Week 3 – Weekly Assignment                     Name: _____

7th Grade                                       Date: _____
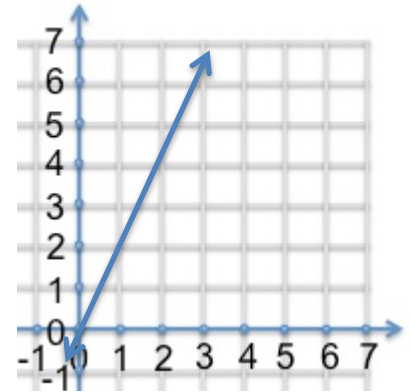
**Please show all of your work for the following.**

1. Identify whether or not the following graph represents a direct proportion. If so, what is the constant of proportionality?

   Yes or No?

   How do you know? _____

   _____

   Constant of Proportionality _____

   Equation: _____



2. Tell whether or not the table below is a direct proportion. If so, write the direct proportion equation.

| x | 4 | 5 | 7 | 9 |
|---|---|---|---|---|
| y | 8 | 10 | 14 | 18 |

   Is it a Direct Proportion? _____

   What is the equation? _____

3. Solve for x.        $3x + 9 = 2(x + 5) + 3$

**Factor the following expressions. Show all of your work.**

4. $-27x - 45y$

5. $18m - 36k + 48$

6.    Find the **area and circumference** of a circle whose diameter is 12.

**Simplify each expression. Show all of your work.**

7.    $\frac{1}{4}x + \frac{2}{3}x - \frac{1}{6}x$

8.    $0.035y + 2.3y - y$

9.    $-2.6m + 4.6m - 1.3m$

10.    $\frac{4}{3}z + \frac{2}{3}z - \frac{1}{3}z$