Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Math 7

Chapter 4 – Expressions and Equations Notes #8

Two-Step Equations…with Integers

We know that…

* In order to solve an equation, we need to ISOLATE the variable, or in other words, get the variable ALONE.
* We do this by looking at the operation next to the variable, and doing the OPPOSITE, or INVERSE operation!

We also know that…

* When solving two-step equations, we perform the Order of Operations – PEMDAS - in REVERSE.
	+ FIRST, undo ADDITION and SUBTRACTION
	+ SECOND, undo MULTIPLICATION and DIVISION

Today we apply our integer knowledge…

* Rules for Integers
	+ Addition: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Subtraction: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Multiplication: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	+ Division: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1) -2y + 8 = 12 Check:  Write the original equation.

 Plug-in the value for the variable.

 Evaluate each side.

 Both sides should be equal.

2) -20 = -3w - 5 Check: Write the original equation.

 Plug-in the value for the variable.

 Evaluate each side.

 Both sides should be equal.

3) $\frac{n}{8}+1=-7$ Check:

4) $\frac{r}{-3}+3=-9$ 5) $-12=\frac{w}{2}-3$

You Try!

6) -6x – 5 = 13 Check: 7) $-4=\frac{r}{4}+2$