

1.4 Concepts and Vocabulary (page 123)

4. extraneous 5. quadratic in form 6. True

1.4 Exercises (page 123)

7. $\{1\}$ 8. $\{0\}$ 9. No real solution 10. No real solution 11. $\{-13\}$ 12. $\{0\}$ 13. $\{4\}$ 14. $\{1\}$ 15. $\{-1\}$ 16. $\{-3, 3\}$ 17. $\{0, 64\}$
18. $\{0, 9\}$ 19. $\{3\}$ 20. $\{3\}$ 21. $\{2\}$ 22. No real solution 23. $\left\{-\frac{8}{5}\right\}$ 24. No real solution 25. $\{8\}$ 26. $\{4\}$ 27. $\{-1, 3\}$
28. $\{-2\}$ 29. $\{1, 5\}$ 30. $\{18\}$ 31. $\{1\}$ 32. $\{25\}$ 33. $\{5\}$ 34. $\{3\}$ 35. $\{2\}$ 36. $\{-1\}$ 37. $\{-4, 4\}$ 38. $\{-\sqrt{97}, \sqrt{97}\}$
39. $\{0, 3\}$ 40. $\{0, 81\}$ 41. $\{-2, -1, 1, 2\}$ 42. $\{-\sqrt{5}, \sqrt{5}\}$ 43. $\{-1, 1\}$ 44. $\{-2, 2\}$ 45. $\{-2, 1\}$ 46. $\{-1, 2\}$ 47. $\{-6, -5\}$
48. $\left\{-\frac{7}{2}, -1\right\}$ 49. $\left\{-\frac{1}{3}\right\}$ 50. $\{-2, 7\}$ 51. $\left\{-\frac{3}{2}, 2\right\}$ 52. $\left\{\frac{5}{3}, 2\right\}$ 53. $\left\{0, \frac{1}{16}\right\}$ 54. $\{0\}$ 55. $\{16\}$ 56. $\{4\}$ 57. $\{1\}$ 58. $\{16\}$
59. $\left\{\left(\frac{9 - \sqrt{17}}{8}\right)^4, \left(\frac{9 + \sqrt{17}}{8}\right)^4\right\}$ 60. $\{1, 16\}$ 61. $\{\sqrt{2}, \sqrt{3}\}$ 62. $\left\{\sqrt{\frac{-5 + \sqrt{41}}{2}}\right\}$ 63. $\{-4, 1\}$ 64. $\{-1, 4\}$ 65. $\left\{-2, -\frac{1}{2}\right\}$
66. $\left\{\frac{3}{4}, \frac{4}{3}\right\}$ 67. $\left\{-\frac{3}{2}, \frac{1}{3}\right\}$ 68. $\left\{\frac{-3 - \sqrt{41}}{8}, \frac{-3 + \sqrt{41}}{8}\right\}$ 69. $\left\{-\frac{1}{8}, 27\right\}$ 70. $\left\{-\frac{\sqrt{3}}{9}, \frac{\sqrt{3}}{9}\right\}$ 71. $\left\{-2, -\frac{4}{5}\right\}$ 72. $\left\{\frac{1}{2}, \frac{7}{6}\right\}$ 73. $\{-3, 0, 3\}$
74. $\{-1, 0, 1\}$ 75. $\left\{0, \frac{3}{4}\right\}$ 76. $\{-2, 0, 2\}$ 77. $\{-5, 0, 4\}$ 78. $\{-7, 0, 1\}$ 79. $\{-1, 1\}$ 80. $\{-4, -1, 1\}$ 81. $\{-2, 2, 3\}$ 82. $\{-1, 1, 3\}$