

Name \_\_\_\_\_

Date \_\_\_\_\_

**Trigonometry – Introduction, Practice, and Review**

Quality – Accuracy – Transfer – 100%

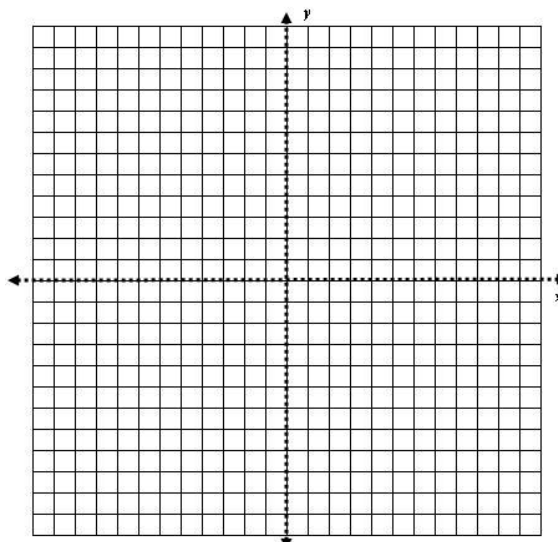
**Section 1. Practice – Linear Equations in Slope-Intercept  $y = mx + b$  form.**

1.  $y = \frac{2}{3}x + 2$

a. Name the Slope: \_\_\_\_\_ = \_\_\_\_\_

b. Name the y-intercept: \_\_\_\_\_

c. Coordinates of the y-intercept: \_\_\_\_\_

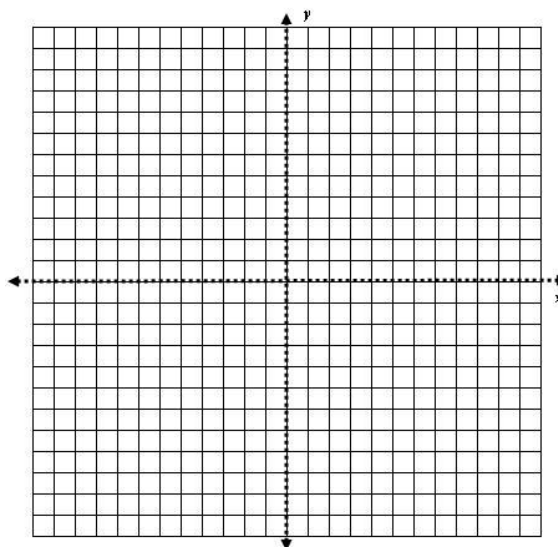


2.  $y = -\frac{2}{5}x + 7$

a. Name the Slope: \_\_\_\_\_ = \_\_\_\_\_

b. Name the y-intercept: \_\_\_\_\_

c. Coordinates of the y-intercept: \_\_\_\_\_

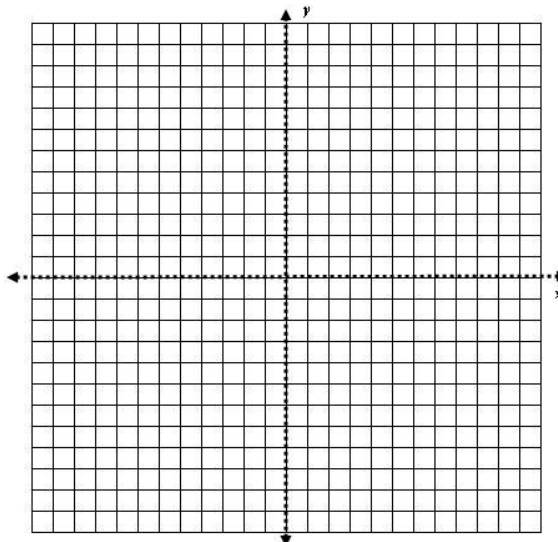


3.  $5x + 2y = 12$

a. Name the Slope: \_\_\_\_\_ = \_\_\_\_\_

b. Name the y-intercept: \_\_\_\_\_

c. Coordinates of the y-intercept: \_\_\_\_\_



MTH 098 - Introduction to Algebra

Class #14A Warm Up

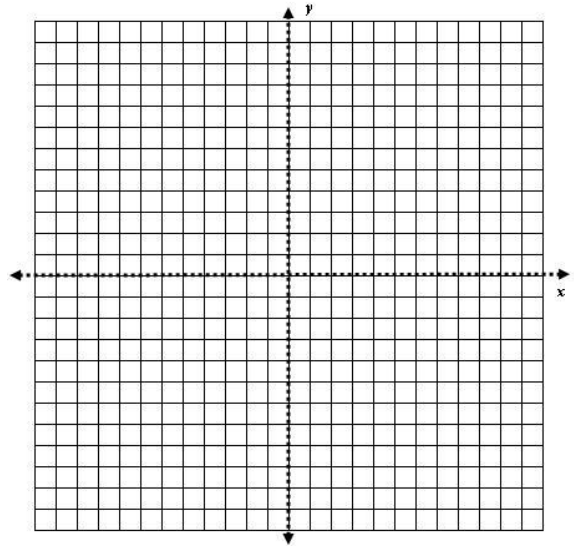
Page 2.

4.  $5y - 3x = -15$

a. Name the Slope: \_\_\_\_\_ = \_\_\_\_\_

b. Name the y-intercept: \_\_\_\_\_

c. Coordinates of the y-intercept: \_\_\_\_\_

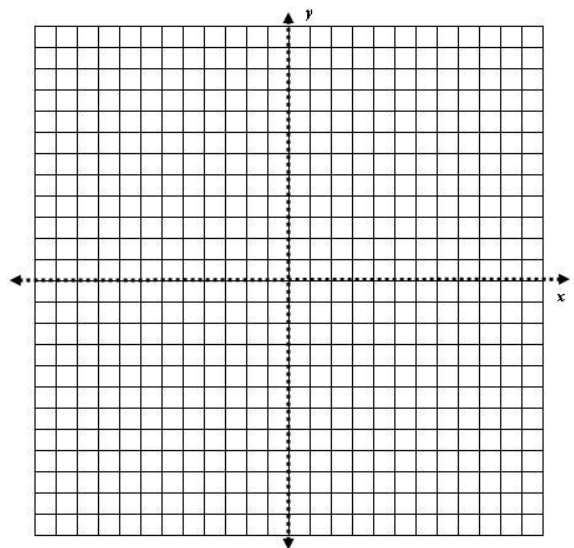


5.  $x + 3y = 18$

a. Name the Slope: \_\_\_\_\_ = \_\_\_\_\_

b. Name the y-intercept: \_\_\_\_\_

c. Coordinates of the y-intercept: \_\_\_\_\_

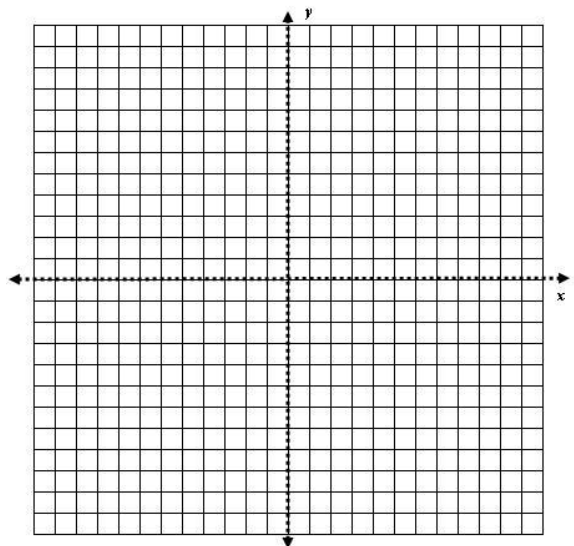


6.  $2y - x = -4$

a. Name the Slope: \_\_\_\_\_ = \_\_\_\_\_

b. Name the y-intercept: \_\_\_\_\_

c. Coordinates of the y-intercept: \_\_\_\_\_



**Section 2. Parallel and Perpendicular Lines.**

1. Parallel and Perpendicular lines are determined by comparing their \_\_\_\_\_.

a. Parallel Lines have slopes that are: \_\_\_\_\_.

b. Perpendicular Lines have slopes that are: \_\_\_\_\_.

2. State whether the lines are Parallel, Perpendicular, or Neither. Use Complete Technique.

$$5x + 2y = 12$$

a.  $y = -\frac{2}{5}x + 3$  **a.** \_\_\_\_\_

$$3y - 2x = 15$$

b.  $y = -\frac{3}{2}x + 2$  **b.** \_\_\_\_\_

$$3x - 2y = 8$$

c.  $2x + 3y = 9$  **c.** \_\_\_\_\_

$$4x + 2y - 6 = 0$$

d.  $3y + 6x = -9$  **d.** \_\_\_\_\_

**Section 3. Solve the System of Equations for  $x$  and  $y$  using the Substitution Technique.**

2, To solve a system of equations by substitution, consider an equation that states  $x =$  or  $y =$ . In some cases where it is not readily obvious, perhaps one equation can be re-arranged for a "singleton" variable and then identified.

1. Solve for the First Variable.

2. Solve for the Second Variable.

3. Check in the 2<sup>nd</sup> Equation

a.  $y = 2x + 7$   
 $y = -x - 5$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

b.  $x = y + 1$   
 $4x + 2y = -14$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

c.  $y = 2x - 13$   
 $-4x - 7 = 9y$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

d.  $5x - 2y = -7$   
 $8 = y - 4x$

$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

**Section 4. Solve the System of Equations for  $x$  and  $y$  using the Elimination Technique.**

2, To solve a system of equations by elimination, consider an equation in the form  $ax + by = c$ . Multiply one or both equations to create a column of one variable where the coefficients are "matching opposites". ADD the equations together to eliminate one variable to solve for the 2<sup>nd</sup> one.

a. 
$$\begin{aligned} -x - 3y &= -13 \\ x + 4y &= 18 \end{aligned}$$
  $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

b. 
$$\begin{aligned} 2x + y &= 11 \\ x + 3y &= 18 \end{aligned}$$
  $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

c. 
$$\begin{aligned} 2x + 3y &= 6 \\ 5x - 4y &= -8 \end{aligned}$$
  $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

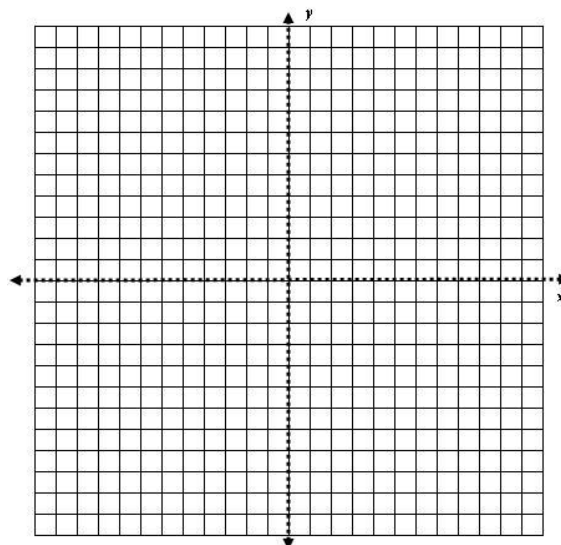
d. 
$$\begin{aligned} 6x &= 4y + 12 \\ 3y - 5x &= -6 \end{aligned}$$
  $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$

**Section 5. Find the Coordinates of the x and the y intercept.**

1.  $5y - 3x = -15$

a. Coordinates of the x-intercept: \_\_\_\_\_

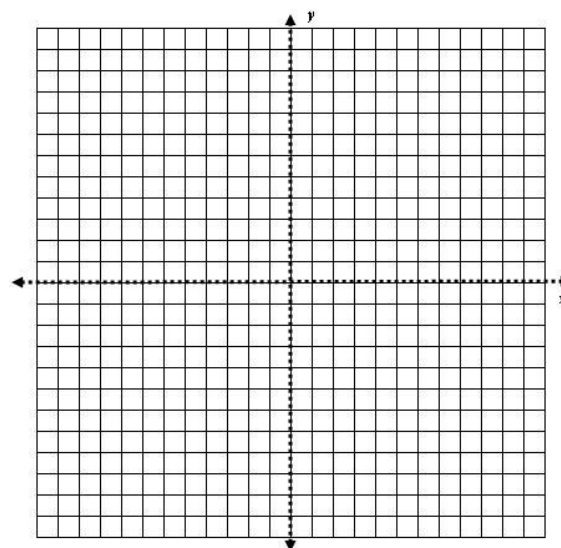
b. Coordinates of the y-intercept: \_\_\_\_\_



2.  $x + 3y = 18$

a. Coordinates of the x-intercept: \_\_\_\_\_

b. Coordinates of the y-intercept: \_\_\_\_\_



3.  $2y - x = -4$

a. Coordinates of the x-intercept: \_\_\_\_\_

b. Coordinates of the y-intercept: \_\_\_\_\_

