

# Equation of a Line HW

Math 8—MLK

Name \_\_\_\_\_

Date \_\_\_\_\_ Assignment #10

Find the slope.  $slope = \frac{(y_2 - y_1)}{(x_2 - x_1)}$

A) Label your points  $x_1 y_1$  and  $x_2 y_2$ .

B) Substitute the values into the slope formula above. (Calculate the slope).

C) Sketch the line and find the y-intercept.

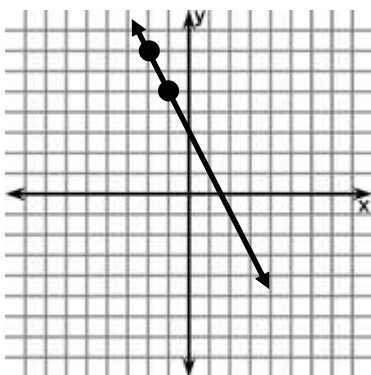
D) Write the equation of the line using the slope and the y-intercept.

1)  $(-1,5), (-2,7)$   
 $x_1 y_1 \quad x_2 y_2$

$$slope = \frac{(7 - 5)}{(-2 - -1)} = \frac{2}{-1}$$

y-int = 3

Equation:  $y = \frac{2}{-1}x + 3$

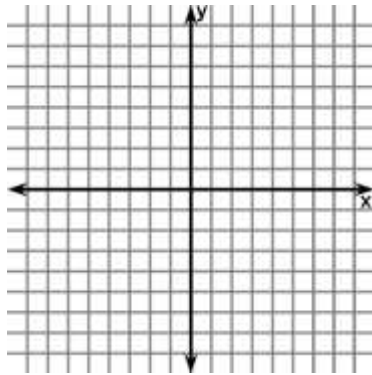


2)  $(3,2), (8,5)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation of Line: \_\_\_\_\_

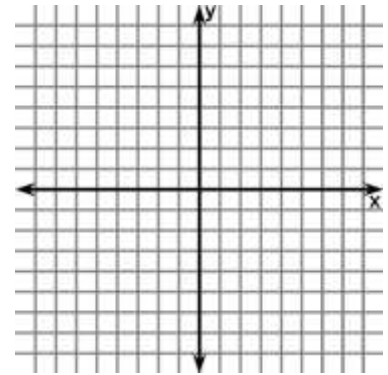


3)  $(2,5), (5,2)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation of Line: \_\_\_\_\_

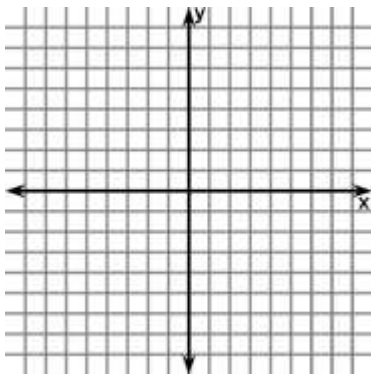


4)  $(2,-3), (-1,2)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation of Line: \_\_\_\_\_

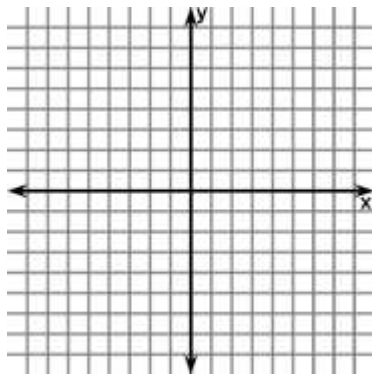


5)  $(4,-1), (2,-6)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation of Line: \_\_\_\_\_

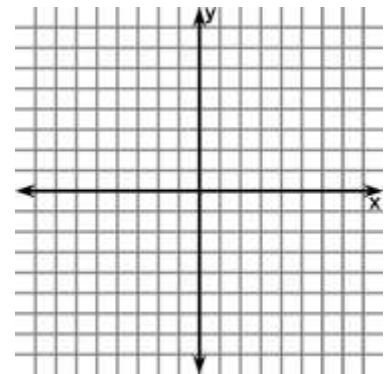


6)  $(1,3), (2,2)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation of Line: \_\_\_\_\_

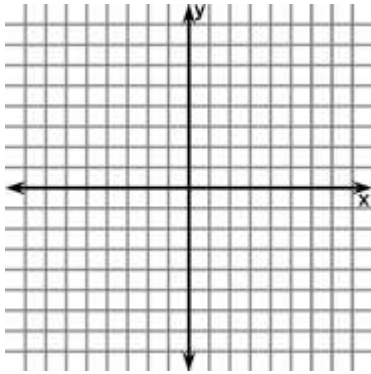


7)  $(-7,3), (7,-2)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation  
of Line: \_\_\_\_\_

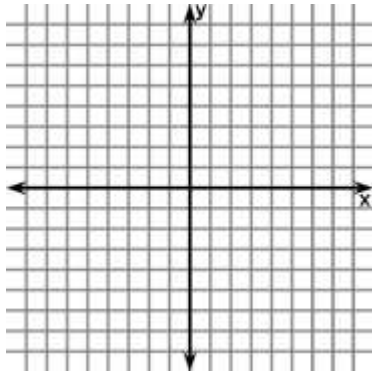


8)  $(8,-2), (6,2)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation  
of Line: \_\_\_\_\_

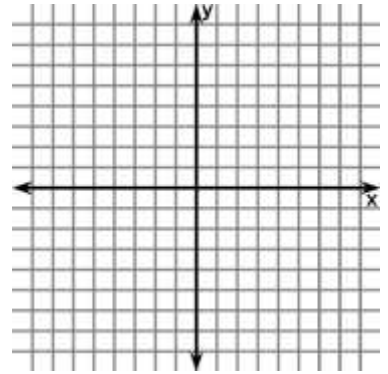


9)  $(5,7), (3,-2)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation  
of Line: \_\_\_\_\_

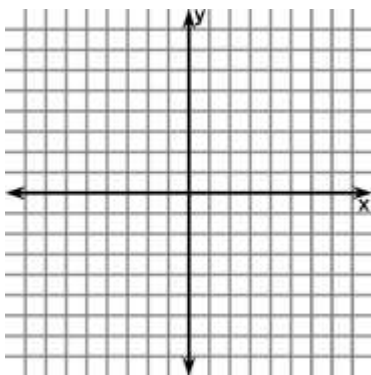


10)  $(-2,5), (7,-8)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation  
of Line: \_\_\_\_\_

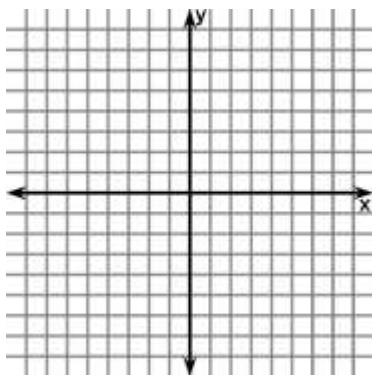


11)  $(5,-3), (4,3)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation  
of Line: \_\_\_\_\_



12)  $(2,-5), (-2,1)$   
 $x_1 y_1 \quad x_2 y_2$

slope = \_\_\_\_\_

y-int = \_\_\_\_\_

Equation  
of Line: \_\_\_\_\_

