



Homework 13-4

Solving Perimeter and Area Problems

Another Look!

Mrs. Adams is building a sandbox.
What is the area of the sandbox?

You know the perimeter.
You need to find the area.



Perimeter = 50 ft



Width = ?

Length = 10 ft

Step 1

To find the width, w , you can use the perimeter and length information.

Think: What number times 2 is equal to $50 - 10 - 10$?

$$2 \times 15 = 30$$

$$\text{So, } w = 15.$$

Step 2

Now that you have found w , use the area formula.

$$A = \ell \times w$$

$$A = 10 \times 15$$

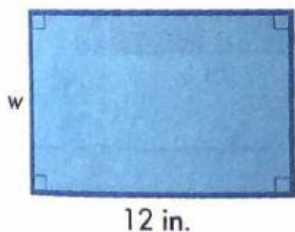
$$A = 150 \text{ square ft}$$

So, the area of the sandbox is 150 square feet.

In 1 through 6, find the area or perimeter.

1. What is the area of the rectangle?

Perimeter = 40 in.



2. What is the perimeter of the rectangle?

Area = 33 sq m



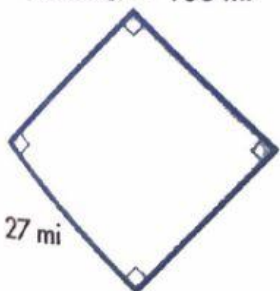
3. What is the perimeter of the square?

Area = 361 sq cm



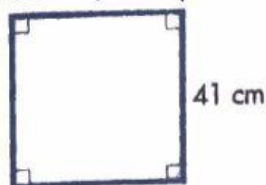
4. What is the area of the square?

Perimeter = 108 mi



5. What is the perimeter of the square?

Area = 1,681 sq cm



6. What is the area of the rectangle?

Perimeter = 70 ft

