

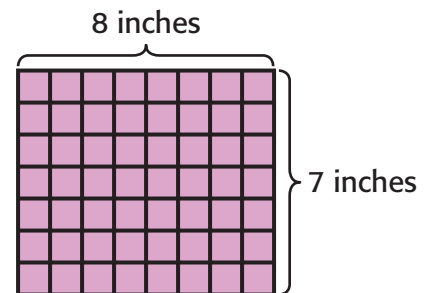
MY Homework**Lesson 6****Area of Rectangles****Homework Helper**Need help? connectED.mcgraw-hill.com

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 $A = \ell \times w$.

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

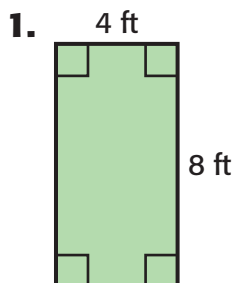
$$A = 8 \times 7 \quad \text{The length is 8 inches and the width is 7 inches.}$$

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

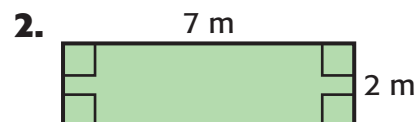
Area is measured in square units. In this case, it is measured in square inches. So, the area is 56 square inches.

Practice

Find the area of each rectangle.

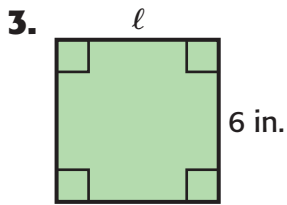


_____ square feet



_____ square meters

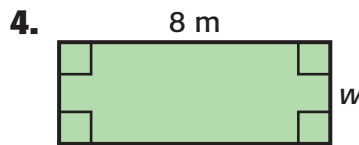
Algebra Find the unknown side. Use the area formula.



$$36 = l \times w$$

$$36 = \underline{\hspace{2cm}} \times 6$$

The unknown is $\underline{\hspace{2cm}}$ inches.



$$24 = l \times w$$

$$24 = 8 \times \underline{\hspace{2cm}}$$

The unknown is $\underline{\hspace{2cm}}$ meters.

Vocabulary Check



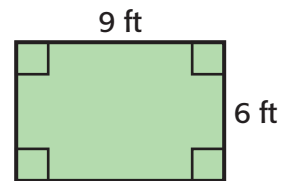
5. Explain how the equation $A = l \times w$ is a formula.




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?

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

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) $10 \div 5 = 2$

