8th Grade Math Essential Skills and Concepts



I Can...

Expressions and Equations

- represent a negative exponent as a fractions.
- use the properties of exponents to write an equivalent expression.
- determine square roots or perfect squares and cube roots of perfect cubes.
- find the slope of a line on a coordinate plane.
- put a line in slope-intercept form.
- solve linear equations in one variable.
- solve a system of equations graphically and algebraically.

Functions

- compare rates of change determined from a table and a linear graph.
- find the rate of change of a line from two points from a table or a graph.
- determine the initial value of a function for a given situation.

Geometry

- describe transformations of two-dimensional figures using coordinates.
- apply the Pythagorean Theorem to find the length of an unknown side of a right triangle.
- solve problems using the formulas for volume of cones, cylinders, and spheres.