

Review 4.4 – 4.7

Find the slope and the y-intercept of the graph of the linear equation.

1. $y = -4x - 6$

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

$m =$ _____ $b =$ _____

$m =$ _____ $b =$ _____

Find the x- and y-intercepts of the graph of the equation.

3. $3x - 4y = 24$

4. $-6x + 3y = 12$

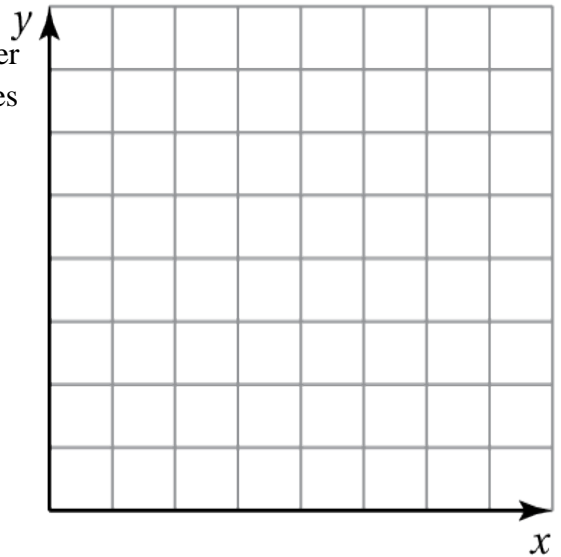
x-intercept = _____ y-intercept = _____

x-intercept = _____ y-intercept = _____

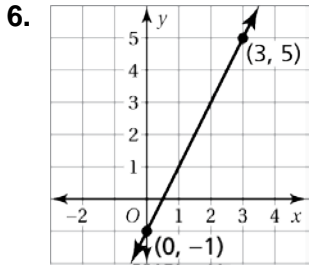
5. You spend \$24 on a meal for you and your friends.

a. Graph the equation $4y + 6x = 24$, where x is the number of sandwiches purchased and y is the number of beverages purchased.

b. Interpret the intercepts.

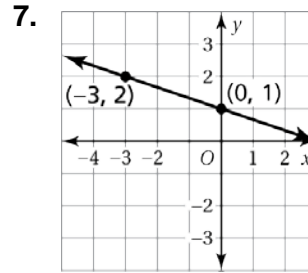


Write an equation of the line in **slope-intercept form**.



$m =$ _____

$b =$ _____



$m =$ _____

$b =$ _____

Equation: _____

Equation: _____

Write an equation in **point-slope form** of the line that passes through the given point and has the given slope.

8. $(1, 2); m = -2$

9. $(4, -2); m = \frac{1}{4}$

Equation: _____

Equation: _____

Write an equation in **slope-intercept form** of the line that passes through the given points.

10. $(-3, -1), (4, -1)$

11. $(2, 5), (0, 1)$

Equation: _____

Equation: _____

12. You are draining your fish aquarium. After 2 minutes, there are 6 gallons of water in the aquarium. After 5 minutes, the aquarium is empty. Write an equation that represents the volume y (in gallons) of water in the aquarium after x minutes.