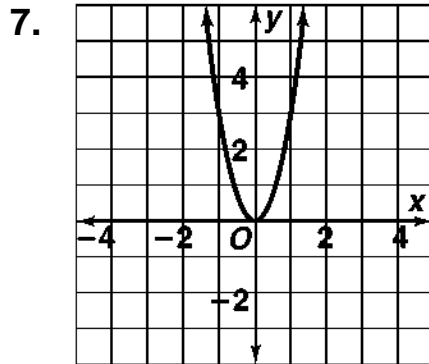


Answers for Chapter 5 Extra Practice

1. linear; none, $3x$, 4

3. linear; none, $-\frac{3}{2}x$, $\frac{1}{2}$

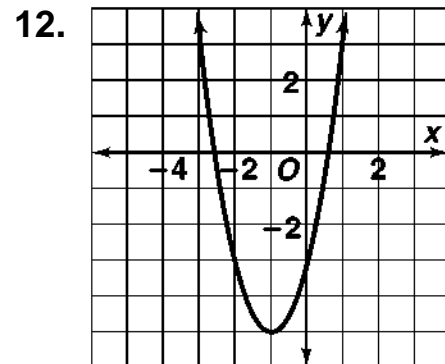
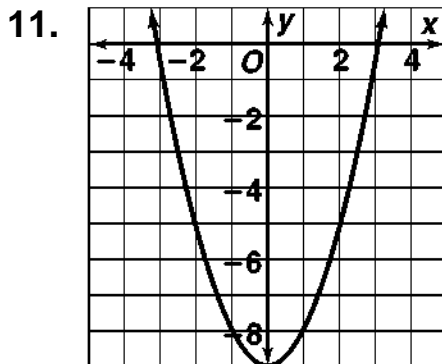
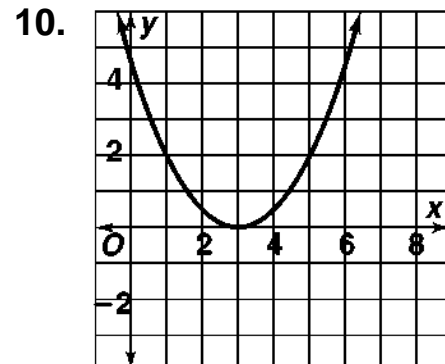
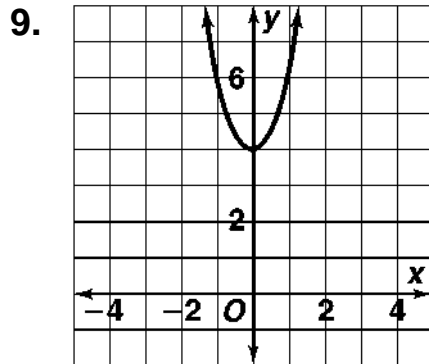
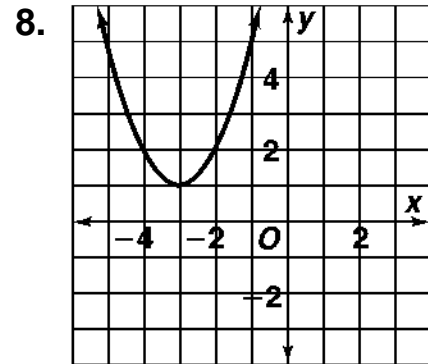
5. quadratic; $-x^2$, none, 3



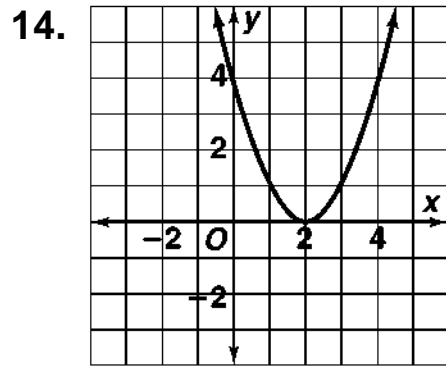
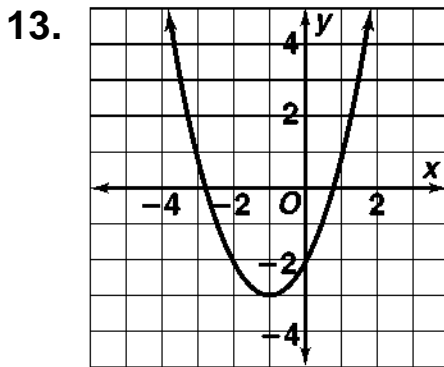
2. quadratic; x^2 , none, 1

4. quadratic; x^2 , none, -1

6. quadratic; $5x^2$, $10x$, none



Answers for Chapter 5 Extra Practice (cont.)



15. $(x + 9)(x - 6)$

17. $(x - 6)(x + 6)$

19. $(x - 8)(x - 7)$

21. $(7x + 1)(x - 3)$

23. $\frac{1}{4}(x - 4)(x + 4)$

25. $4(x^2 + 3x + 10)$

27. 0.24, -4.24

29. 0.41, -2.41

31. -7, 5

33. 0, -4

35. $8 - 3i$

37. $1 - 3i$

39. $8 + 4i$

41. $\pm 4i$

43. $\pm i\sqrt{10}$

45. $\pm i\frac{\sqrt{10}}{2}$

47. $-i, -1 - i, i$

49. -1, -4

16. $(x + 6)(x + 4)$

18. $(x - 12)(x + 3)$

20. $(5x + 7)^2$

22. $(5x - 2)(x + 5)$

24. $(x - 8)(x + 2)$

26. cannot be factored

28. ± 5

30. ± 3

32. ± 6.32

34. -2, -1

36. $6 - 2i$

38. $75 + 54i$

40. $-17 - 19i$

42. $\pm \frac{1}{2}i$

44. $\pm 2i\sqrt{3}$

46. $\pm i\sqrt{3}$

48. $2 + i, 5 + 5i, 2 + 51i$

50. $\pm 2i\sqrt{2}$

Answers for Chapter 5 Extra Practice (cont.)

51. $\frac{5}{4} \pm \frac{\sqrt{17}}{4}$ 52. $\frac{1}{6} \pm \frac{i\sqrt{107}}{6}$
53. $2 \pm 2i\sqrt{2}$ 54. 0, 7
55. -2 56. $\pm\sqrt{7}$
57. $-4 \pm\sqrt{33}$ 58. 84; 2, real
59. -7; 2, imaginary 60. -4; 2, imaginary
61. 25; 2, real 62. 80; 2, real
63. 16; 2, real 64. 57; 2, real
65. 0; 1, real
66. a. $f(x) = 0.04x^2 + 1.2x + 5$
b. 252 ft
67. a. 30 ft by 20 ft 68. a. 30 ft
b. 300 ft² b. 2.5 s
69. 19 years old; 24 years old
70. 2S
71. a. 625 bulldozers; \$781,250
b. $x \geq 0$; $P(x) \leq \$781,250$
c. $500 \leq x \leq 750$
72. 8 in. 73. 12; 20 in.
74. a. 40 ft
b. 50.6 ft
75. a. The archer releases the arrow 5 ft above the ground.
b. 402 ft

