

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Integers

Numbers *greater than 0* are called **positive numbers**. (1, 2, 3...)

Numbers *less than 0* are called **negative numbers**. (-1, -2, -3...)

*Zero is neither positive nor negative.*

**Integers are the set of whole numbers and their opposites.**

This set includes the positive numbers, the negative numbers and zero.



**Opposites** are a pair of numbers that are equal distances away from zero on opposite sides of zero on the number line.

Show relationships between negative numbers, and between positive and negative numbers with the signs  $<$ ,  $>$ , or  $=$ .

For example:

$$-3 > -5$$

$$-2 < 4$$

$$1 > -1$$

$$-9 = -9$$

## Absolute Value

When dealing with integers at this math level, *the distance of a number from zero* is called that number's **absolute value**.

It is written as  $|x|$ , meaning the absolute value of  $x$ .

For example:

The absolute value of -2 is 2, because -2 is 2 spaces from 0.

It is written as

$$|-2| = 2$$

**Absolute value** tells how far from zero.

**Positive and negative signs** tell in which direction from zero.