

Simplify Radical Equations - Practice

Simplify the following problems. Be sure to check your answers.

1. $x^3 = 8$

2. $x = \sqrt{-6x + 7}$

3. $x = \sqrt{8x - 7}$

4. $x^2 - 36 = 0$

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

6. $x + 2 = \sqrt{-2x - 1}$

7. $x + 2 = \sqrt{21}$

8. $(x + 3)^2 = 116$

9. $(x - 3)^2 = -64$

10. $x = \sqrt{6x + 29}$

Solutions:

1. $x = 2$

2. $x = 1$

3. $x = 1, 7$

4. $x = -6, 6$

5. $x = 5 - \sqrt{7}, 5 + \sqrt{7}$

6. $x = -1$

7. $x = -2 - \sqrt{21}, -2 + \sqrt{21}$

8. $x = -3 - 2\sqrt{29}, -3 + 2\sqrt{29}$

9. $x = 3 - 8i, 3 + 8i$

10. $x = 3 - \sqrt{28}, 3 + \sqrt{28}$