

# Handout 1.3: More About Linear Equations

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Per: \_\_\_\_\_

Write an equation in point-slope form for the line that satisfies each set of conditions.

1) Slope  $-1$ , passes through  $(0, 0)$

2) Slope  $3$ , passes through  $(1, -3)$

3)  $(-2, 1)$  and  $(3, -2)$

4)  $(-5, -2)$  and  $(-1, 3)$

Write each equation in standard form. Identify  $A$ ,  $B$ , and  $C$ .

5)  $y = -4x - 7$

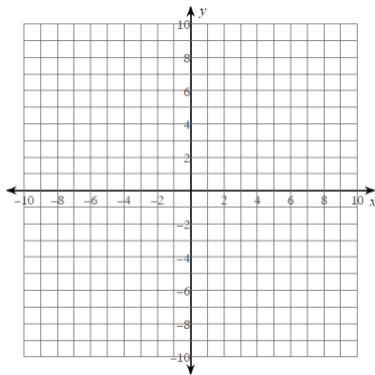
6)  $12y = 4x + 8$

7)  $2.4y = -14.4x$

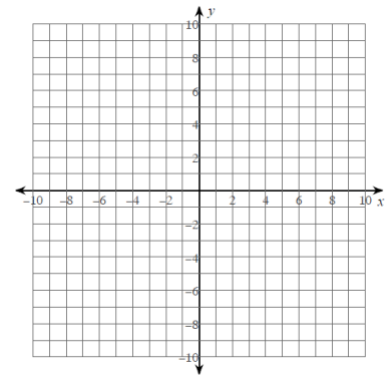
8)  $\frac{2}{3}y - \frac{3}{4}x + \frac{1}{6} = 0$

Find the x-intercept and the y-intercept of the graph of each equation. Then graph the equation using the intercepts.

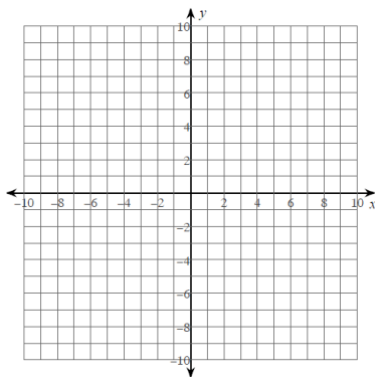
9)  $y = -2x - 8$



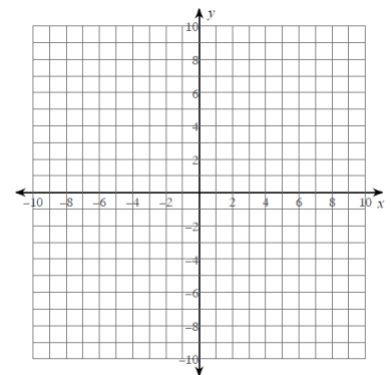
10)  $5y = 15x - 45$



11)  $-4y + 6x = -42$



12)  $\frac{1}{3}x - \frac{2}{9}y = 2$



13) A plumber charges \$25 for a service call plus \$50 per hour of service.

a. Write an equation in slope-intercept form that represents this situation.

\_\_\_\_\_

b. What does the slope represent in this situation?

\_\_\_\_\_

c. What does the y-intercept represent in this situation?

\_\_\_\_\_

14) Aidyn collected 100 pounds of aluminum cans to recycle. He plans to collect an additional 25 pounds each week.

a. Write an equation in slope-intercept form that represents this situation.

\_\_\_\_\_

b. What does the slope represent in this situation?

\_\_\_\_\_

c. What does the y-intercept represent in this situation?

\_\_\_\_\_

