

Math

Major Clusters



Note:
These are
end-of-year
expectations
for...

Sixth Grade

Ratios and Proportional Relationships

I can...

- Use ratios to compare data.
- Understand how to find a rate when given a specific ratio.
- Solve word problems related to ratios in order to figure out the rate.

The Number System

I can...

- Compute and solve word problems involving division of fractions.
- Fluently divide multi-digit numbers.
- Fluently add multi-digit decimals.
- Fluently subtract multi-digit decimals.
- Fluently multiply multi-digit decimals.
- Fluently divide multi-digit decimals.
- Find the greatest common factor of two whole numbers less than or equal to 100.
- Find the least common multiple of two whole numbers less than or equal to 12.
- Use the Distributive property to factor out the greatest common factor from an addition expression with two whole numbers.
- Understand and use positive and negative numbers to represent quantities in real-world situations.
- Understand that a rational number is a point on a number line.
- Extend number line diagrams to show positive and negative numbers on the line and in the plane.
- Recognize opposite signs of numbers as indicating places on opposite sides of 0 on the number line.
- Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane.
- Place integers and other numbers on a number line diagram.
- Place ordered pairs on a coordinate plane.
- Order positive and negative numbers.
- Understand absolute value of rational numbers.
- Understand the distance between two numbers (positive or negative) on a number line.
- Write, understand, and explain what rational numbers mean in real-world situations.
- Understand that absolute value as the number's distance from 0 on the number line.
- Understand absolute values as they apply to real-world situations.
- Compare absolute values of positives and negatives to determine which number is farther from zero.
- Graph in all four quadrants of the coordinate plane to help solve real-world and mathematical problems.
- Determine the distance between points in the same first

		coordinate or the same second coordinate.
	Expressions and Equations	I can... • Write and understand numerical expression involving whole number exponents. • Write, read, and figure out expressions in which letters stand for numbers. • Write expressions using numbers and letters (with letters standing for numbers.) • Understand that in looking at $2(8+7)$ you can see the $8+7$ as two separate numbers or as 15. • Identify parts of an expression using mathematical words, such as sum, term, product, factor, quotient, etc. • Evaluate an expression/equation using order of operations when given the value of the variable. • Create an equivalent expression through the use of properties of operations such as the commutative, associative, and distributive properties and factoring. • Determine if two expressions are equivalent using the distributive property, factoring, or substitution. • Explain if a value from a set makes an inequality or equation true or false. • Write an expression using a variable that helps me solve real-world problems. • Solve real-world and mathematical problems by evaluating an expression or equation when the variable is a positive rational number. • Write an inequality about a real-world situation and recognize that it has infinite solutions. I can graph that inequality on a number line. • Write an equation involving dependent and independent variables and evaluate that equation.

Math (continued)

Supporting and Additional Clusters	
The Number System	I can... ● Find the greatest common factor of two whole numbers less than or equal to 100. ● Find the least common multiple of two whole numbers less than or equal to 12. ● Use the Distributive property to factor out the greatest common factor from an addition expression with two whole numbers.
Geometry	I can... ● Find the area of triangles, quadrilaterals, and polygons by decomposing shapes to help me find the area in a real-world problem. ● Find the volume of right rectangular prisms expressed as a proper or improper fraction in various real-world and mathematical situations. ● Draw polygons on a coordinate plane and use the coordinates to find the lengths of the sides to help me solve real-world problems. ● Represent 3D shapes using nets and use the net to help find the surface area of the figure.
Statistics and Probability	I can... ● Write a statistical question that has more than one right answer. ● Describe a set of data using its center (mode, median, or mean), its spread, and its shape. ● Describe a measure of center and a measure of variation for a data set. ● Display data on a number line, dot plot (line plot), histogram, and box plots. ● Tell how many items are in a data set. ● Tell how data was collected and in what unit of measure. ● Find the median, mean, interquartile range, mean absolute deviation (average distance from the mean), and outliers in a set of data. ● Choose the measure of center that best describes the data based on the context in which it was gathered.