1-9 Study Guide and Intervention

Algebra: Area Formulas

The **area** of a figure is the number of square units needed to cover a surface. You can use a formula to find the area of a rectangle. The formula for finding the area of a rectangle is $A = \ell \times w$. In this formula, *A* represents area, ℓ represents the length of the rectangle, and *w* represents the width of the rectangle.

Example 1 Find the area of a rectangle with length 8 feet and width 7 feet.
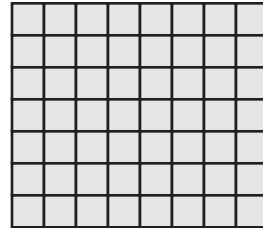
$A = \ell \times w$ Area of a rectangle
$A = 8 \times 7$ Replace ℓ with 8 and *w* with 7.
$A = 56$
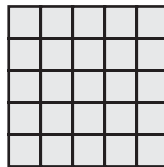The area is 56 square feet.

Example 2 Find the area of a square with side length 5 inches.
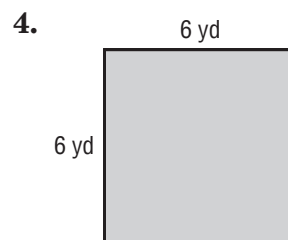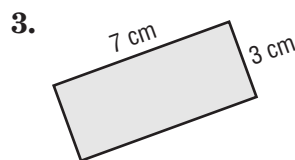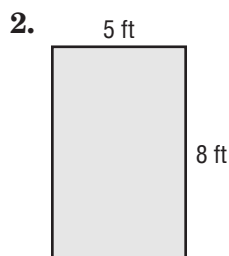
$A = s^2$ Area of a square
$A = 5^2$ Replace *s* with 5.
$A = 25$
The area is 25 square inches.

Exercises

Find the area of each figure.

1.

2.   5 ft

8 ft

3.   7 cm   3 cm

4.   6 yd

6 yd
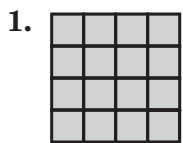
5. What is the area of a rectangle with a length of 10 meters and a width of 7 meters?

6. What is the area of a square with a side length of 15 inches?