

Answer Key

Challenge: Skills and Applications

1. $(x^{1/2} - 5)(x^{1/2} - 2)$
2. $(x^3 - 6)(x^3 + 2)$
3. $(\sqrt{x} - 9)(\sqrt{x} + 5)$
4. $(\sqrt{x} + 1)(\sqrt{x} + 10)$
5. $\left(\frac{1}{x} - 7\right)\left(\frac{1}{x} - 8\right)$
6. $\left(\frac{1}{x} - 9\right)\left(\frac{1}{x} + 12\right)$
7. 2, -2, 3, -3
8. $2\sqrt{2}, -2\sqrt{2}, \sqrt{3}, \sqrt{3}$
9. -2, 3
10. -1, $-\frac{3}{10}$
11. 2; 4, -4
12. $(x - 6.6)(x - 7)$
13. 3.3 ft, 3.5 ft
14. 60 ft by 60 ft