

Catoosa County Public Schools

Teaching and Learning Standards

Every Child, Every Day, Without Exception



6th Grade Mathematics

District Essential Standards and Learning Targets

1.2 Multiply and divide any combination of whole numbers, fractions, and mixed numbers using a student-selected strategy. Interpret products and quotients of fractions and solve word problems.

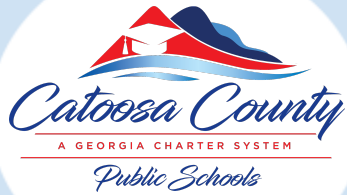
- I can divide fractions and whole numbers.
- I can multiply fractions and whole numbers.
- I can solve word problems involving multiplying fractions.
- I can solve word problems involving dividing fractions.

2.1 Describe and interpret the center of the distribution by the equal share value (mean).

- I can find the mean given a set of data.
- I can identify the missing number in a data set if I have the mean.

2.2 Summarize categorical and quantitative (numerical) data sets in relation to the context: display the distributions of quantitative (numerical) data in plots on a number line, including dot plots, histograms, and box plots and display the distribution of categorical data using bar graphs.

- I can interpret and display data using number line, dot plot (line plot), histogram.
- I can interpret and display data using a box- and- whisker plot.
- I can find the median.
- I can find the range and IQR.



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3.2 Order and plot integers on a number line and use distance from zero to discover the connection between integers and their opposites.

- I can name opposites of numbers.
- I can use words and integers to represent real-world situations and explain the meaning of zero.
- I can find and plot integers and rational numbers on a horizontal and vertical number line.
- I can explain and determine the absolute value (distance from zero) of rational numbers.

4.1 Explain the concept of a ratio, represent ratios, and use ratio language to describe a relationship between two quantities.

- I can use ratios to compare data.
- I can solve unit rate problems.
- I can understand percent as a rate per 100.
- I can explain the concept of a ratio as a relationship between two quantities using ratio language such as using part-to-part or part-to-whole.

4.3 Solve problems involving proportions using a variety of student-selected strategies.

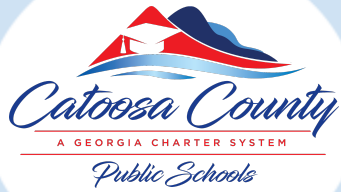
- I can solve problems using proportions.

5.1 Explore area as a measurable attribute of triangles, quadrilaterals, and other polygons conceptually by composing or decomposing into rectangles, triangles, and other shapes. Find the area of these geometric figures to solve problems.

- I can find the area of triangles.
- I can find the area of quadrilaterals.
- I can find the area of composite figures.

6.2 Determine greatest common factors and least common multiples using a variety of strategies to make sense of applicable problems.

- I can determine common multiples of two whole numbers.
- I can determine common factors of two whole numbers.
- I can solve word problems involving LCM and GCF



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6.3 Write and read expressions that represent operations with numbers and variables in realistic situations. (sum, difference, term, product, factor, quotient, coefficient, variable, constant).

- I can write expressions using numbers and variables to represent real life situations.

6.4 Evaluate expressions when given values for the variables, including expressions that arise in everyday situations.

- I can evaluate expressions using the order of operations.

6.5 Apply the properties of operations to identify and generate equivalent expressions.

- I can combine like terms to generate equivalent expressions.
- I can use the distributive property to generate equivalent expressions.

7.3 Solve problems by writing and solving equations of the form $x + p = q$, $px = q$ and $x/p = q$ for cases in which p , q and x are all nonnegative rational numbers.

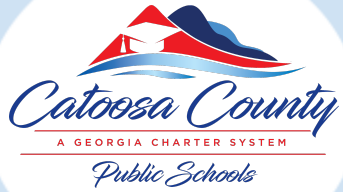
- I can solve algebraic equations.
- I can identify and create algebraic equations from word problems.

7.4 Recognize and generate inequalities of the form $x > c$, $x < c$, or $x < c$ to explain situations that have infinitely many solutions; represent solutions of such inequalities on a number line.

- I can represent solutions of inequalities on number lines
- I can write an inequality and understand its solution set in relation to the problem.

8.3 Solve problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same x -coordinate or the same y -coordinate.

- I can locate and place an ordered pair on the coordinate plane in all 4 quadrants.
- I can identify the quadrant of an ordered pair on the coordinate plane.
- I can identify reflections across the x and y axes.
- I can find the distance between 2 points on the coordinate plane.



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5.3 Geometric and Spatial Reasoning

- I can use fractions to determine volume of a right rectangular prism.