

Camegie Learning Algebra 1

Study Guide -

Adding and subtracting positive and negative numbers

Adding

If the numbers are **both positive** or **both negative**, just add them up and use that sign.

$$-6 + (-10) = -16$$

$$+7 + (+8) = +15$$

$$32 + 12 = 44$$

If **one number is positive** and **one is negative**, you will have more of one than the other. Use the sign of that one. The numerical part is how many extras you have.

$$-5 + 8 = 3$$

There are 3 **more positives** than negatives

$$-10 + 8 = -2$$

There are 2 **more negatives** than positives

$$18 + (-12) = 6$$

There are 6 **more positives** than negatives

Subtracting

To subtract, you **add the opposite of the subtracted number**.

$$-2 - (-15) = -2 + (+15) = +13$$

You are subtracting -15 so you change it to $+15$ and add as described above.

$$-10 - 7 = -10 + (-7) = -17$$

You are subtracting 7 so you change it to -7 and add as described above.