Pg. 68 #17, 23, 37-41 (slope intercept: y=mx+b form), 71-74, 85-87

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

11. $(1, 6)$ and $(8, -1)$ **12.** $(-3, 9)$ and $(0, 3)$ **13.** $(0, 0)$ and $(2, 6)$

14. $(-4, -3)$ and $(7, 1)$ **15.** $(-2, -1)$ and $(8, -3)$ **16.** $(1, 2)$ and $(2, 3)$

17. $\left(\frac{2}{3}, \frac{4}{7}\right)$ and $\left(\frac{2}{3}, \frac{11}{7}\right)$ **18.** $(-3, 5)$ and $(4, 5)$ **19.** $(-5, -7)$ and $(0, 10)$

Write in standard form the equation of each line.

20. slope $= 3$; $(1, 5)$ **21.** slope $= \frac{5}{6}$; $(22, 12)$ **22.** slope $= -\frac{3}{5}$; $(-4, 0)$

23. slope $= 0$; $(4, -2)$ **24.** slope $= -1$; $(-3, 5)$ **25.** slope $= 5$; $(0, 2)$

Find the slope of each line.

32. $5x + y = 4$ **33.** $-3x + 2y = 7$ **34.** $-\frac{1}{2}x - y = \frac{3}{4}$

35. $Ax + By = C$ **36.** $Ax - By = C$ **37.** $y = 7$

Write an equation for each line. Then graph the line.

38. through $(-2, 1)$ and parallel to $y = -3x + 1$

39. through $(-3, -1)$ and perpendicular to $y = -\frac{2}{5}x - 4$

40. through $(-7, 10)$ and horizontal

41. through $\left(1, -\frac{2}{7}\right)$ and vertical

Write an equation for each line. Then graph the line.

71. $m = 0$, through $(5, -1)$ **72.** $m = 2$, through $(1, 3)$

73. $m = \frac{5}{6}$, through $(-4, 0)$ **74.** $m = -\frac{3}{2}$, through $(0, -1)$

85. Which equation represents a line through (3, 5) that is perpendicular to $y = 2x - 5$?

A. $2y = -x + 13$ B. $2y = x + 13$

C. $2y - x = 13$ D. $2y + x = -13$

86. For the equation $3x - 2y = 12$, which has value -6?

F. the x-intercept G. the y-intercept

H. the slope J. the origin

87. Which pair of equations represents perpendicular lines?

A. $y = -\frac{3}{8}x + 12$ and $(y - 1) = -\frac{3}{8}(x + 4)$

B. $y = -\frac{3}{8}x + 12$ and $3x + 8y = 20$

C. $y = -\frac{3}{8}x + 12$ and $(y - 1) = -\frac{8}{3}(x + 4)$

D. $y = -\frac{3}{8}x + 12$ and $(y - 1) = \frac{8}{3}(x + 4)$