.RP.3.c</p> <p>Find a percent of a quantity as a rate per 100. Solve problems that involve finding the whole given a part and the percent, and finding a part of a whole given the percent.</p>	<p>G6 M1 Topic D: Percent</p>
<p>NY-6.RP.3.d</p> <p>Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.</p>	<p>G6 M1 Lesson 21: Getting the Job Done—Speed, Work, and Measurement Units</p> <p>G6 M1 Lesson 22: Getting the Job Done—Speed, Work, and Measurement Units</p> <p>G6 M1 Lesson 23: Problem-Solving Using Rates, Unit Rates, and Conversions</p>

The Number System

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

New York Next Generation Mathematics Learning Standards	Aligned Components of <i>Eureka Math</i>
<p>NY-6.NS.1</p> <p>Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions.</p>	<p>G6 M2 Topic A: Arithmetic Operations Including Dividing by a Fraction</p>

The Number System

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

New York Next Generation Mathematics Learning Standards	Aligned Components of <i>Eureka Math</i>
<p>NY-6.NS.2</p> <p>Fluently divide multi-digit numbers using a standard algorithm.</p>	<p>G6 M2 Topic C: Dividing Whole Numbers and Decimals</p>
<p>NY-6.NS.3</p> <p>Fluently add, subtract, multiply, and divide multi-digit decimals using a standard algorithm for each operation.</p>	<p>G6 M2 Topic B: Multi-Digit Decimal Operations—Adding, Subtracting, and Multiplying</p> <p>G6 M2 Lesson 14: The Division Algorithm—Converting Decimal Division into Whole Number Division Using Fractions</p> <p>G6 M2 Lesson 15: The Division Algorithm—Converting Decimal Division to Whole Number Division Using Mental Math</p>

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NY-6.NS.4

Find the greatest common factor of two whole numbers less than or equal to 100. 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 other than 1. Find the least common multiple of two whole numbers less than or equal to 12.

G6 M2 Lesson 17: Divisibility Tests for 3 and 9
 G6 M2 Lesson 18: Least Common Multiple and Greatest Common Factor
 G6 M2 Lesson 19: The Euclidean Algorithm as an Application of the Long Division Algorithm

The Number System

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

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Aligned Components of *Eureka Math*

NY-6.NS.5

Understand that positive and negative numbers are used together to describe quantities having opposite directions or values. Use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

G6 M3 Lesson 2: Real-World Positive and Negative Numbers and Zero
 G6 M3 Lesson 3: Real-World Positive and Negative Numbers and Zero
 G6 M3 Lesson 4: The Opposite of a Number
 G6 M3 Lesson 5: The Opposite of a Number’s Opposite
 G6 M3 Lesson 6: Rational Numbers on the Number Line
 G6 M3 Lesson 13: Statements of Order in the Real World

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<p>NY-6.NS.6</p> <p>Understand a rational number as a point on the number line. Use number lines and coordinate axes to represent points on a number line and in the coordinate plane with negative number coordinates.</p>	<p>G6 M3 Topic A: Understanding Positive and Negative Numbers on the Number Line</p> <p>G6 M3 Topic B: Order and Absolute Value</p> <p>G6 M3 Topic C: Rational Numbers and the Coordinate Plane</p>
<p>NY-6.NS.6.a</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, and that 0 is its own opposite.</p>	<p>G6 M3 Topic A: Understanding Positive and Negative Numbers on the Number Line</p>
<p>NY-6.NS.6.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>G6 M3 Topic C: Rational Numbers and the Coordinate Plane</p>
<p>NY-6.NS.6.c</p> <p>Find and position integers and other rational numbers on a horizontal or vertical number line. Find and position pairs of integers and other rational numbers on a coordinate plane.</p>	<p>G6 M3 Topic A: Understanding Positive and Negative Numbers on the Number Line</p> <p>G6 M3 Topic C: Rational Numbers and the Coordinate Plane</p>

New York Next Generation Mathematics Learning Standards	Aligned Components of <i>Eureka Math</i>
<p>NY-6.NS.7</p> <p>Understand ordering and absolute value of rational numbers.</p>	<p>G6 M3 Lesson 8: Ordering Integers and Other Rational Numbers</p> <p>G6 M3 Lesson 11: Absolute Value—Magnitude and Distance</p> <p>G6 M3 Lesson 12: The Relationship Between Absolute Value and Order</p> <p>G6 M3 Lesson 13: Statements of Order in the Real World</p>
<p>NY-6.NS.7.a</p> <p>Interpret statements of inequality as statements about the relative position of two numbers on a number line.</p>	<p>G6 M3 Lesson 7: Ordering Integers and Other Rational Numbers</p> <p>G6 M3 Lesson 9: Comparing Integers and Other Rational Numbers</p> <p>G6 M3 Lesson 10: Writing and Interpreting Inequality Statements Involving Rational Numbers</p>
<p>NY-6.NS.7.b</p> <p>Write, interpret, and explain statements of order for rational numbers in real-world contexts.</p>	<p>G6 M3 Lesson 7: Ordering Integers and Other Rational Numbers</p> <p>G6 M3 Lesson 9: Comparing Integers and Other Rational Numbers</p> <p>G6 M3 Lesson 10: Writing and Interpreting Inequality Statements Involving Rational Numbers</p>
<p>NY-6.NS.7.c</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>G6 M3 Lesson 11: Absolute Value—Magnitude and Distance</p> <p>G6 M3 Lesson 12: The Relationship Between Absolute Value and Order</p> <p>G6 M3 Lesson 13: Statements of Order in the Real World</p>
<p>NY-6.NS.7.d</p> <p>Distinguish comparisons of absolute value from statements about order.</p>	<p>G6 M3 Lesson 12: The Relationship Between Absolute Value and Order</p>

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<p>NY-6.NS.8</p> <p>Solve real-world and mathematical problems by graphing points on a 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>G6 M3 Topic C: Rational Numbers and the Coordinate Plane</p>
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Expressions, Equations, and Inequalities

Apply and extend previous understandings of arithmetic to algebraic expressions.

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Aligned Components of *Eureka Math*

<p>NY-6.EE.1</p> <p>Write and evaluate numerical expressions involving whole-number exponents.</p>	<p>G6 M4 Topic B: Special Notations of Operations</p> <p>G6 M4 Lesson 16: Write Expressions in Which Letters Stand for Numbers</p>
<p>NY-6.EE.2</p> <p>Write, read, and evaluate expressions in which letters stand for numbers.</p>	<p>G6 M4 Topic C: Replacing Letters and Numbers</p> <p>G6 M4 Topic D: Expanding, Factoring, and Distributing Expressions</p> <p>G6 M4 Topic E: Expressing Operations in Algebraic Form</p> <p>G6 M4 Topic F: Writing and Evaluating Expressions and Formulas</p>
<p>NY-6.EE.2.a</p> <p>Write expressions that record operations with numbers and with letters standing for numbers.</p>	<p>G6 M4 Topic C: Replacing Letters and Numbers</p>

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<p>NY-6.EE.2.b</p> <p>Identify parts of an expression using mathematical terms (term, coefficient, sum, difference, product, factor, and quotient); view one or more parts of an expression as a single entity.</p>	<p>G6 M4 Topic E: Expressing Operations in Algebraic Form</p>
<p>NY-6.EE.2.c</p> <p>Evaluate expressions given specific values for their variables. Include expressions that arise from formulas in real-world problems. Perform arithmetic operations, including those involving whole-number exponents, in the conventional order (Order of Operations).</p>	<p>G6 M4 Lesson 6: The Order of Operations</p>
<p>NY-6.EE.3</p> <p>Apply the properties of operations to generate equivalent expressions.</p>	<p>G6 M4 Topic A: Relationships of the Operations</p> <p>G6 M4 Lesson 9: Writing Addition and Subtraction Expressions</p> <p>G6 M4 Lesson 11: Factoring Expressions</p> <p>G6 M4 Lesson 12: Distributing Expressions</p>
<p>NY-6.EE.4</p> <p>Identify when two expressions are equivalent.</p>	<p>G6 M4 Lesson 8: Replacing Numbers with Letters</p> <p>G6 M4 Lesson 9: Writing Addition and Subtraction Expressions</p> <p>G6 M4 Lesson 10: Writing and Expanding Multiplication Expressions</p> <p>G6 M4 Lesson 11: Factoring Expressions</p> <p>G6 M4 Lesson 12: Distributing Expressions</p> <p>G6 M4 Lesson 13: Writing Division Expressions</p>

Expressions, Equations, and Inequalities**Reason about and solve one-variable equations and inequalities.**

New York Next Generation Mathematics Learning Standards	Aligned Components of <i>Eureka Math</i>
<p>NY-6.EE.5</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>G6 M4 Topic G: Solving Equations</p> <p>G6 M4 Topic H: Applications of Equations</p>
<p>NY-6.EE.6</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>G6 M4 Topic F: Writing and Evaluating Expressions and Formulas</p> <p>G6 M4 Topic G: Solving Equations</p> <p>G6 M4 Topic H: Applications of Equations</p>
<p>NY-6.EE.7</p> <p>Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$; $x - p = q$; $px = q$; and $\frac{x}{p} = q$ for cases in which p, q, and x are all nonnegative rational numbers.</p>	<p>G6 M4 Lesson 26: One-Step Equations—Addition and Subtraction</p> <p>G6 M4 Lesson 27: One-Step Equations—Multiplication and Division</p> <p>G6 M4 Lesson 28: Two-Step Problems—All Operations</p> <p>G6 M4 Lesson 29: Multi-Step Problems—All Operations</p> <p>G6 M4 Lesson 30: One-Step Problems in the Real World</p> <p>G6 M4 Lesson 31: Problems in Mathematical Terms</p> <p>G6 M4 Lesson 32: Multi-Step Problems in the Real World</p>

**New York Next Generation
Mathematics Learning Standards**

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NY-6.EE.8

Write an inequality of the form $x > c$, $x \geq c$, $x \leq c$, or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of these forms have infinitely many solutions; represent solutions of such inequalities on a number line.

G6 M4 Lesson 33: From Equations to Inequalities

G6 M4 Lesson 34: Writing and Graphing Inequalities in Real-World Problems

Expressions, Equations, and Inequalities

Represent and analyze quantitative relationships between dependent and independent variables.

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Mathematics Learning Standards**

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NY-6.EE.9

Use variables to represent two quantities in a real-world problem that change in relationship to one another. Given a verbal context and an equation, identify 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.

G6 M4 Lesson 31: Problems in Mathematical Terms

G6 M4 Lesson 32: Multi-Step Problems in the Real World

Geometry

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

New York Next Generation Mathematics Learning Standards	Aligned Components of <i>Eureka Math</i>
<p>NY-6.G.1</p> <p>Find area of triangles, trapezoids, and other polygons by composing into rectangles or decomposing into triangles and quadrilaterals. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>G6 M5 Topic A: Area of Triangles, Quadrilaterals, and Polygons</p> <p>G6 M5 Lesson 8: Drawing Polygons in the Coordinate Plane</p> <p>G6 M5 Lesson 9: Determining Perimeter and Area of Polygons on the Coordinate Plane</p>
<p>NY-6.G.2</p> <p>Find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.</p>	<p>G6 M5 Topic C: Volume of Right Rectangular Prisms</p> <p>G6 M5 Lesson 19: Surface Area and Volume in the Real World</p> <p>G6 M5 Lesson 20: Addendum Lesson for Modeling—Applying Surface Area and Volume to Aquariums</p>
<p>NY-6.G.3</p> <p>Draw polygons in the coordinate plane given coordinates for the vertices. Use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.</p>	<p>G6 M5 Topic B: Polygons on the Coordinate Plane</p>

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<p>NY-6.G.4</p> <p>Represent three-dimensional figures 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>G6 M5 Topic D: Nets and Surface Area</p>
<p>NY-6.G.5</p> <p>Use area and volume models to explain perfect squares and perfect cubes.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

Statistics and Probability

Develop understanding of statistical variability.

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<p>NY-6.SP.1a</p> <p>Recognize that a statistical question is one that anticipates variability in the data related to the question and accounts for it in the answers.</p>	<p>G6 M6 Lesson 1: Posing Statistical Questions</p>
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New York Next Generation Mathematics Learning Standards

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<p>NY-6.SP.1b</p> <p>Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population.</p>	<p>G7 M5 Lesson 13: Populations, Samples, and Generalizing from a Sample to a Population</p> <p>G7 M5 Lesson 14: Selecting a Sample</p> <p>G7 M5 Lesson 15: Random Sampling</p> <p>G7 M5 Lesson 18: Sampling Variability and the Effect of Sample Size</p> <p>G7 M5 Lesson 19: Understanding Variability When Estimating a Population Proportion</p>
<p>NY-6.SP.1c</p> <p>Understand that the method and sample size used to collect data for a particular question is intended to reduce the difference between a population and a sample taken from the population so valid inferences can be drawn about the population. Generate multiple samples (or simulated samples) of the same size to recognize the variation in estimates or predictions.</p>	<p>G7 M5 Lesson 14: Selecting a Sample</p> <p>G7 M5 Lesson 15: Random Sampling</p> <p>G7 M5 Lesson 16: Methods for Selecting a Random Sample</p> <p>G7 M5 Lesson 17: Sampling Variability</p> <p>G7 M5 Lesson 18: Sampling Variability and the Effect of Sample Size</p> <p>G7 M5 Lesson 19: Understanding Variability When Estimating a Population Proportion</p> <p>G7 M5 Lesson 20: Estimating a Population Proportion</p>
<p>NY-6.SP.2</p> <p>Understand that a set of quantitative data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.</p>	<p>G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape</p> <p>G6 M6 Lesson 22: Presenting a Summary of a Statistical Project</p>

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<p>NY-6.SP.3</p> <p>Recognize that a measure of center for a quantitative data set summarizes all of its values with a single number while a measure of variation describes how its values vary with a single number.</p>	<p>G6 M6 Topic B: Summarizing a Distribution That Is Approximately Symmetric Using the Mean and Mean Absolute Deviation</p> <p>G6 M6 Topic C: Summarizing a Distribution That Is Skewed Using the Median and the Interquartile Range</p>
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Statistics and Probability

Summarize and describe distributions.

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<p>NY-6.SP.4</p> <p>Display quantitative data in plots on a number line, including dot plots and histograms.</p>	<p>G6 M6 Lesson 2: Displaying a Data Distribution</p> <p>G6 M6 Lesson 3: Creating a Dot Plot</p> <p>G6 M6 Lesson 4: Creating a Histogram</p> <p>G6 M6 Lesson 5: Describing a Distribution Displayed in a Histogram</p> <p>G6 M6 Lesson 6: Describing the Center of a Distribution Using the Mean</p> <p>G6 M6 Lesson 7: The Mean as a Balance Point</p> <p>G6 M6 Lesson 8: Variability in a Data Distribution</p> <p>G6 M6 Lesson 10: Describing Distributions Using the Mean and MAD</p> <p>G6 M6 Lesson 11: Describing Distributions Using the Mean and MAD</p> <p>G6 M6 Lesson 14: Summarizing a Distribution Using a Box Plot</p> <p>G6 M6 Lesson 15: More Practice with Box Plots</p> <p>G6 M6 Lesson 16: Understanding Box Plots</p> <p>G6 M6 Lesson 17: Developing a Statistical Project</p>
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<p>NY-6.SP.4 <i>continued</i></p>	<p>G6 M6 Lesson 18: Connecting Graphical Representations and Numerical Summaries</p> <p>G6 M6 Lesson 20: Describing Center, Variability, and Shape of a Data Distribution from a Graphic Representation</p> <p>G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape</p> <p>G6 M6 Lesson 22: Presenting a Summary of a Statistical Project</p>
<p>NY-6.SP.5</p> <p>Summarize quantitative data sets in relation to their context.</p>	<p>G6 M6 Lesson 4: Creating a Histogram</p> <p>G6 M6 Lesson 5: Describing a Distribution Displayed in a Histogram</p> <p>G6 M6 Topic B: Summarizing a Distribution that Is Approximately Symmetric Using the Mean and Mean Absolute Deviation</p> <p>G6 M6 Topic C: Summarizing a Distribution that is Skewed Using the Median and the Interquartile Range</p> <p>G6 M6 Lesson 17: Developing a Statistical Project</p> <p>G6 M6 Lesson 18: Connecting Graphical Representations and Numerical Summaries</p> <p>G6 M6 Lesson 19: Comparing Data Distributions</p> <p>G6 M6 Lesson 20: Describing Center, Variability, and Shape of a Data Distribution from a Graphic Representation</p>
<p>NY-6.SP.5.a</p> <p>Report the number of observations.</p>	<p>G6 M6 Lesson 2: Displaying a Data Distribution</p> <p>G6 M6 Lesson 3: Creating a Dot Plot</p> <p>G6 M6 Lesson 4: Creating a Histogram</p> <p>G6 M6 Lesson 5: Describing a Distribution Displayed in a Histogram</p>
<p>NY-6.SP.5.b</p> <p>Describe the nature of the attribute under investigation, including how it was measured and its units of measurement.</p>	<p>G6 M6 Lesson 2: Displaying a Data Distribution</p>

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<p>NY-6.SP.5.c</p> <p>Calculate range and measures of center, as well as describe any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.</p>	<p>G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape</p> <p>G6 M6 Lesson 22: Presenting a Summary of a Statistical Project</p>
<p>NY-6.SP.5.d</p> <p>Relate the range and the choice of measures of center to the shape of the data distribution and the context in which the data were gathered.</p>	<p>G6 M6 Lesson 21: Summarizing a Data Distribution by Describing Center, Variability, and Shape</p> <p>G6 M6 Lesson 22: Presenting a Summary of a Statistical Project</p>

Statistics and Probability

Investigate chance processes and develop, use, and evaluate probability models.

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Aligned Components of *Eureka Math*

<p>NY-6.SP.6</p> <p>Understand that the probability of a chance event is a number between 0 and 1 inclusive, that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. 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.</p>	<p>G7 M5 Lesson 1: Chance Experiments</p>
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New York Next Generation Mathematics Learning Standards

Aligned Components of *Eureka Math*

<p>NY-6.SP.7</p> <p>Approximate the probability of a simple event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability.</p>	<p>G7 M5 Lesson 2: Estimating Probabilities by Collecting Data</p> <p>G7 M5 Lesson 3: Chance Experiments with Equally Likely Outcomes</p> <p>G7 M5 Lesson 4: Calculating Probabilities for Chance Experiments with Equally Likely Outcomes</p> <p>G7 M5 Lesson 5: Chance Experiments with Outcomes That Are Not Equally Likely</p> <p>G7 M5 Lesson 8: The Difference Between Theoretical Probabilities and Estimated Probabilities</p> <p>G7 M5 Lesson 12: Applying Probability to Make Informed Decisions</p>
<p>NY-6.SP.8</p> <p>Develop a probability model and use it to find probabilities of simple events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p>	<p>G7 M5 Lesson 4: Calculating Probabilities for Chance Experiments with Equally Likely Outcomes</p> <p>G7 M5 Lesson 5: Chance Experiments with Outcomes That Are Not Equally Likely</p> <p>G7 M5 Lesson 8: The Difference Between Theoretical Probabilities and Estimated Probabilities</p> <p>G7 M5 Lesson 9: Comparing Estimated Probabilities to Probabilities Predicted by a Model</p> <p>G7 M5 Lesson 12: Applying Probability to Make Informed Decisions</p>
<p>NY-6.SP.8.a</p> <p>Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of simple events.</p>	<p>G7 M5 Lesson 4: Calculating Probabilities for Chance Experiments with Equally Likely Outcomes</p>
<p>NY-6.SP.8.b</p> <p>Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process.</p>	<p>G7 M5 Lesson 5: Chance Experiments with Outcomes That Are Not Equally Likely</p> <p>G7 M5 Lesson 12: Applying Probability to Make Informed Decisions</p>