Essential Work of 8th Grade Mathematics

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.

The Number System

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

Statistics and Probability

- Investigate patterns of association in bivariate data.