

# INTEGERS

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## 1. To Add Integers:

- If they have the same sign, we add their absolute value and keep the same sign

$$3 + 5 = 8$$

$$-3 + -5 = -8$$

- If they have different signs, we take the difference of their absolute value and keep the sign of the number with the larger absolute value

$$3 + -5 = -2$$

$$-3 + 5 = 2$$

## 2. To Subtract Integers:

- To do a subtraction problem between 2 integers, you must write an equivalent addition statement. To do this.....

1. Change the operation symbol from a minus sign to a plus sign
2. Change the second number to its additive inverse
3. Follow the rules for adding integers

$$3 - 5 =$$

$$3 - (-5) =$$

$$-3 - 5 =$$

$$-3 - (-5) =$$

$$3 + (-5) = \\ -2$$

$$3 + 5 = \\ 8$$

$$-3 + (-5) = \\ -8$$

$$-3 + 5 = \\ 2$$

## 3. To Multiply/Divide Integers:

1. If you are multiplying or dividing 2 numbers with the same sign, the answer will be positive.

$$5 * 3 = 15$$

$$-5 * -3 = 15$$

$$6 \div 2 = 3$$

$$-6 \div -2 = 3$$

2. If you are multiplying or dividing 2 numbers with a different sign, the answer will be negative.

$$-5 * 3 = -15$$

$$5 * -3 = -15$$

$$6 \div -2 = -3$$

$$-6 \div 2 = -3$$