**Numbers and Operations**

M06.A-N.3.2.1

Write, interpret, and explain statements of order for rational numbers in real-world contexts.

**Numbers and Operations**

M06.A-N.3.2.3

Solve real-world and mathematical problems by plotting points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

**Numbers and Operations**

M06.A-N.2.2.1

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

**Numbers and Operations**

M06.A-N.3.1.2

Determine the opposite of a number and recognize that the opposite of the opposite of a number is the number itself (e.g., -(-3) = 3; 0 is its own opposite).

**Numbers and Operations**

M06.A-N.3.2.2

Interpret the absolute value of a rational number as its distance from 0 on the number line and as a magnitude for a positive or negative quantity in a real-world situation.

**Numbers and Operations**

M06.A-N.3.1.1

Represent quantities in real-world contexts using positive and negative numbers, explaining the meaning of 0 in each situation (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge).

**Numbers and Operations**

M06.A-N.3.1.3

Locate and plot integers and other rational numbers on a horizontal and vertical number line; locate and plot pairs of integers and other rational numbers on a coordinate plane.

**Numbers and Operations**

M06.A-R.1.1.1

Use ratio language and notation (such as 3 to 4, 3:4, ¾) to describe a ratio relationship between two quantities.

**Numbers and Operations**

M06.A-R.1.1.3

Construct tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and/or plot the pairs of values on the coordinate plane. Use tables to compare ratios.

**Numbers and Operations**

M06.A-N.1.1.1

Interpret and compute quotients of fractions (including mixed numbers), and solve word problems involving division of fractions by fractions.

**Numbers and Operations**

M06.A-N.2.1.1

Solve problems involving operations (+, −, ×, and ÷) with whole numbers, decimals (through thousandths), straight computation, or word problems.

**Numbers and Operations**

M06.A-N.2.2.2

Apply the distributive property to express a sum of two whole numbers, 1 through 100, with a common factor as a multiple of a sum of two whole numbers with no common factor.

**Numbers and Operations**

M06.A-R.1.1.2

Find the unit rate a/b associated with a ratio a:b (with b ≠ 0) and use rate language in the context of a ratio relationship.

**Numbers and Operations**

M06.A-R.1.1.4

Solve unit rate problems including those involving unit pricing and constant speed.

**Numbers and Operations**

M06.A-R.1.1.5

Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percentage.

**Algebraic Concepts**

M06.B-E.3.1.2

Analyze the relationship between the dependent and independent variables using graphs and tables and/or relate these to an equation.

**Algebraic Concepts**

M06.B-E.1.1.1

Write and evaluate numerical expressions involving whole-number exponents.

**Algebraic Concepts**

M06.B-E.1.1.2

Write algebraic expressions from verbal descriptions.

**Algebraic Concepts**

M06.B-E.1.1.3

Identify parts of an expression using mathematical terms (e.g., sum, term, product, factor, quotient, coefficient, quantity).

**Algebraic Concepts**

M06.B-E.1.1.4

Evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems.

**Algebraic Concepts**

M06.B-E.2.1.2

Write algebraic expressions to represent real-world or mathematical problems.

**Algebraic Concepts**

M06.B-E.1.1.5

Apply the properties of operations to generate equivalent expressions.

**Algebraic Concepts**

M06.B-E.2.1.1

Use substitution to determine whether a given number in a specified set makes an equation or inequality true.

**Algebraic Concepts**

M06.B-E.2.1.3

Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q, and x are all non-negative rational numbers.

**Algebraic Concepts**

M06.B-E.2.1.4

Write an inequality of the form x > c or x < c to represent a constraint or condition in a real-world or mathematical problem and/or represent solutions of such inequalities on a number line.

**Algebraic Concepts**

M06.B-E.3.1.1

Write an equation to express the relationship between the dependent and independent variables.

**Geometry**

M06.C-G.1.1.5

Represent three-dimensional figures using nets made of rectangles and triangles.

**Geometry**

M06.C-G.1.1.1

Determine the area of triangles and special quadrilaterals (i.e., square, rectangle, parallelogram, rhombus, and trapezoid). Formulas will be provided.

**Geometry**

M06.C-G.1.1.2

Determine the area of irregular or compound polygons.

**Geometry**

M06.C-G.1.1.3

Determine the volume of right rectangular prisms with fractional edge lengths. Formulas will be provided.

**Geometry**

M06.C-G.1.1.6

Determine the surface area of triangular and rectangular prisms (including cubes). Formulas will be provided.

**Geometry**

M06.C-G.1.1.4

Given coordinates for the vertices of a polygon in the plane, use the coordinates to find side lengths and area of the polygon (limited to triangles and special quadrilaterals). Formulas will be provided.

**Measurement, Data, Probability**

M06.D-S.1.1.1

Display numerical data in plots on a number line, including line plots, histograms, and box-and-whisker plots.

**Measurement, Data, Probability**

M06.D-S.1.1.2

Determine quantitative measures of center (e.g., median, mean, mode) and variability (e.g., range, interquartile range, mean absolute deviation).

**Measurement, Data, Probability**

M06.D-S.1.1.3

Describe any overall pattern and any deviations from the overall pattern with reference to the context in which the data were gathered.

**Measurement, Data, Probability**

M06.D-S.1.1.4

Relate the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.