

Durham Community School

Mathematics Grades 7, 8

Report Card Indicators:

Grade 7:

Ratios and proportional relationships

Analyze proportional relationships and use them to solve real-world and mathematical problems.

The number system

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

Expressions and equations

Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Geometry

Draw, construct and describe geometrical figures and describe the relationships between them. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Statistics and probability

Use random sampling to draw inferences about a population. Draw informal comparative inferences about two populations. Investigate chance processes and develop, use, and evaluate probability models.

Grade 8:

The number system

Know that there are numbers that are not rational, and approximate them by rational numbers.

Expressions and equations

Work with radicals and integer exponents. Understand the connections between proportional relationships, lines, and linear equations. Analyze and solve linear equations and pairs of simultaneous linear equations.

Functions

Define, evaluate, and compare functions. Use functions to model relationships between quantities.

Geometry

Understand congruence and similarity using physical models, transparencies, or geometry software. Understand and apply the Pythagorean Theorem. Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.

Statistics and probability

Investigate patterns of association in bivariate data.