

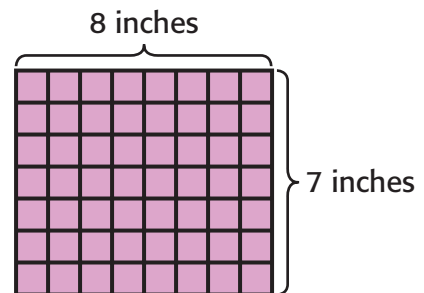
MY Homework**Lesson 6****Area of Rectangles****Homework Helper**Need help? connectED.mcgraw-hill.com

Find the area of a rectangle with a length of 8 inches and a width of 7 inches.

One Way Tile a rectangle.

1 Tile a rectangle with unit squares. It is 8 unit squares long and 7 unit squares wide.

Each unit square represents one square inch.



2 Count the unit squares.
There are 56 unit squares.

Another Way Use $A = \ell \times w$.

$$A = \ell \times w \quad \text{Area formula}$$

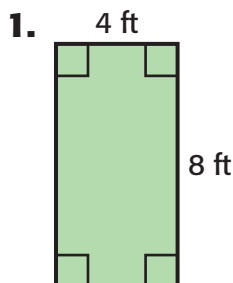
$$A = 8 \times 7 \quad \text{The length is 8 inches and the width is 7 inches.}$$

$$56 = 8 \times 7 \quad \text{Multiply.}$$

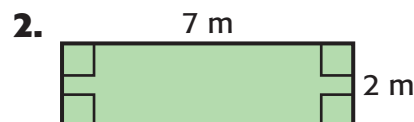
Area is measured in square units. In this case, it is measured in square inches. So, the area is 56 square inches.

Practice

Find the area of each rectangle.

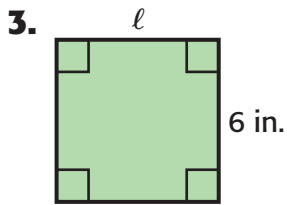


32 square feet



14 square meters

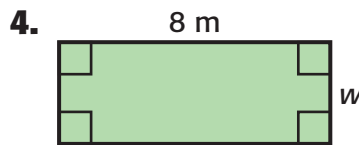
Algebra Find the unknown side. Use the area formula.



$$36 = l \times w$$

$$36 = \underline{6} \times 6$$

The unknown is 6 inches.



$$24 = l \times w$$

$$24 = 8 \times \underline{3}$$

The unknown is 3 meters.

Vocabulary Check



5. Explain how the equation $A = l \times w$ is a formula.

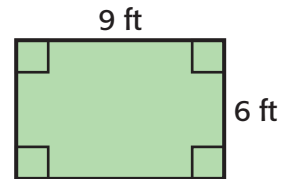
Sample answer: The equation $A = l \times w$ uses letters to represent area, length, and width. The equation shows their relationship.



Problem Solving


For Exercises 6 and 7, use the information below and the rectangle at the right.

Mrs. Morris plans to tile her front hallway shown at the right.



6. If each tile is 1 foot long and 1 foot wide, how many tiles will she need?

54 tiles

7. **Mathematical PRACTICE**  **Keep Trying** Squares of tile come in packages of 6 tiles. How many packages will Mrs. Morris need?

9 packages

Test Practice

8. Which equation can be used to find the area of the rectangle?

(A) $5 + 10 = 15$ (C) $5 \times 10 = 50$

(B) $10 - 5 = 5$ (D) $10 \div 5 = 2$

