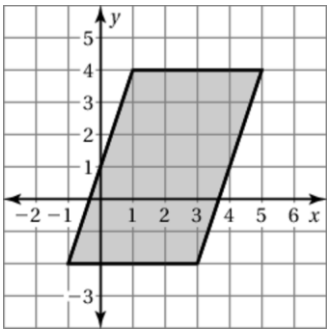
Name_____ Date _____

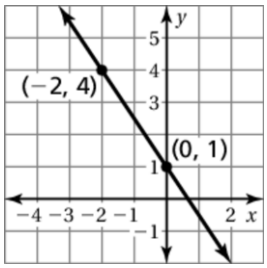
4.6 Practice A

1. Write an equation that represents each side of the figure.

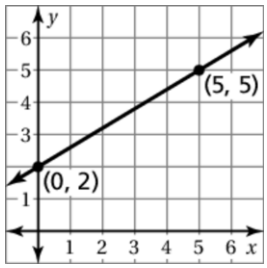


Write an equation of the line in slope-intercept form.

2.



3.



4. A plant is 3 inches tall when you purchase it and grows 2 inches per month. Write an equation that represents the height y (in inches) of a plant that you purchased x months ago.

Write an equation of the line that passes through the points.

5. $(0, 0), (4, -2)$

6. $(-2, 6), (0, 3)$

7. A bucket is empty. You are filling the bucket with water at a rate of 3 inches per second.

a. Plot the points $(0, 0)$ and $(5, 15)$.

b. What do the points in part (a) represent?

c. Draw a line through the points.

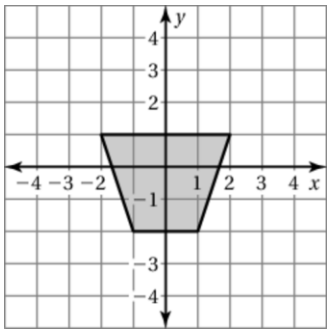
d. What does the line represent?

e. Write an equation of the line.

Name _____ Date _____

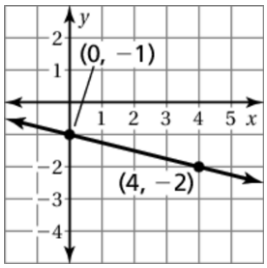
4.6 Practice B

1. Write an equation that represents each side of the figure.

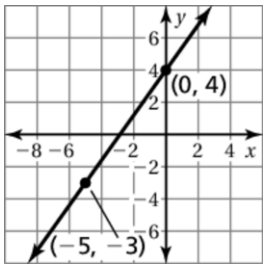


Write an equation of the line in slope-intercept form.

2.



3.



4. Your hair is 6 inches long and grows at a rate of 144 millimeters per year.

a. Convert 144 millimeters per year to inches per year. Round your answer to the nearest tenth.

b. Write an equation that represents the length y (in inches) of your hair after x years.

c. How long is your hair after 4 years?

Write an equation of the line that passes through the points.

5. $(-4, -1), (0, 5)$

6. $(0, -3), (1, -5)$

7. Yesterday, you typed 8 pages in 48 minutes. Today, you typed 20 pages in 2 hours.

a. Plot the two points (x, y), where x is the time (in minutes) and y is the number of pages.

b. What is the rate of typing?

c. Write an equation that represents the number of pages in terms of the number of minutes.