

Introduction to Square Roots

1. Find the exact value of each square root without a calculator.

$$\sqrt{25}$$

2. Find the exact value of each square root without a calculator.

$$\sqrt{\frac{1}{4}}$$

3. Find the exact value of each square root without a calculator.

$$\sqrt{0.25}$$

4. Find the exact value of each square root without a calculator.

$$-3\sqrt{16}$$

5. Find the exact value of each square root without a calculator.

$$\sqrt{\frac{121}{16}}$$

6. Find the exact value of each square root without a calculator.

$$\sqrt{5+95}$$

7. Use a calculator to find the approximate value of the square root, rounded to the indicated place.

$$\sqrt{21}$$

8. Tell if the square root is rational, irrational, or not a real number. If the square root is rational, find the exact value; if the square root is irrational, write the approximate value rounded to two decimal places.

$$\sqrt{-9}$$

9. Tell if the square root is rational, irrational, or not a real number. If the square root is rational, find the exact value; if the square root is irrational, write the approximate value rounded to two decimal places.

$$\sqrt{1600}$$

10. Tell if the square root is rational, irrational, or not a real number. If the square root is rational, find the exact value; if the square root is irrational, write the approximate value rounded to two decimal places.

$$\sqrt{31}$$

11. Simplify each square root.

$$\sqrt{(y-8)^2}, y-8 \geq 0$$

12. Simplify each square root.

$$\sqrt{(2x + y)^2}$$