math Antics®
Exercises

Exponents & Square Roots

1 Fill in the blank.

This symbol $\sqrt{}$ without any index number, is the __square__ root.
(or 2nd)

2 Fill in the blank.

The root sign is also called the __radical__ sign.

3 Fill in the blank.

Exponents and Roots are __inverse__ operations.

4 Use what you know about exponents and roots to fill in the missing number.

$$7^2 = 49$$
$$\sqrt[2]{49} = \underline{7}$$

5 Use what you know about exponents and roots to fill in the missing number.

$$3^4 = 81$$
$$\sqrt[4]{81} = \underline{3}$$

6 Use what you know about exponents and roots to fill in the missing number.

$$\sqrt[3]{125} = 5$$
$$\underline{5}^3 = 125$$

7 Use the multiplication table to find the roots of these "perfect squares".

$$\sqrt{25} = \underline{5} \qquad \sqrt{64} = \underline{8}$$
$$\sqrt{36} = \underline{6} \qquad \sqrt{100} = \underline{10}$$

8 Calculate this cube root.

$$\sqrt[3]{8} = \underline{2}$$

9 Use the root function on a calculator to find the value of this root. (Round your answer to 2 decimal places.)

$$\sqrt{2} = 1.41$$

10 Use the root function on a calculator to find the value of this root. (Round your answer to 2 decimal places.)

$$\sqrt[3]{2} = 1.26$$

See Video for step-by-step solutions to each problem.