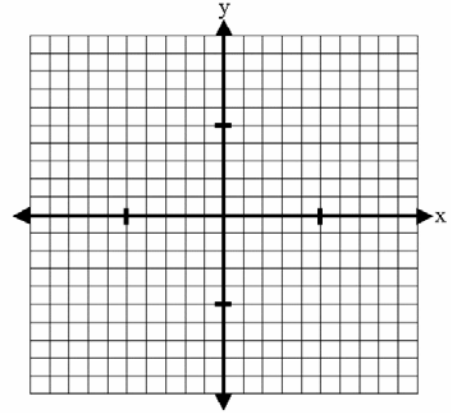


OBJECTIVE: You will be able to operate on and graph linear functions and find inverses of linear functions

1a. Write the equation of line passing through (2, -5) and (-3, -8) in slope-intercept form.

b. Graph the equation you wrote for part a.

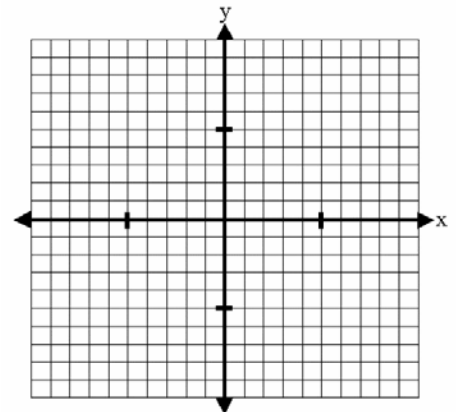
c. Is the equation you wrote and graphed a function?
Explain how you know this.



2a. Write the equation of line passing through (-6, 4) and with a slope of $-\frac{1}{2}$ in slope-intercept form.

b. Graph the equation you wrote for part a.

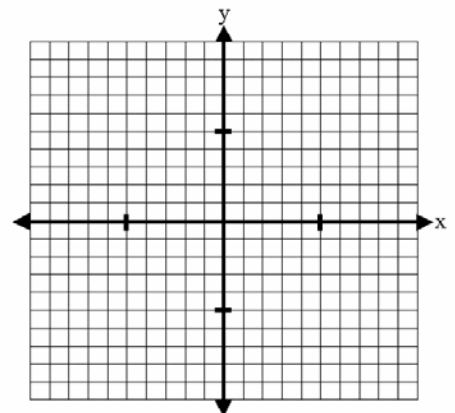
c. Is the equation you wrote and graphed a function?
Explain how you know this.



3a. Write the equation of the line passing through the point (1, 3) that is parallel to the line $3x - 2y = 20$.

b. Graph the equation you wrote for part a.

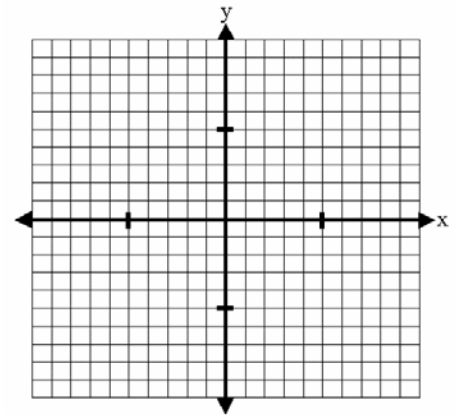
c. Is the equation you wrote and graphed a function?
Explain how you know this.



4a. Write the equation of the line passing through the point $(-8, 3)$ that is perpendicular to the line $-4x + 2y = -8$.

b. Graph the equation you wrote for part a.

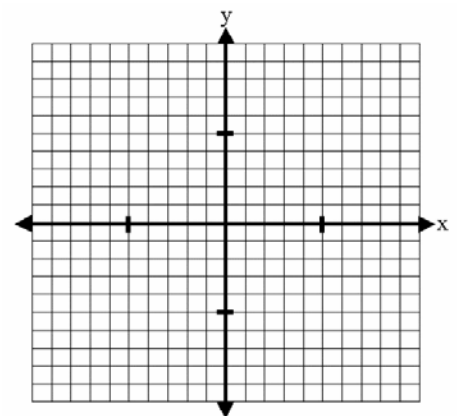
c. Is the equation you wrote and graphed a function?
Explain how you know this.



5a. Write the equation of the line passing through the points $(-8, 3)$ and $(-4, 3)$

b. Graph the equation you wrote for part a.

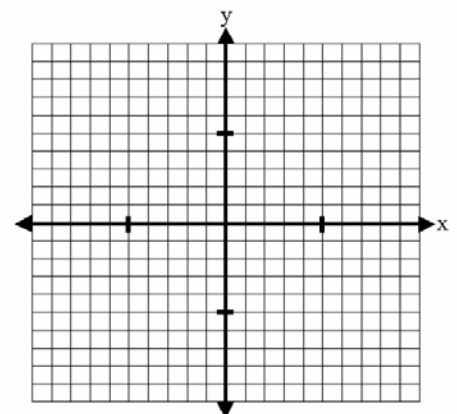
c. Is the equation you wrote and graphed a function?
Explain how you know this.



6a. Write the equation of the line passing through the points $(2, -8)$ and $(2, 9)$.

b. Graph the equation you wrote for part a.

c. Is the equation you wrote and graphed a function?
Explain how you know this.

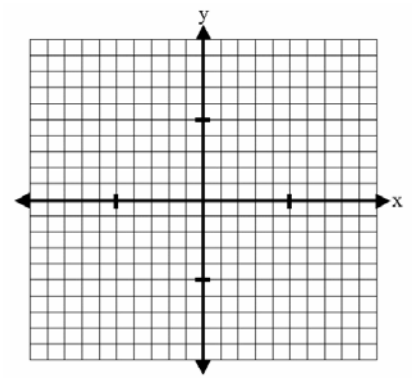
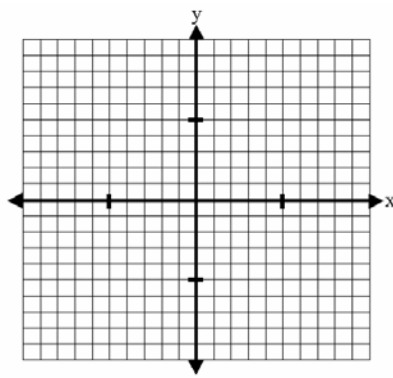
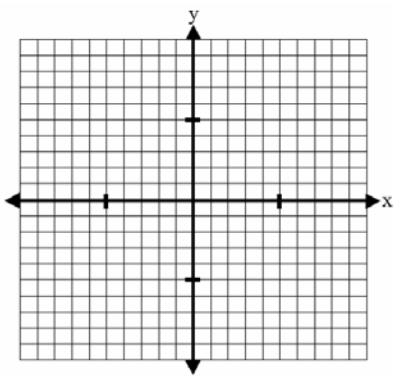


7. Find the inverse of each of the following: Then graph the original equation and the inverse on the same graph.

a. $y = 7x - 5$

b. $2x - 3y = 9$

c. $y = -9$



d. $y = -\frac{3}{5}x - 6$

e. $\frac{4}{5}x - \frac{3}{2}y = \frac{1}{4}$

f. $x = 2$

