NAME_____

Module 7 **Ratio, Proportion, and Percent**
Lesson 1 **Square Roots**

Guided Practice 7.1

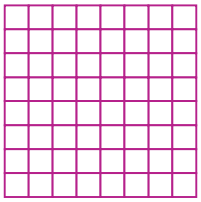
Set 1

1. Is 32 a square number?

No; 32 cannot be modeled by an array that forms a square.

2. Is 64 a square number?

YES



$8 \times 8 = 64$

3. Is 40 a square number?

No; 40 cannot be modeled by an array that forms a square.

Set 2

Evaluate.

1. $\sqrt{100} + 2^3$

$\sqrt{100} + 2^3$
$10 + 8$
18

2. $\sqrt{49} + 3^2$

$\sqrt{49} + 3^2$
$7 + 9$
16

3 $4^2 + \sqrt{81}$

$4^2 + \sqrt{81}$
$16 + 9$
25

Set 3

1 Kody has square ceiling tiles that are three feet on each side. How many of these tiles will Kody need to cover a square ceiling with an area of 81 square feet?

Tiles: $A = 3^2 = 9$ ft^2 each

Ceiling: $A = 81$ ft^2

Number needed: $81 \div 9 = 9$

Kody will need nine tiles.

2 Josiah measured the distance around a square park to be 28 miles. What is the area of the park?

$P = 28$ mi
$s = 28 \div 4 = 7$ mi

$A = s^2$
$A = 7^2$
$A = 49$ mi^2

The area of the park is 49 square miles.