Answer Key

Practice B

1. $(x + 4)(x^2 - 4x + 16)$
2. $(x + 6)(x^2 - 6x + 36)$
3. $(x - 10)(x^2 + 10x + 100)$
4. $(x - 7)(x^2 + 7x + 49)$
5. $(2x - 1)(4x^2 + 2x + 1)$
6. $(2x - 5)(4x^2 + 10x + 25)$
7. $(3x - 2)(9x^2 + 6x + 4)$
8. $(2x + 10)(4x^2 - 20x + 100)$
9. $(3x + 8)(9x^2 - 24x + 64)$
10. $(4x + 3)(16x^2 - 12x + 9)$
11. $(10x - 1)(100x^2 + 10x + 1)$
12. $(5x + 4)(25x^2 - 20x + 16)$
13. $(x - 3)(x^2 + 5)$ 14. $(x - 4)(x^2 + 2)$
15. $(x + 2)(x^2 + 7)$ 16. $(x - 4)(3x^2 + 2)$
17. $(x + 1)(5x^2 + 1)$ 18. $(x - 6)(2x^2 + 5)$
19. $(x - 2)^2(x + 2)$ 20. $(x - 5)(x - 3)(x + 3)$
21. $(x + 1)(x - 4)(x + 4)$
22. $(x - 1)(2x - 3)(2x + 3)$
23. $(x - 3)(4x - 1)(4x + 1)$
24. $(x + 2)(3x - 2)(3x + 2)$
25. $(2x - 3)(2x + 3)(4x^2 + 9)$
26. $(x^2 - 3)(x^2 + 3)$ 27. $(x^2 + 3)(x^2 + 2)$
28. $(x^2 + 3)(x^2 - 2)$ 29. $(x^2 - 3)(x^2 + 8)$
30. $(x^2 - 5)(x^2 - 2)$ 31. $2x^2(x - 10)(x + 10)$
32. $2x^2(2x - 3)(2x + 3)$
33. $3x^2(3x - 1)(3x + 1)$
34. $3(x - 1)(x + 1)(x^2 + 1)$
35. $2(x^2 + 2)(x^2 + 6)$ 36. $-(x^2 + 7)(x^2 + 3)$
37. $-6, -2, 2$ 38. 2 39. $-\frac{3}{2}$ 40. $\frac{1}{3}$ 41. -7
42. $-3, 3, 5$ 43. $-2, 2$ 44. No real solutions
45. $-3, -1, 1, 3$ 46. $-\sqrt{5}, \sqrt{5}$
47. $-\sqrt{6}, -2, 2, \sqrt{6}$
48. $-2\sqrt{2}, -\sqrt{2}, \sqrt{2}, 2\sqrt{2}$ 49. 750 ft^3
50. $x^3 - 15x^2 + 50x = 750$ 51. 15
52. 10 ft by 15 ft by 5 ft