

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

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

5 Select the appropriate meaning of a negative number in a real world situation. LC.6.NS.C.5

6a Find given points between -10 and 10 on both axes of a coordinate plane. LC.6.NS.C.6A

6b Label points between -10 and 10 on both axes of a coordinate plane. LC.6.NS.C.6B

6c Identify numbers as positive or negative. LC.6.NS.C.6C

6d Locate positive and negative numbers on a number line. LC.6.NS.C.6D

6e Plot positive and negative numbers on a number line. LC.6.NS.C.6E

7a Compare two numbers on a number line (e.g., $-2 > -9$). LC.6.NS.C.7A

7b Determine the meaning of absolute value. LC.6.NS.C.7B

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

Expressions and Equations EE

1a Identify what an exponent represents (e.g., $8^3 = 8 \times 8 \times 8$). LC.6.EE.A.1A

1b Solve numerical expressions involving whole number exponents. LC.6.EE.A.1B

2 Evaluate expressions from formulas containing exponents for specific values of their variables. LC.6.EE.A.2

3 Use properties to produce equivalent expressions. LC.6.EE.A.3

4 Evaluate whether or not both sides of an equation are equal. LC.6.EE.A.4

5 Use substitute to determine which values from a specified set make an equation or inequality true. LC.6.EE.B.5

6 Use variable to represent numbers and write expressions when solving real world problems. LC.6.EE.B.6

7a Solve problems or word problems using up to three digit numbers and any of the four operations. LC.6.EE.B.7A

7b Solve real world, single step linear equations. LC.6.EE.B.7B

8 Given a real world problem, write an inequality. LC.6.EE.B.8

9a Use variables to represent two quantities in a real-world problem that change in relationship to one another. LC.6.EE.C.9A

9b Analyze the relationships between the dependent and independent variables using graphs and tables, and relate to the equation. LC.6.EE.C.9B

Geometry **G**

1a Apply the formula to find the area of triangles. LC.6.G.A.1A

1b Decompose complex shapes (polygon, trapezoid, pentagon) into simple shapes (rectangles, squares, triangles) to measure area. LC.6.G.A.1B

1c Find area of quadrilaterals. LC.6.G.A.1C

1d Find area of triangles LC.6.G.A.1D

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

3a Use coordinate points to draw polygons. LC.6.G.A.3A

3b Use coordinate points to find the side lengths of polygons that are horizontal or vertical. LC.6.G.A.3B

4 Find the surface area of three dimensional figures using nets of rectangles or triangles. LC.6.G.A.4

Statistics and Probability **SP**

1 Identify statistical questions and make a plan for data collection. LC.6.SP.A.1

2a Find the range of a given data set. LC.6.SP.A.2A

2b Explain or identify what the mode represents in a set of data. LC.6.SP.A.2B

3 Explain or identify what the mean represents in a set of data. LC.6.SP.A.3

4 Collect and graph data: bar graph, line plots, dot plots, histograms. LC.6.SP.B.4

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.5b Use measures of central tendency to interpret data including overall patterns in the data. LC.6.SP.B.5A

5c Solve for mean of a given data set. LC.6.SP.B.5C

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

5e Explain or identify what the median represents in a set of data. LC.6.SP.B.5f Use measures of central tendency to interpret data including overall patterns in the data. LC.6.SP.B.5E

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