

Day 10 – Writing Equations of Lines

Name: _____

Practice Assignment

Date: _____ Block: _____

Review

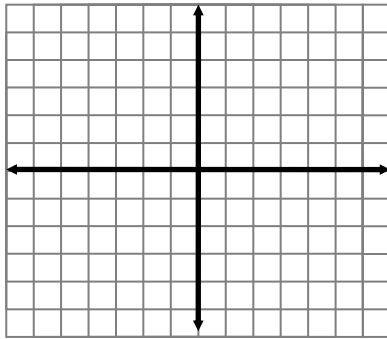
1. Solve the equation for x: $6x + 11 = -2x - 5$

2. Solve for y: $4x - 2y = 12$

Directions: Write the equation of the line given the slope and a point on the line in both slope intercept form. Then graph.

Slope Intercept Form: $y = mx + b$ $m = \text{slope}$ $b = \text{y-intercept}$
Point Slope Form: $y - y_1 = m(x - x_1)$

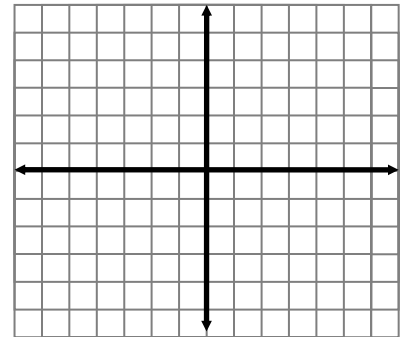
3. (1, 2), slope = 3



$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

Slope Intercept Equation: _____

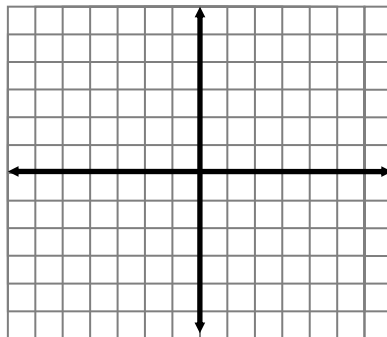
4. (-2, 5), slope = -4



$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

Slope Intercept Equation: _____

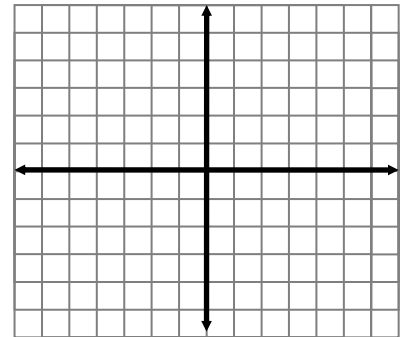
5. (3, -1), slope = -1



$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

Slope Intercept Equation: _____

6. (4, 1), slope = $\frac{1}{2}$



$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

Slope Intercept Equation: _____

7. Nick is given \$50 to spend on a vacation. He decides to spend \$5 a day. The amount Nick has left and the number of days are related.

a. Complete the following (some may need to be calculated)

Independent Quantity:

Dependent Quantity:

Slope:

Y-intercept:

Point(s):

Equation:

b. When will Nick have \$15 left?

8. Julio plans a diet to gain 0.2 kg a day. After 14 days he weighs 40 kg. The number days he diets and his weight are related.

a. Complete the following (some may need to be calculated)

Independent Quantity:

Dependent Quantity:

Slope:

Y-intercept:

Point(s):

Equation:

b. When will Julio weigh 50 kg?

9. A plane loses altitude at the rate of 5 meters per second. It begins with an altitude of 8500 meters. The plane's altitude is a function of the number of seconds that pass.

a. Complete the following (some may need to be calculated)

Independent Quantity:

Dependent Quantity:

Slope:

Y-intercept:

Point(s):

Equation:

b. When will the plane land (hint: what is the altitude when the plane lands?)