

SECTION 3.5

1. $y = 2x + 5$ 3. $y = \frac{1}{2}x + 2$ 5. $y = \frac{5}{4}x + \frac{21}{4}$ 7. $y = -\frac{5}{3}x + 5$ 9. $y = -3x + 9$ 11. $y = -3x + 4$
13. $y = \frac{2}{3}x - \frac{7}{3}$ 15. $y = \frac{1}{2}x$ 17. $y = 3x - 9$ 19. $y = -\frac{2}{3}x + 7$ 21. $y = -x - 3$ 23. $y = \frac{7}{5}x - \frac{27}{5}$
25. $y = -\frac{2}{5}x + \frac{3}{5}$ 27. $x = 3$ 29. $y = -\frac{5}{4}x - \frac{15}{2}$ 31. $y = -3$ 33. $y = -2x + 3$ 35. $x = -5$
37. $y = x + 2$ 39. $y = -2x - 3$ 41. $y = \frac{2}{3}x + \frac{5}{3}$ 43. $y = \frac{1}{3}x + \frac{10}{3}$ 45. $y = \frac{3}{2}x - \frac{1}{2}$ 47. $y = -\frac{3}{2}x + 3$

49. $y = -1$ 51. $y = x - 1$ 53. $y = -x + 1$ 55. $y = -\frac{8}{3}x + \frac{25}{3}$ 57. $y = \frac{1}{2}x - 1$ 59. $y = -4$ 61. $y = \frac{3}{4}x$

63. $y = -\frac{4}{3}x + \frac{5}{3}$ 65. $x = -2$ 67. $y = x - 1$ 69. $y = \frac{4}{3}x + \frac{7}{3}$ 71. $y = -x + 3$ 73. $y = 0.5875x - 1161.325$.

This model predicts an hourly wage of \$10.74 in 1995. 75. $y = 45,455x - 90,037,270$. This model predicts 872,730 health care jobs in the year 2000. 79a. The slope is the rate at which the number of CD players sold decreases per dollar increase in price. b. The y -intercept represents the number of CD players that would be given away if the price were \$0.

c. The x -intercept represents the price at which no CD players would be sold. 81. $\left(-\frac{b}{m}, 0\right)$ 83. $\{(0, 3), (1, 2), (3, 0)\}$.

Other answers are possible. 85. $f(0) = 5$