

Lesson #56 - Solving Two Step Equations with Distributive Property

Two Step Equations are equations that reguire two Steps.

Example 1) Solve and check: 8x + 7 = 31

Steps to solving a two step equation:

<u>Steps</u>	<u>Example</u>
1) Move all of the constant terms to one side of the	8 V L 7 ~ 3 1
equal sign by using either addition or subtraction.	
2) Isolate the variable by using either	8x=24
multiplication or division.	2 (V-3)
	$\begin{bmatrix} - & & & \\ & & & \end{bmatrix}$
3) Check your solution	8117-21
5) check your solution	81+7=31
	9/23.5
	863)+7=31
	·
	24+7=31
	5. (/ / = 0
	31-21.
	31-51/

January 20, 2017

Example 2) Solve and Check: $4A\begin{bmatrix} x \\ 5 \end{bmatrix} = 0$ X = -20

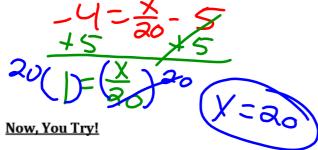
Example 3) Ken said -20 is the solution to the equation $-4 = \frac{x}{20} - 5$.

Part A: Is Ken correct? __

$$-4 = \frac{20}{20} - 5$$

$$-4 = -1 - 5 - 4 \pm -6$$

Part B: If Ken is incorrect, what is the actual solution to the above equation?



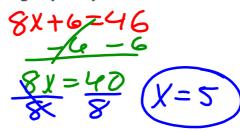
Directions: Solve and check the following equations.

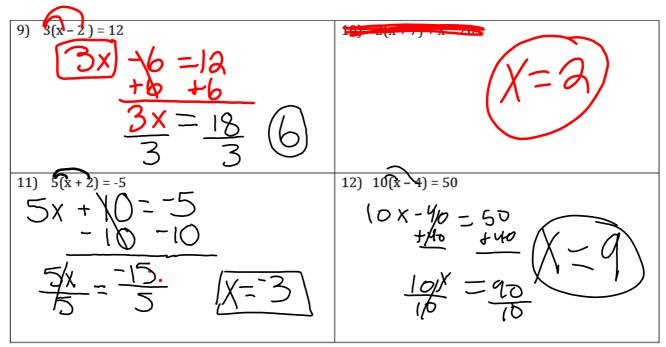
$(4)^{-15} = 4x + 4$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\frac{-20-4x}{4}$	-Gx =-114
1-5=X	1 6 -6
0^{x} $14-2$	x = 19
6) $\begin{bmatrix} \frac{1}{9} - 1 = -2 \\ + 1 \end{bmatrix}$	7) 48=5
$\frac{1}{X} \frac{1}{X} = (-1) 9 (X = -9)$	-4(X)-(-3)-9
	(X-19)

Lesson 56 Key January 20, 2017

We can also use the DISTRIBUTIVE PROPERTY to turn longer equations into two step equations.

Example 8) Solve and check the following: 2(4x + 3) = 46





Challenge: Write and solve an equation for the following situation:

Ray buys bottles of water at \$2.10 each and a large pizza pie at \$12.99. The total cost was \$21.39. Write an equation that can be used to determine the number of water bottles he bought. Then solve the equation. $2.10\chi + 12.99 - 21.39$