## **EXERCISES**

Match each equation to its equivalent equation in slope-intercept form.

$$\mathbf{I} \cdot \mathbf{v} + 6 = 3(x+2)$$

**A.** 
$$y = 4x - 2$$

**2.** 
$$y = \frac{1}{2}(x+8) - 2$$

**B**. 
$$y = \frac{1}{2}x + 2$$

**3.** 
$$y + 1 = 1(x - 3)$$

**C**. 
$$y = 3x$$

**4.** 
$$-4x + y = -2$$

**D.** 
$$y = -\frac{1}{2}x + 2$$

**5**. 
$$2x - 4y = -4$$

**E.** 
$$y = x - 4$$

**6.** 
$$2x + 4y = 8$$

**F.** 
$$y = \frac{1}{2}x + 1$$



Convert each equation to slope-intercept form.

**7.** 
$$y + 3 = 4(x + 6)$$

$$8 \times 6x + 2y = 12$$

**9.** 
$$y = -2 + \frac{1}{3}(x+9)$$

**10.** 
$$2x - 5y = -15$$

11. 
$$-x - 2y = 2$$

**12.** 
$$y - 1 = -2(x - 5)$$

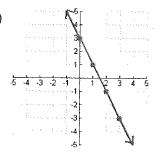
**13.** 
$$y = \frac{3}{4}(x+12) - 2$$

**14.** 
$$-7x + y = 6$$

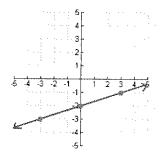
**15.** 
$$y + 15 = 4(x + 6)$$

One of the two equations listed in each problem matches the graph. Determine which equation is represented by the graph. Explain how you know your answer is correct.

16. 
$$y - 1 = 2(x + 1)$$
  
OR  
 $6x + 3y = 9$ 



17. 
$$6x + 2y = -4$$
  
OR  
 $y = \frac{1}{3}(x - 9) + 1$ 



## REVIEW

Write an equation in slope-intercept form that satisfies the information given about the line.

**18.** has a slope of  $\frac{5}{2}$  and a *y*-intercept of 3

**19.** has a slope of -3 and goes through the point (3, 1)

**20.** has a slope of 5 and goes through the origin

**21.** goes through the points (6, 1) and (10, -1)

**22.** goes through the points (-2, 5) and (4, 11)

**23.** has a slope of 0 and a *y*-intercept of -5

**24.** goes through the points (4, 1) and (4, 9)

**25.** goes through the points (1, -3) and (2, -6)