

SECTION 3.2

1. function 3. function 5. function 7. not a function 9. Yes. \$22.25 11. $f(3) = 11$ 13. $f(0) = -4$
15. $G(0) = 4$ 17. $G(-2) = 10$ 19. $q(3) = 5$ 21. $q(-2) = 0$ 23. $F(4) = 24$ 25. $F(-3) = -4$
27. $H(1) = 1$ 29. $H(t) = \frac{3t}{t+2}$ 31. $s(-1) = 6$ 33. $s(a) = a^3 - 3a + 4$ 35. $P(-2+h) - P(-2) = 4h$
37. $f(-3+h) - f(-3) = -3h$ 39a. The packaging cost is \$4.75 per game. b. The packaging cost is \$4.00 per game.
- 41a. The appraiser's fee is \$3000. b. The appraiser's fee is \$950. 43. Domain: $\{1, 2, 3, 4, 5\}$; range: $\{1, 4, 7, 10, 13\}$
45. Domain: $\{0, 2, 4, 6\}$; range: $\{1, 2, 3, 4\}$ 47. Domain: $\{1, 3, 5, 7, 9\}$; range: $\{0\}$ 49. Domain: $\{-2, -1, 0, 1, 2\}$;
range: $\{0, 1, 2\}$ 51. Domain: $\{-2, -1, 0, 1, 2\}$; range: $\{-3, 3, 6, 7, 9\}$ 53. 1 55. -8 57. None 59. None
61. 0 63. None 65. None 67. -2 69. None 71. Range: $\{-3, 1, 5, 9\}$ 73. Range: $\{-23, -13, -8, -3, 7\}$
75. Range: $\{0, 1, 4\}$ 77. Range: $\{2, 14, 26, 42\}$ 79. Range: $\left\{-5, \frac{5}{3}, 5\right\}$ 81. Range: $\left\{-1, -\frac{1}{2}, -\frac{1}{3}, 1\right\}$
83. Range: $\{-38, -8, 2\}$ 85. Answers will vary. 87. $\{(-2, -8), (-1, -1), (0, 0), (1, 1), (2, 8)\}$. Yes, the set defines a
function. 89. The car will skid 61.2 ft. 91a. After 5 s the parachutist is falling at a rate of 25 ft/s. b. After 15 s the
parachutist is falling at a rate of 30 ft/s. 93a. After 5 h the temperature will be 64°F. b. After 15 h the temperature
will be 52°F.