

Square and Cube Roots - Guided Lesson Explanation**Explanation#1**

We know the root number is an equal factor of the number.

$$64 = 8 \times 8 \quad \text{or} \quad -8 \times -8$$

$$x^2 = 64$$

$$x = \pm \sqrt{64}$$

$$x = \pm 8$$

Explanation#2

We know the root number is an equal factor of the number. To solve the problem we are going to need to find the root of $9/16$.

$$y = \pm \sqrt{\frac{9}{16}}$$

We are lucky because the roots of 9 (3) and 16 (4) are whole numbers.

$$y = \pm \frac{3}{4}$$

Explanation#3

Area is base times length. Squares have equal sides.

So we will calculate $x^2 = 49$

$$x^2 = 49$$

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

$$\text{So } x = \pm 7$$

