

Mathematics: Grade 6

Ratios and Proportional Relationships RP

- 1a** Write or select a ratio to match a given statement and representation. LC.6.RP.A.1A
- 1b** Select or make a statement to interpret a given ratio. **LC.6.RP.A.1c** Describe the ratio relationship between two quantities for a given situation. LC.6.RP.A.1B
- 1d** Complete a statement that describes the ratio relationship between two quantities. LC.6.RP.A.1D
- 1e** Write or select a ratio to match a given statement and representation. LC.6.RP.A.1E
- 2** Determine the unit rate in a variety of contextual situations. LC.6.RP.A.2
- 3a** Use ratios and reasoning to solve real-world mathematical problems (e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations). LC.6.RP.A.3A
- 3b** Find a missing value (representations, whole numbers, common fractions, decimals to hundredths place, percent) for a given ratio. LC.6.RP.A.3B
- 3c** Solve unit rate problems involving unit pricing. LC.6.RP.A.3C
- 3d** Solve one step real world measurement problems involving unit rates with ratios of whole numbers when given the unit rate (3 inches of snow falls per hour, how much in 6 hours). LC.6.RP.A.3D
- 3e** Calculate a percent of a quantity as rate per 100. LC.6.RP.A.3E
- 3f** Complete a conversion table for length, mass, time, volume. LC.6.RP.A.3F
- 3g** Analyze a table of equivalent ratios to answer questions. LC.6.RP.A.3G
- 3h** Solve word problems involving ratios. LC.6.RP.A.3H

The Number System NS

- 1** Solve one step problems involving division of fractions by fractions. LC.6.NS.A.1
- 2** Divide multi-digit whole numbers. LC.6.NS.B.2
- 3** Solve one step, addition, subtraction, multiplication, or division problems with fractions or decimals. LC.6.NS.B.3

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- 4** Find the greatest common multiple of two whole numbers less than or equal 25 and the least common multiple of two whole numbers less than or equal to 8. **LC.6.NS.B.4**
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- 5** Select the appropriate meaning of a negative number in a real world situation. **LC.6.NS.C.5**
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- 6a** Find given points between -10 and 10 on both axes of a coordinate plane. **LC.6.NS.C.6A**
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- 6b** Label points between -10 and 10 on both axes of a coordinate plane. **LC.6.NS.C.6B**
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- 6c** Identify numbers as positive or negative. **LC.6.NS.C.6C**
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- 6d** Locate positive and negative numbers on a number line. **LC.6.NS.C.6D**
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- 6e** Plot positive and negative numbers on a number line. **LC.6.NS.C.6E**
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- 7a** Compare two numbers on a number line (e.g., $-2 > -9$). **LC.6.NS.C.7A**
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- 7b** Determine the meaning of absolute value. **LC.6.NS.C.7B**
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- 8** Use coordinates and absolute value to find the distance between two coordinates with the same first coordinate or the same second coordinate. **LC.6.NS.C.8**
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Expressions and Equations **EE**

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- 1a** Identify what an exponent represents (e.g., $8^3 = 8 \times 8 \times 8$). **LC.6.EE.A.1A**
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- 1b** Solve numerical expressions involving whole number exponents. **LC.6.EE.A.1B**
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- 2** Evaluate expressions from formulas containing exponents for specific values of their variables. **LC.6.EE.A.2**
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- 3** Use properties to produce equivalent expressions. **LC.6.EE.A.3**
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- 4** Evaluate whether or not both sides of an equation are equal. **LC.6.EE.A.4**
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- 5** Use substitute to determine which values from a specified set make an equation or inequality true. **LC.6.EE.B.5**
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- 6** Use variable to represent numbers and write expressions when solving real world problems. **LC.6.EE.B.6**
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- 7a** Solve problems or word problems using up to three digit numbers and any of the four operations. **LC.6.EE.B.7A**
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- 7b** Solve real world, single step linear equations. **LC.6.EE.B.7B**
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- 8** Given a real world problem, write an inequality. **LC.6.EE.B.8**
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- 9a** Use variables to represent two quantities in a real-world problem that change in relationship to one another. [LC.6.EE.C.9A](#)
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- 9b** Analyze the relationships between the dependent and independent variables using graphs and tables, and relate to the equation. [LC.6.EE.C.9B](#)
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Geometry [G](#)

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- 1a** Apply the formula to find the area of triangles. [LC.6.G.A.1A](#)
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- 1b** Decompose complex shapes (polygon, trapezoid, pentagon) into simple shapes (rectangles, squares, triangles) to measure area. [LC.6.G.A.1B](#)
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- 1c** Find area of quadrilaterals. [LC.6.G.A.1C](#)
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- 1d** Find area of triangles [LC.6.G.A.1D](#)
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- 2** Identify the appropriate formula (i.e., perimeter, area, volume) to use when measuring for different purposes in a real life context. [LC.6.G.A.2](#)
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- 3a** Use coordinate points to draw polygons. [LC.6.G.A.3A](#)
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- 3b** Use coordinate points to find the side lengths of polygons that are horizontal or vertical. [LC.6.G.A.3B](#)
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- 4** Find the surface area of three dimensional figures using nets of rectangles or triangles. [LC.6.G.A.4](#)
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Statistics and Probability [SP](#)

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- 1** Identify statistical questions and make a plan for data collection. [LC.6.SP.A.1](#)
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- 2a** Find the range of a given data set. [LC.6.SP.A.2A](#)
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- 2b** Explain or identify what the mode represents in a set of data. [LC.6.SP.A.2B](#)
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- 3** Explain or identify what the mean represents in a set of data. [LC.6.SP.A.3](#)
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- 4** Collect and graph data: bar graph, line plots, dot plots, histograms. [LC.6.SP.B.4](#)
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- 5a** Select an appropriate statement about the range of the data for a given graph (bar graph, line plot) (i.e., range of data) up to 10 points. [LC.6.SP.B.5a](#) Use measures of central tendency to interpret data including overall patterns in the data. [LC.6.SP.B.5A](#)
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- 5c** Solve for mean of a given data set. [LC.6.SP.B.5C](#)
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- 5d** Select statement that matches mean, mode, and spread of data for 1 measure of central tendency for a given data set. [LC.6.SP.B.5D](#)
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- 5e** Explain or identify what the median represents in a set of data. [LC.6.SP.B.5E](#) Use measures of central tendency to interpret data including overall patterns in the data. [LC.6.SP.B.5E](#)
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5g Solve for the median of a given data set. LC.6.SP.B.5G

5h Identify outliers, range, mean, median, and mode. LC.6.SP.B.5H