

SECTION 7.2

1. $x^2yz^2\sqrt{yz}$ 3. $2ab^4\sqrt{2a}$ 5. $3xyz^2\sqrt{5yz}$ 7. $\sqrt{-9x^3}$ is not a real number. 9. $a^5b^2\sqrt[3]{ab^2}$ 11. $-5y\sqrt[3]{x^2y}$
 13. $abc^2\sqrt[3]{ab^2}$ 15. $2x^2y\sqrt[4]{xy}$ 17. $-6\sqrt{x}$ 19. $-2\sqrt{2}$ 21. $3\sqrt{2b} + 5\sqrt{3b}$ 23. $-2xy\sqrt{2y}$
 25. $6ab^2\sqrt{3ab} + 3ab\sqrt{3ab}$ 27. $-\sqrt[3]{2}$ 29. $8b\sqrt[3]{2b^2}$ 31. $3a\sqrt[4]{2a}$ 33. $17\sqrt{2} - 15\sqrt{5}$ 35. $5b\sqrt{b}$
 37. $-8xy\sqrt{2x} + 2xy\sqrt{xy}$ 39. $2y\sqrt[3]{2x}$ 41. $-4ab\sqrt[4]{2b}$ 43. 16 45. $2\sqrt[3]{4}$ 47. $xy^3\sqrt{x}$ 49. $8xy\sqrt{x}$
 51. $2x^2y\sqrt[3]{2}$ 53. $2ab\sqrt[4]{3a^2b}$ 55. 6 57. $x - \sqrt{2x}$ 59. $4x - 8\sqrt{x}$ 61. $x - 6\sqrt{x} + 9$ 63. $84 + 16\sqrt{5}$
 65. $672x^2y^2$ 67. $4a^3b^3\sqrt[3]{a}$ 69. $-8\sqrt{5}$ 71. $x - y^2$ 73. $12x - y$ 75. $y\sqrt{5y}$ 77. $b\sqrt{13b}$ 79. $\frac{\sqrt{2}}{2}$
 81. $\frac{2\sqrt{3y}}{3y}$ 83. $\frac{3\sqrt{3a}}{a}$ 85. $\frac{\sqrt{2y}}{2}$ 87. $\frac{5\sqrt[3]{3}}{3}$ 89. $\frac{5\sqrt[3]{9y^2}}{3y}$ 91. $\frac{b\sqrt{2a}}{2a^2}$ 93. $\frac{\sqrt{15x}}{5x}$ 95. $2 + 2\sqrt{2}$
 97. $-\frac{12 + 4\sqrt{2}}{7}$ 99. $-\frac{10 + 5\sqrt{7}}{3}$ 101. $-\frac{7\sqrt{x} + 21}{x - 9}$ 103. $-\sqrt{6} + 3 - 2\sqrt{2} + 2\sqrt{3}$ 105. $-\frac{17 + 5\sqrt{5}}{4}$
 107. $\frac{8a - 10\sqrt{ab} + 3b}{16a - 9b}$ 109. $\frac{3 - 7\sqrt{y} + 2y}{1 - 4y}$ 111a. False; $\sqrt[6]{432}$ b. True c. False; $\sqrt[3]{x} \cdot \sqrt[3]{x} = x^{2/3}$
 d. False; $\sqrt{x} + \sqrt{y}$ e. False; $\sqrt[2]{2} + \sqrt[3]{3}$ f. True 113a. $14\sqrt{2} - 20$ b. $\frac{2\sqrt{x+4} - 4}{x}$ c. $\frac{b + 18 - 6\sqrt{b+9}}{b}$