

1. Simplify.

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

answer:  $7x^8y^8$

2. Simplify.

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

$$\frac{63 - 3\sqrt{13}}{428}$$

answer:

3. Write the expression in radical form.

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

answer:  $\sqrt[8]{4^{63}}$

4. Solve the inequality.

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

answer:  $x > \frac{3}{5}$

5. Solve the equation.

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

answer:  $\pm 10i$