
Grade 7 | Tennessee Academic Standards for Mathematics 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

MP.1

Make sense of problems and persevere in solving them.

MP.2

Reason abstractly and quantitatively.

MP.3

Construct viable arguments and critique the reasoning of others.

MP.4

Model with mathematics.

MP.5

Use appropriate tools strategically.

MP.6

Attend to precision.

MP.7

Look for and make use of structure.

MP.8

Look for and express regularity in repeated reasoning.

Aligned Components of *Eureka Math*

Lessons in every module engage students in mathematical practices. These are designated in the Module Overview and labeled in lessons.

For example:

A STORY OF RATIOS

Lesson 13 **7•3**

Questions leading to finding a solution:

- What is a solution set of an inequality?
 - A solution set contains more than one number that makes the inequality a true statement.
- Is -3 a solution to our inequality in part (a)?
 - Yes. When the value of -3 is substituted into the inequality, the resulting statement is true.
- Could -4 be a solution to our inequality in part (a)?
 - Substituting -4 does not result in a true statement because -12 is equal to, but not greater than -12 .
- We have found that $x = -3$ is a solution to the inequality in part (a) where $x = -4$ and $x = -5$ are not. What is meant by the minimum value in this inequality? Explain.
 - The minimum value is the smallest value that makes the inequality true. -3 is not the minimum value because there are rational numbers that are smaller than -3 but greater than -4 . For example, $-3\frac{1}{2}$ is smaller than -3 but still creates a true statement.
- How is solving an inequality similar to solving an equation? How is it different?
 - Solving an equation and an inequality are similar in the sequencing of steps taken to solve for the variable. The same if-then moves are used to solve for the variable.
 - They are different because in an equation, you get one solution, but in an inequality, there are an infinite number of solutions.

MP.2

Ratios and Proportional Relationships

7.RP.A Analyze proportional relationships and use them to solve real-world and mathematical problems.

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<p>7.RP.A.1</p> <p>Compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units.</p>	<p>G7 M1 Lesson 11: Ratios of Fractions and Their Unit Rates</p> <p>G7 M1 Lesson 12: Ratios of Fractions and Their Unit Rates</p> <p>G7 M1 Lesson 13: Finding Equivalent Ratios Given the Total Quantity</p> <p>G7 M1 Lesson 15: Equations of Graphs of Proportional Relationships Involving Fractions</p>
<p>7.RP.A.2</p> <p>Recognize and represent proportional relationships between quantities.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>7.RP.A.2a</p> <p>Decide whether two quantities are in a proportional relationship (e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin).</p>	<p>G7 M1 Lesson 2: Proportional Relationships</p> <p>G7 M1 Lesson 3: Identifying Proportional and Non-Proportional Relationships in Tables</p> <p>G7 M1 Lesson 4: Identifying Proportional and Non-Proportional Relationships in Tables</p> <p>G7 M1 Lesson 5: Identifying Proportional and Non-Proportional Relationships in Graphs</p> <p>G7 M1 Lesson 6: Identifying Proportional and Non-Proportional Relationships in Graphs</p> <p>G7 M1 Lesson 15: Equations of Graphs of Proportional Relationships Involving Fractions</p> <p>G7 M4 Lesson 11: Tax, Commissions, Fees, and Other Real-World Percent Applications</p>
<p>7.RP.A.2b</p> <p>Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</p>	<p>G7 M1 Topic B: Unit Rate and Constant of Proportionality</p> <p>G7 M1 Lesson 15: Equations of Graphs of Proportional Relationships Involving Fractions</p> <p>G7 M1 Lesson 16: Relating Scale Drawings to Ratios and Rates</p> <p>G7 M1 Lesson 17: The Unit Rate as the Scale Factor</p> <p>G7 M4 Lesson 11: Tax, Commissions, Fees, and Other Real-World Percent Applications</p> <p>G7 M4 Lesson 12: The Scale Factor as a Percent for a Scale Drawing</p>

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<p>7.RP.A.2c</p> <p>Use the concept of equality to represent proportional relationships with equations.</p>	<p>G7 M1 Lesson 2: Proportional Relationships</p> <p>G7 M1 Lesson 8: Representing Proportional Relationships with Equations</p> <p>G7 M1 Lesson 9: Representing Proportional Relationships with Equations</p> <p>G7 M1 Lesson 10: Interpreting Graphs of Proportional Relationships</p> <p>G7 M1 Lesson 15: Equations of Graphs of Proportional Relationships Involving Fractions</p> <p>G7 M4 Lesson 2: Part of a Whole as Percent</p> <p>G7 M4 Lesson 3: Comparing Quantities with Percent</p> <p>G7 M4 Lesson 4: Percent Increase and Decrease</p> <p>G7 M4 Lesson 6: Fluency with Percents</p> <p>G7 M4 Lesson 7: Markup and Markdown Problems</p> <p>G7 M4 Lesson 9: Problem Solving When the Percent Changes</p> <p>G7 M4 Lesson 10: Simple Interest</p> <p>G7 M4 Lesson 11: Tax, Commissions, Fees, and Other Real-World Percent Applications</p>
<p>7.RP.A.2d</p> <p>Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.</p>	<p>G7 M1 Lesson 10: Interpreting Graphs of Proportional Relationships</p> <p>G7 M1 Lesson 15: Equations of Graphs of Proportional Relationships Involving Fractions</p> <p>G7 M4 Lesson 11: Tax, Commissions, Fees, and Other Real-World Percent Applications</p>

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<p>7.RP.A.3</p> <p>Use proportional relationships to solve multi-step ratio and percent problems.</p>	<p>G7 M1 Lesson 14: Multi-Step Ratio Problems</p> <p>G7 M4 Lesson 1: Percent</p> <p>G7 M4 Lesson 3: Comparing Quantities with Percent</p> <p>G7 M4 Lesson 4: Percent Increase and Decrease</p> <p>G7 M4 Lesson 5: Find One Hundred Percent Given Another Percent</p> <p>G7 M4 Lesson 6: Fluency with Percents</p> <p>G7 M4 Topic B: Percent Problems Including More than One Whole</p> <p>G7 M4 Topic D: Population, Mixture, and Counting Problems Involving Percents</p>
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The Number System

7.NS.A Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

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<p>7.NS.A.1</p> <p>Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
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<p>7.NS.A.1a</p> <p>Understand $p + q$ as the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts.</p>	<p>G7 M2 Lesson 1: Opposite Quantities Combine to Make Zero</p> <p>G7 M2 Lesson 2: Using the Number Line to Model the Addition of Integers</p> <p>G7 M2 Lesson 3: Understanding Addition of Integers</p> <p>G7 M2 Lesson 4: Efficiently Adding Integers and Other Rational Numbers</p> <p>G7 M2 Lesson 7: Addition and Subtraction of Rational Numbers</p> <p>G7 M2 Lesson 8: Applying the Properties of Operations to Add and Subtract Rational Numbers</p> <p>G7 M2 Lesson 9: Applying the Properties of Operations to Add and Subtract Rational Numbers</p>
<p>7.NS.A.1b</p> <p>Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. 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>G7 M2 Lesson 5: Understanding Subtraction of Integers and Other Rational Numbers</p> <p>G7 M2 Lesson 6: The Distance Between Two Rational Numbers</p> <p>G7 M2 Lesson 7: Addition and Subtraction of Rational Numbers</p> <p>G7 M2 Lesson 8: Applying the Properties of Operations to Add and Subtract Rational Numbers</p> <p>G7 M2 Lesson 9: Applying the Properties of Operations to Add and Subtract Rational Numbers</p>
<p>7.NS.A.1c</p> <p>Apply properties of operations as strategies to add and subtract rational numbers.</p>	<p>G7 M2 Lesson 8: Applying the Properties of Operations to Add and Subtract Rational Numbers</p> <p>G7 M2 Lesson 9: Applying the Properties of Operations to Add and Subtract Rational Numbers</p>
<p>7.NS.A.2</p> <p>Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>

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<p>7.NS.A.2a</p> <p>Understand that multiplication is extended from fractions to all rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.</p>	<p>G7 M2 Lesson 10: Understanding Multiplication of Integers</p> <p>G7 M2 Lesson 11: Develop Rules for Multiplying Signed Numbers</p> <p>G7 M2 Lesson 15: Multiplication and Division of Rational Numbers</p>
<p>7.NS.A.2b</p> <p>Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-\left(\frac{p}{q}\right) = \frac{-p}{q} = \frac{p}{-q}$. Interpret quotients of rational numbers by describing real-world contexts.</p>	<p>G7 M2 Lesson 12: Division of Integers</p> <p>G7 M2 Lesson 15: Multiplication and Division of Rational Numbers</p>
<p>7.NS.A.2c</p> <p>Apply properties of operations as strategies to multiply and divide rational numbers.</p>	<p>G7 M2 Lesson 16: Applying the Properties of Operations to Multiply and Divide Rational Numbers</p>

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<p>7.NS.A.2d</p> <p>Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates or eventually repeats.</p>	<p>G7 M2 Lesson 14: Converting Rational Numbers to Decimals Using Long Division</p>
<p>7.NS.A.3</p> <p>Solve real-world and mathematical problems involving the four operations with rational numbers.</p>	<p>G7 M2 Lesson 18: Writing, Evaluating, and Finding Equivalent Expressions with Rational Numbers</p> <p>G7 M2 Lesson 19: Writing, Evaluating, and Finding Equivalent Expressions with Rational Numbers</p> <p>G7 M2 Lesson 20: Investments—Performing Operations with Rational Numbers</p> <p>G7 M2 Lesson 21: If-Then Moves with Integer Number Cards</p>

Expressions and Equations

7.EE.A Use properties of operations to generate equivalent expressions.

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<p>7.EE.A.1</p> <p>Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.</p>	<p>G7 M3 Topic A: Use Properties of Operations to Generate Equivalent Expressions</p>
<p>7.EE.A.2</p> <p>Rewrite and connect equivalent expressions in different forms in a contextual problem to provide multiple ways of interpreting the problem and investigating how the quantities in it are related.</p>	<p>G7 M3 Lesson 1: Generating Equivalent Expressions</p> <p>G7 M3 Lesson 3: Writing Products as Sums and Sums as Products</p> <p>G7 M3 Lesson 4: Writing Products as Sums and Sums as Products</p> <p>G7 M3 Lesson 6: Collecting Rational Number Like Terms</p>

Expressions and Equations

7.EE.B Solve real-world and mathematical problems using numerical and algebraic expressions and equations and inequalities.

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<p>7.EE.B.3</p> <p>Solve multi-step real-world and mathematical problems posed with positive and negative rational numbers presented in any form (whole numbers, fractions, and decimals).</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>7.EE.B.3a</p> <p>Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate.</p>	<p>G7 M3 Lesson 7: Understanding Equations</p> <p>G7 M3 Lesson 8: Using If-Then Moves in Solving Equations</p> <p>G7 M3 Lesson 9: Using If-Then Moves in Solving Equations</p> <p>G7 M3 Lesson 10: Angle Problems and Solving Equations</p> <p>G7 M3 Lesson 11: Angle Problems and Solving Equations</p> <p>G7 M3 Lesson 13: Inequalities</p> <p>G7 M3 Lesson 14: Solving Inequalities</p> <p>G7 M3 Lesson 15: Graphing Solutions to Inequalities</p> <p>G7 M3 Lesson 25: Volume and Surface Area</p> <p>G7 M3 Lesson 26: Volume and Surface Area</p> <p>G7 M4 Lesson 7: Markup and Markdown Problems</p> <p>G7 M4 Lesson 8: Percent Error Problems</p> <p>G7 M4 Lesson 9: Problem Solving When the Percent Changes</p> <p>G7 M4 Topic D: Population, Mixture, and Counting Problems Involving Percents</p>

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<p>7.EE.B.3b</p> <p>Assess the reasonableness of answers using mental computation and estimation strategies.</p>	<p>G7 M3 Lesson 8: Using If-Then Moves in Solving Equations</p> <p>G7 M3 Lesson 25: Volume and Surface Area</p> <p>G7 M3 Lesson 26: Volume and Surface Area</p> <p>G7 M4 Lesson 16: Population Problems</p> <p>G7 M4 Lesson 17: Mixture Problems</p>
<p>7.EE.B.4</p> <p>Use variables to represent quantities in a real-world and mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>7.EE.B.4a</p> <p>Solve real-world and mathematical problems leading to equations of the form $px + q = r$ and $p(x + q) = r$ where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.</p>	<p>G7 M2 Lesson 17: Comparing Tape Diagram Solutions to Algebraic Solutions</p> <p>G7 M2 Lesson 22: Solving Equations Using Algebra</p> <p>G7 M2 Lesson 23: Solving Equations Using Algebra</p> <p>G7 M3 Lesson 7: Understanding Equations</p> <p>G7 M3 Lesson 8: Using If-Then Moves in Solving Equations</p> <p>G7 M3 Lesson 9: Using If-Then Moves in Solving Equations</p> <p>G7 M3 Lesson 10: Angle Problems and Solving Equations</p> <p>G7 M3 Lesson 11: Angle Problems and Solving Equations</p> <p>G7 M4 Lesson 10: Simple Interest</p> <p>G7 M4 Lesson 11: Tax, Commissions, Fees, and Other Real-World Percent Applications</p> <p>G7 M4 Lesson 17: Mixture Problems</p>

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<p>7.EE.B.4b</p> <p>Solve real-world and mathematical problems leading to inequalities of the form $px + q > r$, $px + q < r$, $px + q \geq r$, and $px + q \leq r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality on a number line and interpret it in the context of the problem.</p>	<p>G7 M3 Lesson 12: Properties of Inequalities</p> <p>G7 M3 Lesson 13: Inequalities</p> <p>G7 M3 Lesson 14: Solving Inequalities</p> <p>G7 M3 Lesson 15: Graphing Solutions to Inequalities</p>
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Geometry

7.G.A Draw, construct, and describe geometrical figures and describe the relationships between them.

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<p>7.G.A.1</p> <p>Solve problems involving scale drawings of congruent and similar geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.</p>	<p>G7 M1 Lesson 17: The Unit Rate as the Scale Factor</p> <p>G7 M1 Lesson 18: Computing Actual Lengths from a Scale Drawing</p> <p>G7 M1 Lesson 19: Computing Actual Areas from a Scale Drawing</p> <p>G7 M1 Lesson 20: An Exercise in Creating a Scale Drawing</p> <p>G7 M1 Lesson 21: An Exercise in Changing Scales</p> <p>G7 M1 Lesson 22: An Exercise in Changing Scales</p> <p>G7 M4 Topic C: Scale Drawings</p>
<p>7.G.A.2</p> <p>Draw triangles with given conditions: three angle measures or three side measures. Notice when the conditions determine a unique triangle, more than one triangle, or no triangle.</p>	<p>G7 M6 Topic B: Constructing Triangles</p>

Geometry

7.G.B Solve real-world and mathematical problems involving angle measure, area, surface area, and volume.

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<p>7.G.B.3</p> <p>Know the formulas for the area and circumference of a circle and use them to solve problems. Explore the relationships between the radius, the circumference, and the area of a circle, and the number π.</p>	<p>G7 M3 Lesson 16: The Most Famous Ratio of All</p> <p>G7 M3 Lesson 17: The Area of a Circle</p> <p>G7 M3 Lesson 18: More Problems on Area and Circumference</p> <p>G7 M3 Lesson 20: Composite Area Problems</p>
<p>7.G.B.4</p> <p>Know and use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.</p>	<p>G7 M3 Lesson 10: Angle Problems and Solving Equations</p> <p>G7 M3 Lesson 11: Angle Problems and Solving Equations</p> <p>G7 M6 Topic A: Unknown Angles</p>
<p>7.G.B.5</p> <p>Solve real-world and mathematical problems involving area of two-dimensional figures composed of triangles, quadrilaterals, and polygons, and volume and surface area of three-dimensional objects composed of cubes and right prisms.</p>	<p>G7 M3 Lesson 19: Unknown Area Problems on the Coordinate Plane</p> <p>G7 M3 Lesson 20: Composite Area Problems</p> <p>G7 M3 Lesson 21: Surface Area</p> <p>G7 M3 Lesson 22: Surface Area</p> <p>G7 M3 Lesson 23: The Volume of a Right Prism</p> <p>G7 M3 Lesson 24: The Volume of a Right Prism</p> <p>G7 M3 Lesson 25: Volume and Surface Area</p> <p>G7 M3 Lesson 26: Volume and Surface Area</p> <p>G7 M6 Topic D: Problems Involving Area and Surface Area</p> <p>G7 M6 Topic E: Problems Involving Volume</p>

Statistics and Probability

7.SP.A Use random sampling to draw inferences about a population.

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<p>7.SP.A.1</p> <p>Explore how 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. Understand that random sampling tends to produce representative samples and support valid inferences.</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>7.SP.A.2</p> <p>Collect and use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge 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>

Statistics and Probability

7.SP.B Draw informal comparative inferences about two populations.

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<p>7.SP.B.3</p> <p>Informally compare the measures of center (mean, median, mode) of two numerical data distributions with similar variabilities.</p>	<p>G6 M6 Lesson 19: Comparing Data Distributions</p> <p>G7 M5 Lesson 21: Why Worry About Sampling Variability?</p> <p><i>Supplemental material is necessary to address comparing the measures of center of two numerical data distributions by using the mode.</i></p>
<p>7.SP.B.4</p> <p>Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.</p>	<p>G7 M5 Topic D: Comparing Populations</p>

Statistics and Probability

7.SP.C Investigate chance processes and develop, use, and evaluate probability models.

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<p>7.SP.C.5</p> <p>Recognize that the probability of a chance event is a number between 0 and 1 and interpret the likelihood of the event occurring.</p>	<p>G7 M5 Lesson 1: Chance Experiments</p>

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<p>7.SP.C.6</p> <p>Calculate theoretical and experimental probability of simple events.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>7.SP.C.6a</p> <p>Approximate the probability of a chance 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>7.SP.C.6b</p> <p>Calculate the theoretical probability of a simple event.</p>	<p>G7 M5 Lesson 4: Calculating Probabilities for Chance Experiments with Equally Likely Outcomes</p>
<p>7.SP.C.6c</p> <p>Compare theoretical probabilities to experimental probabilities; explain any possible sources of 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>7.SP.C.7</p> <p>Develop a probability model and use it to find experimental or theoretical probabilities of events.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>

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<p>7.SP.C.7a</p> <p>Use a uniform probability model, with equal probability assigned to all outcomes, to determine probabilities of events.</p>	<p>G7 M5 Lesson 4: Calculating Probabilities for Chance Experiments with Equally Likely Outcomes</p>
<p>7.SP.C.7b</p> <p>Develop a probability model, including non-uniform models, by observing frequencies in data generated from a chance process. Use the model to estimate the probabilities of events.</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>

Statistics and Probability

7.SP.D Summarize and describe numerical data sets.

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<p>7.SP.D.8</p> <p>Summarize a numerical data set in relation to its context.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>

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<p>7.SP.D.8a</p> <p>Give quantitative measures of center (median and/or mean) and variability (range and/or interquartile range), 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 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 Topic C: Summarizing a Distribution that is Skewed Using the Median and the Interquartile Range</p> <p>G6 M6 Topic D: Summarizing and Describing Distributions</p>
<p>7.SP.D.8b</p> <p>Relate and understand the choice of measures of center (median and/or mean) and variability (range and/or interquartile range) 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>