

two step equations / multi step equations



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Two-Step Equations - means getting the variable to one side of the equation and the integer on the other side. Two-Step Equations.

Variable- an unknown number in an equation.

Combining like terms - When you have 2 numbers with the same variable combined together.

Distribute- giving numbers in parentheses a share of the number outside of them. Usually in multiplication.

How to do a multi-step equation part 1 of 2

The golden rule of algebra is, whatever you do one side of the equation you do to the other

$$x+5-2=9-x$$

$$x+5-2=9-x$$

$$x+3=9-x$$

$$+x \quad +x$$

$$2x+3=9$$

$$2x+3=9$$

$$2x=6$$

$$/2 \quad /2$$

$$x=3$$

How to do a multi-step equation part 2 of 2

$$3+5x-2=+2x+4$$

$$3+5x-2=+2x+4$$

$$5x+1=+2x+4$$

$$\begin{array}{r} -2x \end{array} \quad \begin{array}{r} -2x \end{array}$$

$$3x+1=+4$$

$$\begin{array}{r} -1 \quad -1 \end{array}$$

$$3x=3$$

$$\begin{array}{r} /3 \quad /3 \end{array}$$

$$x=1$$



two-step equations

$$3x+4=16$$

$$9x-3=24$$



Example (Two-Step):

1. $5x + 10 = 10x$

2. $10x + 30 = 25x$



multi-step equation (guided)

$$2(x+10)=40+20$$

$$x=20$$

$$3(x+1)=5+x$$

$$x=-4$$



You Try problems

$$5x+10=20$$

$$5x+2=20$$



You Try - Multi-step Equation

1. $4x + 7 = 10x - 14$

2. $x(17 + 9) - 3 = 8x + 3/4x$