Practice

Form G

Slope-Intercept Form

Find the slope and *y*-intercept of the graph of each equation.

1. $y = 3x - 5$

2. $y = -5x + 13$

3. $y = -x - 1$

4. $y = -11x + 6$

5. $y = -5$

6. $y = \frac{1}{2}x + 6$

7. $y = -6.75x + 8.54$

8. $y = -\frac{2}{3}x - \frac{1}{9}$

9. $y = 2.25$

Write an equation of a line with the given slope *m* and *y*-intercept *b*.

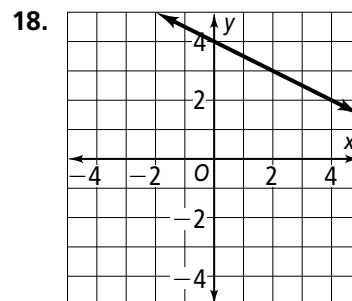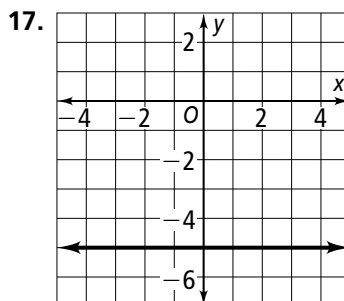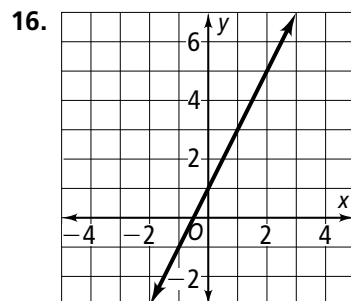**10.** $m = -1, b = 3$

11. $m = 4, b = -2$

12. $m = -5, b = -8$

13. $m = 0.25, b = 6$

14. $m = 0, b = -11$

15. $m = 1, b = \frac{3}{8}$

Write an equation in slope-intercept form of each line.

16.

17.

18.

Write an equation in slope-intercept form of the line that passes through the given points.

19. $(3, 5)$ and $(0, 4)$

20. $(2, 6)$ and $(-4, -2)$

21. $(-1, 3)$ and $(-3, 1)$

22. $(-7, 5)$ and $(3, 0)$

23. $(10, 2)$ and $(-2, -2)$

24. $(0, -1)$ and $(5, 6)$

25. $(3, 2)$ and $(-1, 6)$

26. $(-4, -3)$ and $(3, 4)$

27. $(2, 8)$ and $(-3, 6)$

Practice (continued)   *Form G*

Slope-Intercept Form

Graph each equation.

28. $y = x + 3$

29. $y = 4x - 1$

30. $y = -x + 6$

31. $y = 3x - 2$

32. $y = -5x + 1$

33. $y = -7x - 4$

34. Hudson is already 40 miles away from home on his drive back to college. He is driving 65 mi/h. Write an equation that models the total distance d travelled after h hours. What is the graph of the equation?

35. When Phil started his new job, he owed the company $65 for his uniforms. He is earning $13 per hour. The cost of his uniforms is withheld from his earnings. Write an equation that models the total money he has m after h hours of work. What is the graph of the equation?

Find the slope and the *y*-intercept of the graph of each equation.

36. $y + 4 = -6x$

37. $y + \frac{1}{2}x = -4$

38. $3y - 12x + 6 = 0$

39. $y - 5 = \frac{1}{3}(x - 9)$

40. $y - \frac{2}{5}x = 0$

41. $2y + 6a - 4x = 0$