

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. $\frac{1}{6}$, $-\frac{1}{9}$, 8, $\frac{x-3}{x-8}$
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 5.4

16. $18(3x^2 - 2)$
24. $3(3 - 9y - 5y^2)$
36. $-6(x^2 - 2x + 3)$
70. $9(z - 2)(z + 2)$

Section 5.5

4. $(y - 7)^2$
8. $(2x - 1)^2$
68. $(3x + 2)(x - 6)$
72. $(3y - 4)(y - 2)$
74. $(5x + 3)(3x - 1)$
78. $2(5x + 3)(x - 3)$
100. $5(2y - 3)(2y + 3)$
102. $z(4z - 7)^2$

Section 5.6

18. $x = \frac{5}{8}$
30. $x = -\frac{1}{7}, x = -\frac{1}{2}$
40. $x = 6$

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