Section 2.1

56. $-3 = y$

60. $x = 10$

62. No solution

84. $312, 314$

86. The repair work took 2 hours.

92. 11 meters, 21 meters

Section 2.3

62. 20 minutes

80. 4 feet

82. 8 inches, 24 inches

Section 3.6

42. $10, \ -\frac{1}{2}, \ -7t + 20, \ 24 - 14t$

44. $0, \ 0, \ -25, \ 16t^2 - 8t$

50. $\dfrac{1}{6}, \ -\dfrac{1}{9}, \ 8, \ \dfrac{x-3}{x-8}$

86. $A(x) = (32 - 2x)^2$

Section 5.2

70. $x^2 + 2x$

78. $-9x^3 - 7x^2 + 19x$

80. $-5\nu - 1$

Section 5.3

22. $3x^2 - 11x - 4$

24. $12x^2 + 49x + 49$

26. $-12x^3 + 54x^2 - 4x + 18$

100. $V(n) = 8n^3 - 8n$; 480 cubic inches; $A(n) = 4n^2 - 4$

102. $A = 3x^2 - 2x + 6$

104. $A = \frac{5}{2}x^2 + \frac{25}{2}x$

Section 5.6

18. $x = \frac{5}{8}, \ x = 0$

30. $x = -\frac{1}{7}, \ x = -\frac{1}{2}$

96. The numbers are 11 and 12.

98. The width of the frame is 1 centimeter.

100. The base of the triangle is 14 inches and the height is 10 inches.

Section 6.6

24. $-\frac{4}{5} = u$

32. $x = \frac{4}{5}$

Section 8.1

10. $x = \frac{3}{4}, \ x = \frac{1}{2}$

18. $u = -4, \ u = -1$

Section 8.5

16. 24 inches, 16 inches