Math 9th Grade
First Nine Weeks

## Integrated

### Number, Number Sense and Operations

**C 1.** Identify and justify whether properties (closure, identity, inverse, commutative and associative) hold for a given set and operations; e.g., even integers and multiplication.

**E 2.** Compare order and determine equivalent forms for rational and irrational numbers.

### Measurement

**D 1.** Convert rates within the same measurement system; e.g., miles per hour to feet per second; kilometers per hour to meters per second.

**D 2.** Use unit analysis to check computations involving measurement.

## Algebra I

### Number, Number Sense and Operations

**C 2.** Identify and justify whether properties (closure, identity, inverse, commutative and associative) hold for a given set and operations; e.g., even integers and multiplication.

**E 2.** Compare order and determine equivalent forms for rational and irrational numbers.

**H 5.** Recognize and identify perfect squares and their roots.

**H 7.** Find the square root of perfect squares, and approximate the square root of non-perfect squares as consecutive integers between which the root lies; e.g. $\sqrt{130}$ is between 11 and 12.

**I 2.** Explain the meaning of exponents that are negative or 0

**I 3.** Apply order of operations to simplify expressions and perform computations involving integer exponents and radicals.

**I 8.** Add, subtract, multiply, divide and compare numbers written in scientific notation.

## Algebra II

### Measurement

**D 1.** Convert rates within the same measurement system; e.g., miles per hour to feet per second; kilometers per hour to meters per second.

**D 2.** Use unit analysis to check computations involving measurement.

**D 5.** Solve problems involving unit conversion for situations involving distances, areas, volumes and rates within the same measurement system.

### Number, Number Sense and Operations

**C 1.** Identify and justify whether properties (closure, identity, inverse, commutative and associative) hold for a given set and operations; e.g., even integers and multiplication.

**E 2.** Compare order and determine equivalent forms for rational and irrational numbers.

**F 3.** Explain the effects of operations such as multiplication or division, and of computing powers and roots on the magnitude of quantities.

### Patterns Functions and Algebra

**B 1.** Define function with ordered pairs in which each domain element is assigned exactly one range element.

**F 6.** Write and use equivalent forms of equations and inequalities in problem situations; e.g., changing a linear equation to the slope-intercept forms.

**F 8.** Find linear equations that represent lines that pas through a given set of ordered pairs, and find linear equations that represent lines parallel or perpendicular to a given line through a specific point.

**E 2.** Compare order and determine equivalent forms for rational and irrational numbers.

## Geometry