

*Success
Through
Education*



Math Curriculum Grade Eight

Grade 8 Math

The Number System

Knows that there are numbers that are not rational, and approximates them by rational numbers.

Locates square roots on number line and approximates their value.

Expressions and Equations

Works with radicals and integer exponents.

Converts between standard and scientific notation.

Performs operations with scientific notation.

Performs operations with integer exponents.

Understands the connections between proportional relationships, lines, and linear equations.

Understands unit rate as it relates to slope,
 $y = mx + b$.

Understands what the relationship of m and the b are in the equation.

Analyzes and solves linear equations and pairs of simultaneous linear equations.

Solves problems that include one solution, no solution, and infinitely many solutions.

Solves multi-step equations including rational coefficients.

Solves systems of linear equations.

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Identifies angle congruency when parallel lines are by transversals.

Understands and applies the Pythagorean theorem.

Applies the converse of the Pythagorean Theorem.

Uses the Pythagorean Theorem to solve problems involving 2 and 3-dimensional figures.

Applies the Pythagorean Theorem to find a distance between two points on coordinate grid.

Solves real-world and mathematical problems involving volume of cylinders, cones and spheres.

Statistics and Probability

Investigates patterns of association in bivariate data.

Constructs and interprets scatter plots.

Uses linear model to represent data (line of best fit) and to solve problems.

Analyzes frequency and relative frequency, and creates two-way tables to represent distribution.