Name:

Date:

## **Exponents & Square Roots**

1 Fill in the blank.

This symbol  $\sqrt{\phantom{a}}$  without any index number, is the  $\underline{\phantom{a}}$  root.

**7** Fill in the blank.

The root sign is also called the <a href="radical">radical</a> sign.

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.

$$7^2 = 49$$

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

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

$$3^4 = 81$$

$$\sqrt[4]{81} = \boxed{3}$$

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

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

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

$$\sqrt{25} = \underline{5} \qquad \sqrt{64} = \underline{8}$$

$$\sqrt{36} = \underline{6} \qquad \sqrt{100} = \underline{10}$$

Calculate this cube root.

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

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.)



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