# Adding and Subtracting Integers

Review:

Absolute Value is the distance away from _____ on the number line and is always _____.

Integers include _____ and _____ numbers.

-3 and 3 are called _____

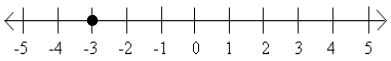
**Adding and Subtracting Integers using a number line**


All positive numbers are to the _____ of zero

All negative numbers are to the _____ of zero.

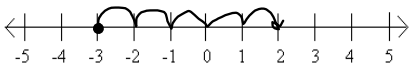
Steps: -3 + 5

1. Make a point at the first number of the expression




Since -3 is the first number, make a point at -3

2. Next, count the number of spaces based on the second number of the expression (remember the direction based on the sign of the number)




Since 5 is positive, move 5 spaces to the right.

-3 + 5 = 2

Example 1: -8 + 5


Example 2: -6 - 4

**Hint: what is the sign in front of the second number**


Example 3: -2 - 4


Example 4: - 10 + 8

**Adding and Subtracting Integers using a different method**

**Rule #1:**

Same Sign: If both numbers have the same sign, add the numbers and keep the sign

If both numbers are positive, then the answer will be positive

3 + 6 = 9

If both numbers are negative, then the answer will be negative

- 6 - 3 = -9

4 + 7 = -20 - 22 =

-5 - 7 =

25 + 13 =

**Rule #2:**

Different Signs: If both numbers have different signs, subtract the numbers and take the sign of the number with the greatest absolute value

-7 + 3 = 20 - 11 =

-15 + 6 = -18 + 30 =

64 - 75 =

12 - 3 =

**Try on your own:**

-11 - 6 = -6 + 12 =

4 - 20 = -45 - 9 =

**Additive Inverse Property**

the additive of a number is what you add to a number to create a sum of zero. In other words, take the sum of a number and its opposite to equal zero.

-5 + 5 = 0 -7 + ___ =

Create 2 additive inverse property examples on your own: