

Catoosa County Public Schools

Teaching and Learning Standards

Every Child, Every Day, Without Exception



7th Grade Mathematics

District Essential Standards and Learning Targets

1.2 Show and explain $p + q$ as the number located a distance $|q|$ from p , in the positive or negative direction, depending on whether q is positive or negative. Interpret sums of rational numbers by describing applicable situations.

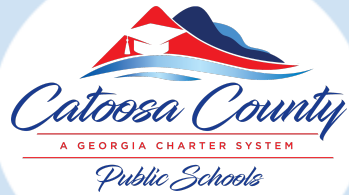
- I can add positive and negative rational numbers.
- I can explain positive and negative rational numbers.
- I can provide a real-world applicable situation.

1.5 Apply properties of operations, including part-whole reasoning, as strategies to add and subtract rational numbers.

- I can apply properties to add/subtract rational numbers.

1.9 Apply properties of operations as strategies to solve multiplication and division problems involving rational numbers represented in an applicable scenario.

- I can apply properties to multiply and divide rational numbers and real world problems.



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1.11 Solve multi-step, contextual problems involving rational numbers, converting between forms as appropriate, and assessing the reasonableness of answers using mental computation and estimation strategies.

- I can convert fractions, decimals, and percentages to solve multi step real world problems.

2.2 Rewrite an expression in different forms from a contextual problem to clarify the problem and show how the quantities in it are related.

- I can rewrite expressions in different forms.
- I can use expressions to solve real-world problems..

3.1 Construct algebraic equations to solve practical problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p , q , and r are specific rational numbers. Interpret the solution based on the situation.

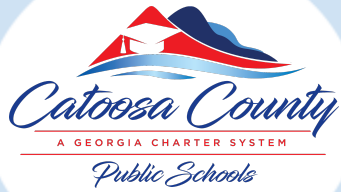
- I can set up equations to solve.
- I can explain the solution of an equation.

3.2 Construct algebraic inequalities to solve problems, leading to inequalities of the form $px + q > r$, $px + q < r$, $px + q \leq r$, or $px + q \geq r$, where p , q , and r are specific rational numbers. Graph and interpret the solution based on the realistic situation that the inequalities represent.

- I can set up and solve inequalities.
- I can graph the solution of an inequality.
- I can explain the solution of an inequality.

4.4 Identify, represent, and use proportional relationship

- I can recognize if two things are proportional.
- I can model proportional relationships.
- I can apply proportional relationships.



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4.8 Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.

- I can graph proportional relationships.
- I can compare proportional relationships.
- I can demonstrate the unit rate as the slope.

4.9 Use proportional relationships to solve multi-step ratio and percent problems presented in applicable situations.

- I can solve multi-step ratio and percent problems using proportional relationships.

5.3 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve equations for an unknown angle in a figure.

- I can identify/classify angle relationships.
- I can solve equations for unknown angles using angle relationships.

5.5 Given the formula for the area and circumference of a circle, solve problems that exist in everyday life.

- I can solve area problems in everyday life.
- I can solve circumference problems in everyday life.

5.8 Find the volume of these geometric figures using concrete problems.

- I can find the volume of cylinders.
- I can find the volume of right prisms.

6.3 Develop a probability model and use it to find probabilities of simple events. Compare experimental and theoretical probabilities of events.

- I can create a probability model for simple events.
- I can compare experimental and theoretical probability.
- I can describe the differences in values between experimental and theoretical probability.