Square Roots

1. Find the positive value of x that makes each equation true. Check your solution.

a) $x^2 = 169$

b) $625 = x^2$

c) $x^2 = 64$

2. A square-shaped park has an area of $324\ yd^2$. What are the dimensions of the park? Write and solve an equation.

Square Roots

1. Find the positive value of x that makes each equation true. Check your solution.

a) $x^2 = 169$

$$x^2 = 169$$
$$\sqrt{x^2} = \sqrt{169}$$
$$x = \sqrt{169}$$
$$x = 13$$

Check:

$$13^2 = 169$$
$$169 = 169$$

b) $625 = x^2$

$$625 = x^2$$
$$\sqrt{625} = \sqrt{x^2}$$
$$\sqrt{625} = x$$
$$25 = x$$

Check:

$$625 = 25^2$$
$$625 = 625$$

c) $x^2 = 64$

$$x^2 = 64$$
$$\sqrt{x^2} = \sqrt{64}$$
$$x = \sqrt{64}$$
$$x = 8$$

Check:

$$8^2 = 64$$
$$64 = 64$$

2. A square-shaped park has an area of $324 \ yd^2$. What are the dimensions of the park? Write and solve an equation.

$$x^2 = 324$$
$$\sqrt{x^2} = \sqrt{324}$$
$$x = \sqrt{324}$$
$$x = 18$$

Check:

$$18^2 = 324$$
$$324 = 324$$

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