Name_____ Class _____ Date _____

Unit 0 HW 0.5 Slope and Graph Linear Functions

Find the slope of the line through each pair of points.

1. (0, 1) and (3, 0)

2. $\left(\frac{1}{2}, \frac{2}{3}\right)$ and $\left(\frac{3}{2}, \frac{5}{3}\right)$

3. (−3, −2) and (1, 6)

4. (4, −1) and (−2, −3)

5. (3, −5) and (1, 2)

6. (8, 9) and (8, 3)

7. (−3, −3) and (−1, −3)

8. $\left(\frac{1}{2}, \frac{1}{2}\right)$ and (−2, −4)
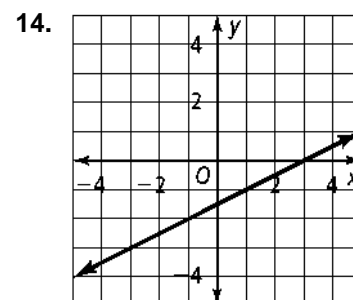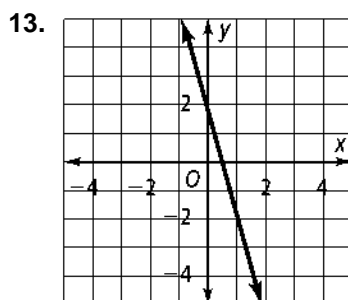
Write an equation for each line.

9. $m = -4$ and the y-intercept is 3.

10. $m = \frac{2}{5}$ and the y-intercept is $\frac{17}{5}$.

11. $m = 0$ and the y-intercept is −4.

12. $m = -1$ and the y-intercept is 2.

Find the slope and y-intercept of each line.

13.

14.

Graph each line.

15. $3x - 4y = 12$

16. $y = -2$

17. $f(x) = \frac{5}{4}x + 7$

18. $x = 5$

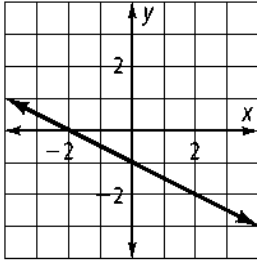**19.** $4x - 3y = -6$

20. $g(x) = -3x - 17.5$

21. $4x + 3y = 12$
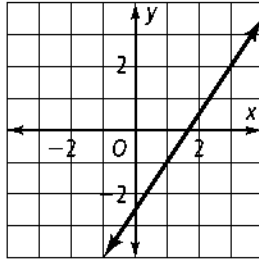
22. $\frac{x}{3} - \frac{y}{6} = 1$

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

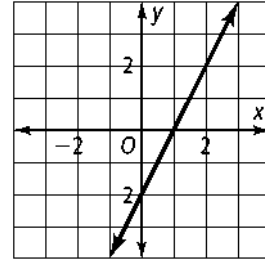**Find the slope and *y*-intercept of each line.**

24.

25.

26.

27. The equation $e = 1200 + 11t$ represents your elevation e in feet for each minute t you hike from a trailhead.
    a. If you graphed this equation, what would the slope represent? Explain.
    b. Are you hiking uphill or downhill? Explain.