Solving One Step Equations – Guided Notes

An_____is a mathematical sentence with an _____sign.

The following are all considered to be equations:

Ex) 9 + 2 = 11
Ex) x + 7 = 37
Ex) a + (-3) = 2a + 5

A _____ of an equation is a value for a _____ that makes an equation _____.

You substitute a number for a variable to determine whether the number is a _____of the equation.

Examples
Directions: Is the given number a solution for the equation? Please show how you arrived at your answer.

Ex) 170 + x = 200, for x=30

Ex) 3 = 12 – a, for a=6

Ex) 9 – m = 3, for m=6

Ex) 8 + t = 2t, for t=3

Important Rules for Solving Equations

Rule #1) When you solve an equation, your goal is to get the _____ alone by itself on _____ of the equation. In other words, you are trying to _____ the variable.

Rule #2) When you are solving for a variable, you MUST use inverse _____ to isolate the variable on one side of the equation.

**Rule #3) Whatever you do to _____ of an equation, you must do to the _____ of the equation. In other words, you must keep the equation _____.

Think of solving an equation like lifting weights. If you add or subtract weight from one side of the barbell, you must add or subtract the same amount of weight from the other side of the barbell to keep it balanced.

Solving One Step Equations involving Addition and Subtraction:

1). x+89=123

2). y-45=237

3).76+x=344

4). y-92=78

5). 99+x=233

Solving One Step Equations involving Multiplication or Division:

1). 7x=126

2). 45y=540

3). 11z=253

4). 9x=135

5). 18y=108

6). 5y=420

7). $\frac{y}{8}=32$

8). $\frac{x}{4}=76$

9). $\frac{x}{19}=7$

10). $\frac{x}{26}=15$

11). $\frac{x}{45}=270$

12). $\frac{1}{4}x=16$

13). $\frac{3}{5}x=75$

14). $\frac{2}{7}x=6$

15). $\frac{1}{12}x=13$