NAME _____ DATE _____ PERIOD _____

3-6 Study Guide and Intervention

Measurement: Perimeter and Area

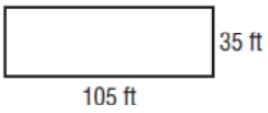
The distance around a geometric figure is called the **perimeter**.

To find the perimeter of any geometric figure, you can use addition or a formula.

The perimeter of a rectangle is twice the length ℓ plus twice the width w.

$$P = 2\ell + 2w$$

Example 1 **Find the perimeter of the figure at right.**



$P = 105 + 105 + 35 + 35$ or 280

The perimeter is 280 inches.

The measure of the surface enclosed by a geometric figure is called the **area**.

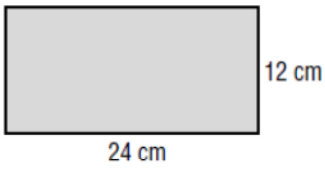
The area of a rectangle is the product of the length ℓ and width w.

$$A = \ell \cdot w$$

Example 2 **Find the area of the rectangle.**

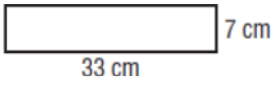
$A = \ell \cdot w$
$= 24 \cdot 12$ or 288

The area is 288 square centimeters.

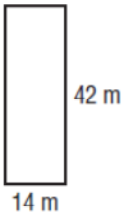


Exercises

Find the perimeter of each figure.

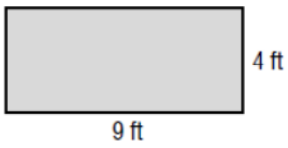
1. 

80 cm

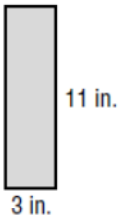
2. 

112 m

Find the perimeter and area of each rectangle.

3. 

26 ft; 36 ft²

4. 

28 in.; 33 in²

5. $\ell = 8$ ft, $w = 5$ ft
26 ft; 40 ft²

6. $\ell = 3.5$ m, $w = 2$ m
11 m; 7 m²

7. $\ell = 8$ yd, $w = 4\frac{1}{3}$ yd
$24\frac{2}{3}$ yd; $34\frac{2}{3}$ yd²

8. $\ell = 29$ cm, $w = 7.3$ cm
72.6 cm; 211.7 cm²