

Chapter 5 Answers (continued)

41. $\frac{-1 \pm \sqrt{61}}{10}$ 42. $\frac{1 \pm i\sqrt{34}}{5}$ 43. $1 \pm i\sqrt{2}$

44. $\frac{3 \pm i\sqrt{183}}{4}$ 45. $\frac{5 \pm i\sqrt{71}}{8}$ 46. $-5, -1$ 47. 4, 2

48. $3 \pm \sqrt{3}$ 49. No; When $p = 4000$, the discriminant is negative, so there are no real solutions. 50. 3, -1

51. $-1, -4$ 52. $4, -2$ 53. $\frac{6 \pm \sqrt{15}}{7}; 1.41, 0.30$

54. $\frac{-5 \pm 3\sqrt{5}}{10}; 0.17, -1.17$ 55. $-1, -\frac{1}{4}$ 56. $\frac{1}{2}, -\frac{4}{3}$

57. $-3, 2$ 58. $16, -3$ 59. $0, -\frac{5}{2}$

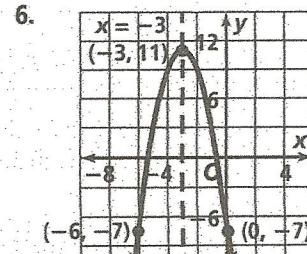
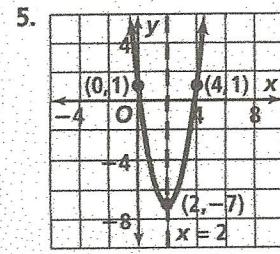
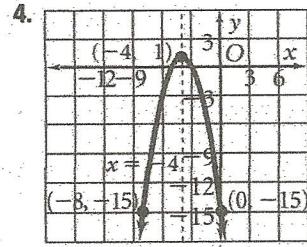
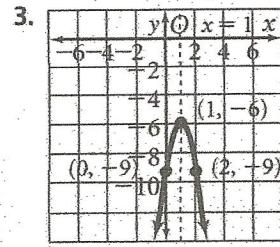
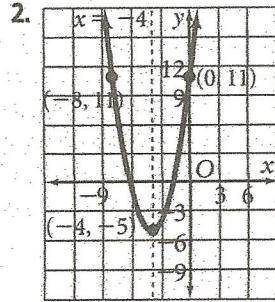
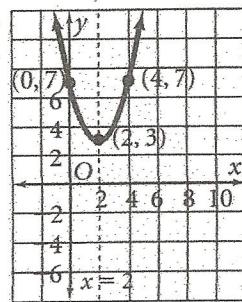
60. $\frac{-3 \pm \sqrt{21}}{2}; 0.79, -3.79$ 61. $2 \pm \sqrt{3}; 3.73, 0.27$

62. $\frac{1 \pm 2\sqrt{2}}{3}; 1.28, -0.61$ 63. $7, -5$ 64. $-5, -2$

Reteaching 5-1

1. $f(x) = 25x^2 + 40x + 16$; yes 2. $y = 3x$; no
3. $y = -11x + 24$; no 4. $g(x) = x^2 - 49$; yes
5. $f(x) = -x^2 + 9$; yes 6. $g(x) = x^2$; yes
7. $f(x) = 3x^2 + 2x$; yes 8. $f(x) = x^2 - 16$; yes
9. $f(x) = 4x^2 + 5x$; yes 10. $y = 8x + 8$; no

Reteaching 5-2



Reteaching 5-3

1. $y = (x - 1)^2 - 4$ 2. $y = -(x - 2)^2 + 10$
 3. $y = \left(x + \frac{3}{2}\right)^2 - \frac{49}{4}$ 4. $y = \left(x - \frac{9}{2}\right)^2 - \frac{81}{4}$
 5. $y = \left(x + \frac{1}{2}\right)^2 - \frac{1}{4}$ 6. $y = \left(x + \frac{5}{2}\right)^2 - \frac{9}{4}$

7. $y = 4(x + 1)^2 - 7$ 8. $y = \frac{3}{4}(x + 6)^2 - 27$
 9. $y = -2\left(x - \frac{1}{2}\right)^2 + \frac{3}{2}$ 10. $y = x^2 - 6x + 10$

11. $y = 2x^2 - 4x - 1$ 12. $y = -3x^2 - 24x - 47$

Reteaching 5-4

1. $(x + 4)(x + 2)$
2. $(x - 3)(x - 1)$
3. $2(x - 2)(x - 1)$
4. $(2x - 1)(x - 5)$
5. $(2x + 1)(x - 4)$
6. $(2x + 5)(2x + 3)$
7. $(x + 2)(x - 7)$
8. $(7x + 2)(x - 3)$
9. $(x - 9)(x + 8)$
10. $(2x + 7)(x + 1)$
11. $(x + 4)(x + 8)$
12. $(2x - 7)(2x - 7)$
13. $(x - 5)(x + 2)$
14. $(2x + 1)(x + 4)$
15. $(3x - 1)(3x - 1)$
16. $(x - 1)(x - 9)$
17. $(x + 6)(x - 2)$
18. $(x + 5)(x + 2)$
19. $(x - 6)(x - 2)$
20. $(2x + 1)(x - 3)$
21. $(x - 1)(x - 5)$
22. $(3x - 4)(x + 2)$
23. $(2x + 1)(x + 5)$
24. $(x - 4)(x + 7)$

Reteaching 5-5

