

Rules for Signed Numbers

Addition: When you have two numbers with a plus sign between them:

1. If the **signs are the same**, add the numbers and put the original sign on the answer.
2. If the **signs are different**, subtract the numbers. The answer will have the same sign as the “larger” of the two numbers.
3. To add a series of signed numbers at one time, combine all the positive numbers to get a positive total and combine the negatives to get a negative total. Then use rule two above to find the answer.

Subtraction: When you have two numbers with a minus sign between them:

1. To subtract signed numbers, change the sign of the number after the minus sign and change the minus sign to plus.
2. Now follow the addition rules above.

Multiplication or Division: (Of two numbers at a time)

1. Same signs – Positive answer.
2. Different signs, Negative answer.

Speed Multiplication:

To multiply a series of signed numbers, count the negative signs.

1. An even number of negative signs will give a positive answer.
2. An odd number of negative signs will give a negative answer.
3. Now ignore the signs, multiply all the numbers, and put the correct sign from 1 or 2 above on your answer.

Example: $(-4)(3)(-2)(-5)(2)$ Three negative signs means a negative answer.

So $4 \times 3 \times 2 \times 5 \times 2 = 240$ Now, put the negative sign on this.

-240

This always works unless one of your factors is zero. Then the answer is zero.