



Basic Math Operations

Adding/Subtracting Negatives

$$-5 + 8 = 3$$

$$-6 + -2 = -8$$

$$4 - (-7) = 11$$

$$3 - 5 = -2$$

Multiplying/Dividing Negatives

Positive x Positive = Positive

Negative x Positive = Negative

Negative x Negative = Positive

The same rules apply when dividing.

$$-9 \div -3 = 3$$

$$-2 * 4 = -8$$

Order of Operations

PEMDAS

1. Parenthesis

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

2. Exponents

$$2(5)^2 - 5(2)^3$$

3. Multiplication/Division

$$2(25) - 5(8)$$

4. Adding/Subtracting

$$50 - 40 = 10$$



FOIL

First Outer Inner Last



First

$$(x - 2)(x + 4) \quad x \cdot x = x^2$$



Outer

$$(x - 2)(x + 4) \quad x \cdot 4 = 4x$$



Inner

$$(x - 2)(x + 4) \quad -2 \cdot x = -2x$$



Last

$$(x - 2)(x + 4) \quad -2 \cdot 4 = -8$$

$$= x^2 - 2x + 4x - 8$$

Combine Like Terms

$$= x^2 + 2x - 8$$

Decimal to Percent

To turn a decimal into a percent multiply it by 100.

$$.68 * 100 = 68\%$$

You can also go the other way. To convert a percent to a decimal divide by 100.

$$24.18\% \div 100 = .2418$$