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7.NS.1.d

7.NS.2 Extend prior knowledge of operations with positive rational numbers to multiply and to divide all rational numbers.

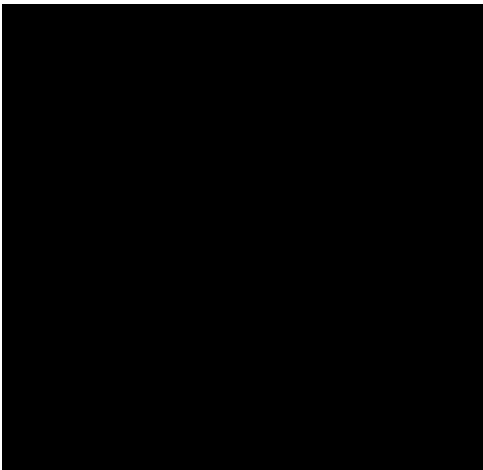
a. Understand that the multiplicative inverse of a number is its reciprocal and

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	<p>7.EE.4 Apply the concepts of linear equations and inequalities in one variable to real-world and mathematical situations.</p> <p>a. Write and fluently solve linear equations of the form $ax + b = c$ and $a(x + b) = c$ where a, b, and c are rational numbers.</p> <p>b. Write and solve multi-step linear equations that include the use of the distributive property and combining like terms. Exclude equations that contain variables on both sides.</p> <p>c. Write and solve two-step linear inequalities. Graph the solution set on a number line and interpret its meaning.</p> <p>d. Identify and justify the steps for solving multi-step linear equations and two-step linear inequalities.</p> <p>7.EE.3 7.EE.4.a, b</p> <p>7.EE.5 Understand and apply the laws of exponents (i.e., product rule, quotient rule, power to a power, product to a power, quotient to a power, zero power property) to simplify numerical expressions that include whole-number exponents.</p>	
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**Unit 3:
Geometry A**

- 7.GM.2 Construct triangles and special quadrilaterals using a variety of tools (e.g., freehand, ruler and protractor, technology).
- a. Construct triangles given all measurements of either angles or sides.
- b. Decide if the measurements determine a unique triangle, more than one triangle, or no triangle.
- c. Construct special quadrilaterals (i.e., kite, trapezoid, isosceles trapezoid, rhombus, parallelogram, rectangle) given specific parameters about angles or sides.
- 7.GM.5 Write equations to solve problems involving the relationships between angles formed by two intersecting lines, including supplementary,



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	complementary, vertical, and adjacent.	
<p>Unit 4: Geometry B</p>	<p>7.GM.1 Determine the scale factor and translate between scale models and actual measurements (e.g., lengths, area) of real-world objects and geometric figures using proportional reasoning.</p> <p>7.GM.4 Investigate the concept of circles.</p> <p>a. Demonstrate an understanding of the proportional relationships between diameter, radius, and circumference of a circle.</p> <p>b. Understand that the constant of proportionality between the circumference and diameter is equivalent to π.</p> <p>c. Explore the relationship between circumference and area using a visual model.</p> <p>d. Use the formulas for circumference and area of circles appropriately to solve real-world and mathematical problems.</p> <p>7.GM.3 Describe two-dimensional cross-sections of three-dimensional figures, specifically right rectangular prisms and right rectangular pyramids.</p> <p>7.GM.6 Apply the concepts of two- and three-dimensional figures to real-world and mathematical situations.</p> <p>a. Understand that the concept of area is applied to two-dimensional figures such as triangles, quadrilaterals, and polygons.</p> <p>b. Understand that the concepts of volume and surface area are applied to three-dimensional figures such as cubes, right rectangular prisms, and right triangular prisms.</p> <p>c. Decompose cubes, right rectangular prisms, and right triangular prisms into rectangles and triangles to derive the formulas for volume and surface area.</p>	<p>Chapters 11, 12, 13</p>

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	<p>d. Use the formulas for area, volume, and surface area appropriately.</p>	
<p>Unit 5: Ratios and Proportional Relationships</p>	<p>7.RP.1 Compute unit rates, including those involving complex fractions, with like or different units.</p> <p>7.RP.2 Identify and model proportional relationships given multiple representations, including tables, graphs, equations, diagrams, verbal descriptions, and real-world situations.</p> <p>b. Recognize or compute the constant of proportionality.</p> <p>c. Understand that the constant of proportionality is the unit rate.</p> <p>7.RP.3 Solve real-world and mathematical problems involving ratios and percentages using proportional reasoning (e.g., multi-step dimensional analysis, percent increase/decrease, tax).</p> <p>7.RP.1 7.RP.2.a, b, c, d 7.RP.3</p> <p>7.RP.1 Compute unit rates, including those involving complex fractions, with like or different units.</p> <p>7.RP.2 Identify and model proportional relationships given multiple representations, including tables, graphs, equations, diagrams, verbal descriptions, and real-world situations.</p> <p>a. Determine when two quantities are in a proportional relationship.</p> <p>b. Recognize or compute the constant of proportionality.</p> <p>c. Understand that the constant of proportionality is the unit rate.</p> <p>d. Use equations to model proportional relationships.</p> <p>e. Investigate the graph of a proportional relationship and explain the meaning of specific points (e.g., origin, unit rate) in the context of the situation.</p>	<p>Chapters 1, 2, 3</p>

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	<p>7.RP.3 Solve real-world and mathematical problems involving ratios and percentages using proportional reasoning (e.g., multi-step dimensional analysis, percent increase/decrease, tax).</p> <p>7.RP.1 7.RP.2.a, b, c 7.RP.3</p>	
<p>Unit 6: Statistics</p>	<p>7.DSP.1 Investigate concepts of random sampling.</p> <ul style="list-style-type: none">a. Understand that a sample is a subset of a population and both possess the same characteristics.b. Differentiate between random and non-random sampling.c. Understand that generalizations from a sample are valid only if the sample is representative of the population.d. Understand that random sampling is used to gather a representative sample and supports valid inferences about the population. <p>7.DSP.2 Draw inferences about a population by collecting multiple random samples of the same size to investigate variability in estimates of the characteristic of interest.</p> <p>7.DSP.4 Compare the numerical measures of center (mean, median, mode) and variability (range, interquartile range, mean absolute deviation) from two</p>	

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