Unit 9 Vocabulary and Big Ideas: Rational Numbers and the Coordinate Plane

Origin: The origin of a number line is the point at 0. The point of intersection of the x-axis and y-axis is called the origin of the coordinate plane.

Positive Numbers: Positive numbers are to the right of, or above, 0 (the origin).

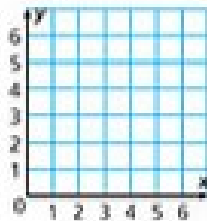**Negative numbers:** Negative numbers are to the left of, or below, 0 (The origin).

Integers: The set of integers includes whole numbers, their opposites, and zero.

Absolute Value: A measure of the distance a number is from zero on a number line.

Rational Number: A number that can be expressed as a fraction as $\frac{a}{b}$ when a and b are both integers and b≠0.

Coordinate Plane: A plane together with a pair of perpendicular number lines that intersect at 0 on each number line. The perpendicular number lines are called axes.

Example: The coordinate plane is divided into four quadrants by the x- and y-axes. Below is the first quadrant of the coordinate plane.

Quadrant: The x- and y-axes divide the coordinate plane into four regions called quadrants. Beginning in the upper right quadrant and moving in a counterclockwise direction.

Example: