

1. Simplify.

$$\sqrt{49x^{16}y^{16}}$$

2. Simplify.

$$\frac{3}{21 + \sqrt{13}}$$

3. Write the expression in radical form.

$$\left(4^7\right)^{\frac{9}{8}}$$

4. Solve the inequality.

$$9 + \sqrt{5x + 1} > 11$$

5. Solve the equation.

$$30x^2 + 3000 = 0$$