

Lesson 3-9

Example 1

Find each square.

a. 9^2

b. $(-12)^2$

c. $\left(\frac{4}{5}\right)^2$

d. $(0.04)^2$

Solution

a. $9^2 = 9 \cdot 9$
 $= 81$

b. $(-12)^2 = (-12) \cdot (-12)$
 $= 144$

c. $\left(\frac{4}{5}\right)^2 = \frac{4}{5} \cdot \frac{4}{5}$
 $= \frac{16}{25}$

d. $(0.04)^2 = 0.04 \cdot 0.04$
 $= 0.0016$

Example 2

Find each square root. You can use a calculator or a table of square roots.
Round to the nearest thousandth, if necessary.

a. $\sqrt{37}$

b. $-\sqrt{95}$

c. $\sqrt{\frac{25}{121}}$

Solution

a. $\sqrt{37} \approx 6.083$

b. $-\sqrt{95} \approx -9.747$

c. $\sqrt{\frac{25}{121}} = \frac{5}{11}$

Example 3

RETAIL The area of a square tabletop is 576 in^2 . Find the length of each side of the tabletop.

Solution

Since the area of a square is equal to the square root of the area, find the square root of 576.

$$\sqrt{576} = 24$$

The length of each side of the tabletop is 24 in.