math Antics
Exercises

Name:

Date:

Exponents In Algebra

1 Solve.

$8^0 = \underline{1}$

$b^0 = \underline{1}$

2 Solve.

$8^1 = \underline{8}$

$b^1 = \underline{b}$

3 Solve.

$\left(\sqrt{10}\right)^2 = \underline{10}$

$\left(\sqrt[3]{15}\right)^3 = \underline{15}$

4 Solve. (assume $x \geq 0$)

$\sqrt[2]{x^2} = \underline{x}$

$\sqrt[3]{x^3} = \underline{x}$

5 Solve for x.

$\sqrt{x} = 5$

$\sqrt{x}^2 = 5^2$

$x = 25$

6 Solve for x.

$x^2 = 49$

$\sqrt{x^2} = \pm\sqrt{49}$

$x = \pm 7$

7 Solve for x.

$\sqrt{x} = 10$

$\sqrt{x}^2 = 10^2$

$x = 100$

8 Solve for x.

$x^2 = 81$

$\sqrt{x^2} = \pm\sqrt{81}$

$x = \pm 9$

9 Solve for x.

$\sqrt[3]{x} = 4$

$\sqrt[3]{x}^3 = 4^3$

$x = 64$

10 Solve for x.

$x^4 = 16$

$\sqrt[4]{x^4} = \pm\sqrt[4]{16}$

$x = \pm 2$

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