

Name \_\_\_\_\_

Date \_\_\_\_\_

Mr. Tallman

**Do Now**

**Solve the following equations. Don't Check.**

1)  $x - 7 = -13$

2)  $14x = -56$

3)  $\frac{x}{4} = -10$

4)  $-17x = -204$

**Lesson #56 - Solving Two Step Equations with Distributive Property**

**Two Step Equations** are equations that \_\_\_\_\_

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

**Steps to solving a two step equation:**

<b><u>Steps</u></b>	<b><u>Example</u></b>
1) Move all of the constant terms to one side of the equal sign by using either addition or subtraction.	
2) Isolate the variable by using either multiplication or division.	
3) Check your solution	

Example 2) Solve and Check:  $4 + \frac{x}{5} = 0$

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

Part A: Is Ken correct? \_\_\_\_\_

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

**Now, You Try!**

**Directions: Solve and check the following equations.**

4) $-15 = 4x + 5$	5) $-6x + 10 = -104$
6) $\frac{x}{9} - 1 = -2$	7) $\frac{x}{-4} + 8 = 5$

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

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

9) $3(x - 2) = 12$	10) $2(x + 7) + x = 20$
11) $5(x + 2) = -5$	12) $10(x - 4) = 50$

**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.