
Name

1. For each ordered pair, determine the quadrant it is found in the x - y -plane. Your choices are Quad I, Quad II, Quad III, and Quad IV.

- a) $(-3, -8)$ b) $(5, 12)$ c) $(7.9, -4.1)$

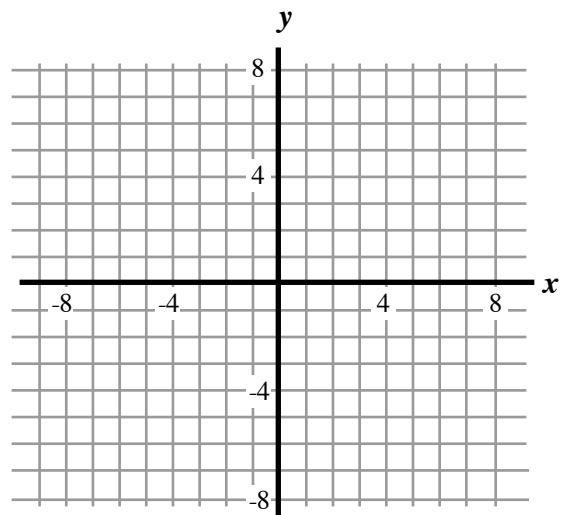
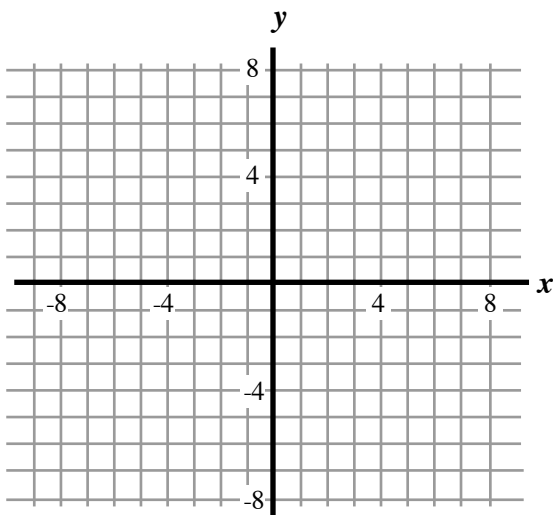
2. (i) Find three sets of ordered pairs as points in the x - y plane.
 (ii) Draw the line that passes through these points.
 (iii) Identify the point where the two lines intersect.

a)

x	$y = -2x + 1$	(x, y)

b)

x	$y = \frac{1}{3}x - 2$	(x, y)

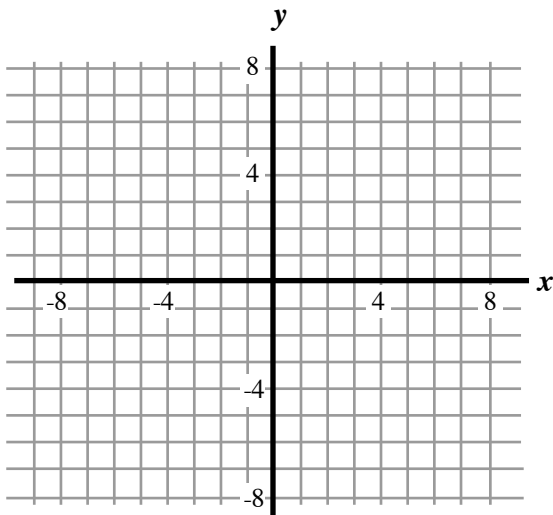


3. Identify the slope and the y-intercept of the line. Then use them to graph the line. Identify the point where they cross.

a) $y = x + 4$

m =

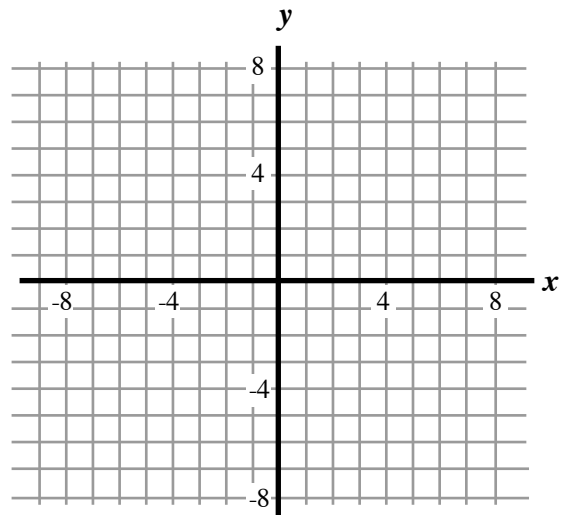
y-int:



b) $y = -\frac{3}{4}x - 2$

m =

y-int:

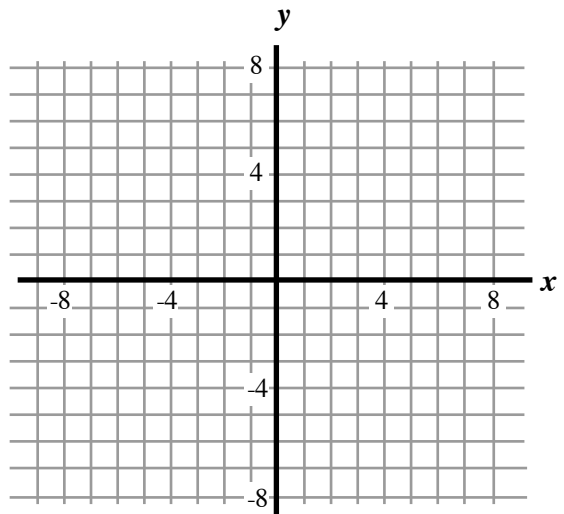


4. Graph $5x - 3y = 15$ by first identifying both the x-intercept and the y-intercept. Identify the slope and use it to find at least one more point on the graph.

x-int: $x(\quad , \quad)$

y-int: $y(\quad , \quad)$

Slope, m =

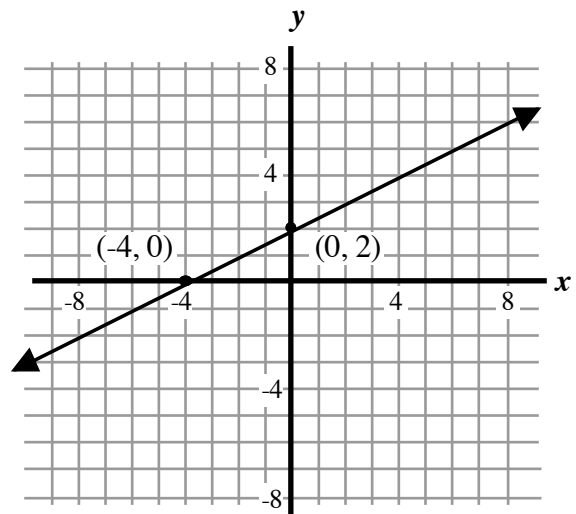


5. Given the graph of the line, identify its slope and y-intercept, and use them to write the equation of the line.

y-int: $y(\quad , \quad)$

Slope, $m =$

Equation: _____



6. Find the slope of the line that passes through the given points.

a) $(2, 3)$ and $(8, 12)$

b) $(-4, 7)$ and $(8, -3)$.

7. Write each equation in slope-intercept form.

a) $2x + 5y = -15$

b) $5x - 2y = 8$

8. Write each equation in standard form.

a) $y = 3x + 7$

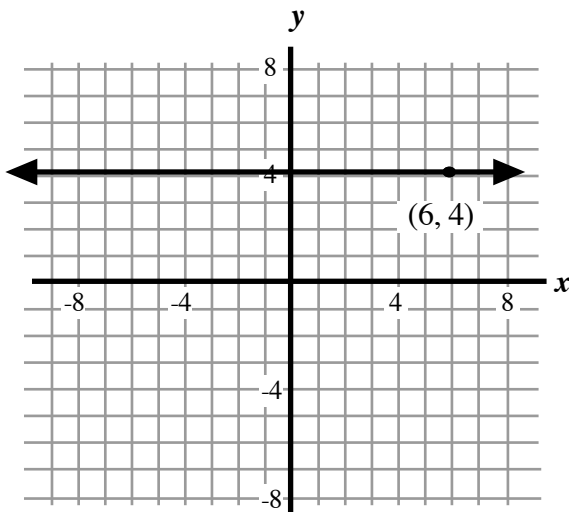
b) $y = -\frac{5}{2}x - 9$

9. Determine if the lines given are perpendicular, parallel, or neither.

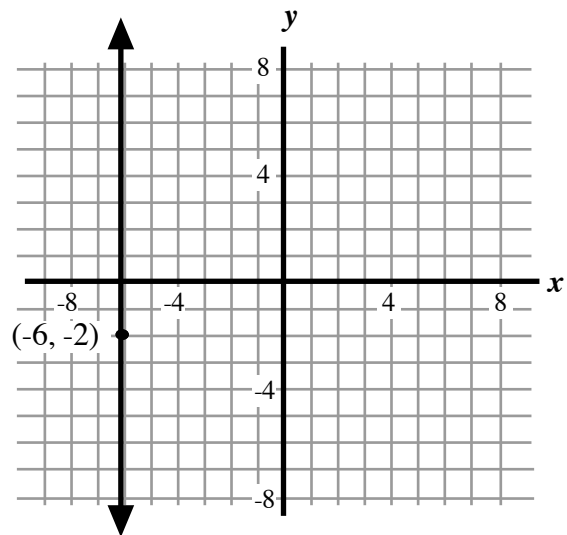
$$y = -\frac{5}{2}x + 2 \quad \text{and} \quad 2x - 5y = 10$$

10. Write the equation of the line shown in the graph.

a)



b)



11. Find the equation of the line that passes through $(-6, 1)$ and has slope, $m = \frac{2}{3}$.

Equation of the line: _____

12. $(-4, 9)$ and $(2, -3)$ are two points on a line. Find the equation of the line by first finding its slope.

Equation of the line: _____

Extra Credit:

Find the equation of the line that passes through $(-3, -6)$ and is perpendicular to $y = \frac{1}{4}x + 3$.

Equation of the line: _____