

Radical Equations and Their
Applications

1. Solve each equation.

$$\sqrt{x-2} = 4$$

2. Solve each equation.

$$\sqrt[3]{9x-1} = 2$$

3. Solve each equation.

$$3\sqrt{x} = 2x$$

4. Solve each equation.

$$\sqrt{-6+11x} - 2 = x$$

5. Solve each equation.

$$\sqrt[3]{8x-1} = \sqrt[3]{3x+5}$$

6. Solve each equation.

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

7. Solve each equation.

$$\sqrt{5x-1} - \sqrt{4x+5} = -1$$

8. Solve each equation.

$$(5x+4)^{\frac{1}{2}} - (x+1)^{\frac{1}{2}} = 1$$

9. Solve for the indicated variable.

$$A = \sqrt{\frac{BC}{2X}} \quad \text{for } B$$