

Rules for Signed Numbers

Re-write Subtraction:

Change subtraction sign to an addition sign and then change the sign of the number after it. Then use addition rules below.

$$3 - 5 \rightarrow 3 + (-5)$$

$$3 - (-5) \rightarrow 3 + 5$$

Addition:

1. If the signs are the same, add the numbers and keep the sign.

$$3 + 5 = 8$$

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

2. If the signs are different, subtract the numbers and take the sign of the bigger* number.

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

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

Multiplication / Division:

1. If the signs are the same, the answer is positive

$$3 * 5 = 15$$

$$(-3) * (-5) = 15$$

2. If the signs are different, the answer is negative.

$$3 * (-5) = -15$$

$$(-3) * 5 = -15$$

*the number with the greatest absolute value