Name_____ Date _____

Mr. Tallman

Do Now

Solve the following equations. Don't Check.

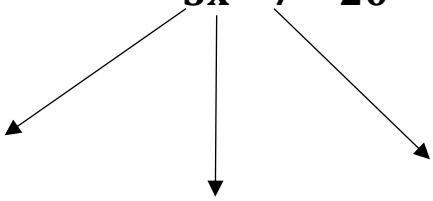
1) x – 7 = - 13	2) 14x = -56
3) $\frac{x}{4} = -10$	4) -17x = -204

Lesson #50 – Solving Two Step Equations

Two Step Equations are equations that _____

Parts of a two step equation:

3x – 7 = 20



- **Variable: _____**
- **Coefficient: _____**
- **Constant: _____**

Example 1) Identify the variable, coefficient, and constant in the following equation: 6x – 8 = 22

Variable: _____ Coefficient: _____ Constant: _____

Example 2) Solve and check: 8x + 7 = 31

Steps to solving a two step equation:

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

Example 4) 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.

5) -15 = 4x + 5	6) $-6x + 10 = -104$
7) $\frac{x}{9} - 1 = -2$	8) $\frac{x}{-4} + 8 = 5$
9) 9x + 9 = 9	10) -9x -13 = -103

11) Consider the following equation: $-9 = \frac{x}{5} - 14$

Part A: Which two mathematical properties will be used to solve the equation above?

Part B: Solve and check the equation above.