
Rules for adding, subtracting, multiplying and dividing positive and negative numbers.

Don't think of it as *adding and subtracting* signed numbers, think of it as combining numbers. First, change subtraction to addition and change the sign that follows. That way there are only two rules to remember:

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

Ex. $(-2) - (3)$ becomes $(-2) + (-3) = -5$

Ex: $(2) - (-3)$ becomes $(2) + (3) = 5$

2. If the signs of the numbers are different, subtract the smaller from the bigger and keep the sign of the bigger number:

Ex: $(-2) + (3) = 1$ Ex: $(-3) + (2) = -1$

Ex: $(2) - (3)$ becomes $(2) + (-3) = -1$

Ex: $(-7) - (-5)$ becomes $(-7) + (5) = -2$

When *multiplying and dividing*, there are two rules:

1. If the signs are the same, multiply and divide as usual and the answer is **ALWAYS positive**.

Ex: $(-2) * (-3) = 6$ Ex: $(-6) / (-2) = 3$

2. If the signs are different, multiply and divide as usual and the answer is **ALWAYS negative**.

Ex: $(2) * (-3) = -6$ Ex: $(6) / (-2) = -3$

***Parentheses are used to highlight the different numbers. Problems may or may not use parentheses.