$$y = mx + b$$

$$y - y_1 = m(x - x_1)$$

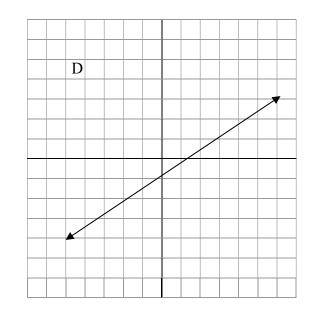
$$y = mx + b$$
  $y - y_1 = m(x - x_1)$   $slope = \frac{y_2 - y_1}{x_2 - x_1}$ 

Chapter 6 Practice Test

1. Find the slope and y-intercept of line D.

Slope = \_\_\_\_\_

y-intercept = \_\_\_\_



2. Write the equation of the line in Problem 1.

3. Rearrange 2x - 4y = 8 into slope-intercept form.

4. Find the x-intercept and y-intercept of each line.

a. 
$$y = 1/2x - 4$$

( , 0)

(0, )

b. 
$$5x - 3y = 15$$

( , 0)

(0, )

5. Find the slope of a line passing through (-2, 1) and (4, 3).

6. What is the slope of a horizontal line?

7. What is the slope of a vertical line?

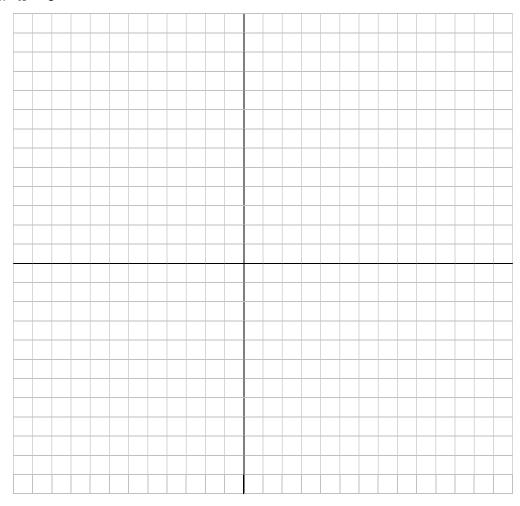
- 8. Write the equation of the line with a y-intercept of 3 and a slope of 6.
- 9. Write the equation of the line that has a slope of  $\frac{3}{4}$  and passes through (-2, 7).
- 10. Write the equation of the line that passes through (1, 2) and (5, -6).
- 11. Write the equation of a horizontal line that passes through (-9, 14).
- 12. Write the equation of a vertical line that passes through (6, -7).
- 13. Graph these lines.

a. 
$$3x - 4y = 12$$

b. 
$$y = -\frac{1}{2}x + 9$$

c. 
$$y = -4$$

d. 
$$x = -3$$

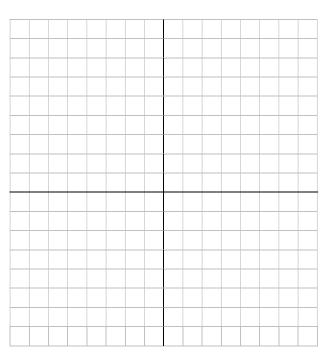


14. Graph these inequalities.

a. 
$$y \le 2x - 6$$

b. 
$$3x - y < 3$$

a.



b.

