Success Through Education

Seventh Grade Math Curriculum

Grade 7 Math

Ratios and Proportional Relationships

Analyzes proportional relationships and uses them to solve real-world and mathematical problems.

Understands unit rates represented as fractions with a denominator of 1.

Recognizes and represents proportional relationships between quantities.

Identifies constant of proportionality.

Represents proportions as equations.

Analyzes proportional relationships within lines passing through the origin.

Number System

Applies and extends previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Represents addition and subtraction of rational numbers on horizontal and vertical number lines.

Understands that subtraction of rational numbers is the concept of adding the additive inverse.

Shows that the distance between two rational numbers on the number line is the absolute value of their difference.

Applies multiplication and division to positive and negative rational numbers.

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Expressions and Equations

Uses properties of operations to generate equivalent expressions.

Solves real-life and mathematical problems using numerical and algebraic expressions and equations.

Solves multi-step problems using whole numbers, fractions, decimals, and percents.

Uses variables to represent quantities in simple equations and inequalities.

Geometry

Draws, constructs and describes geometrical figures and describes the relationships between them.

Solves problems involving scale drawings of geometric figures

Solves real-life and mathematical problems involving angle measure, area, surface area, and volume.

Uses facts about supplementary, complementary, vertical and adjacent angles to solve problems

Statistics and Probability

Uses random sampling to draw inferences about a population.

Draws informal comparative inferences about two populations.

Investigates chance processes and develops, uses evaluates probability models.

Understands that probability is a number between 0 and can be represented as a fraction, decimal, or perce