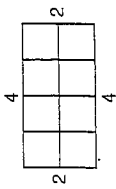


## Explore Perimeter and Area

Perimeter is the distance around a figure.  
Counting the number of units around the outside of a figure will give the perimeter.



Perimeter =  $4 + 2 + 4 + 2 = 12$  units

Area is the number of square units needed to cover a figure.  
Count the number of squares in a figure to find the area.

Area = 8 square units

Use grid paper to draw the figures described in each problem.  
Then find the perimeter and area and record your answers in the table.

Shape	Perimeter	Area
1. Square, length of sides = 3 units	_____ units	_____ square units
2. Rectangle, length of sides = 2 units, 6 units, 2 units, and 6 units	_____ units	_____ square units
3. Square, length of sides = 8 units	_____ units	_____ square units
4. Rectangle, length of sides = 5 units, 6 units, 5 units, and 6 units	_____ units	_____ square units
5. Square, length of sides = 1 unit	_____ units	_____ square units
6. Rectangle, length of sides = 3 units, 7 units, 3 units, and 7 units	_____ units	_____ square units

## Perimeter and Area of Rectangles and Squares

Find the perimeter and the area of each rectangle.

1.  $l = 8$  yd  $w = 10$  yd

2.  $l = 15.6$  m  $w = 12.7$  m

3.  $l = 14$  in.  $w = 14$  in.

4.  $l = 18.5$  cm  $w = 22.6$  cm

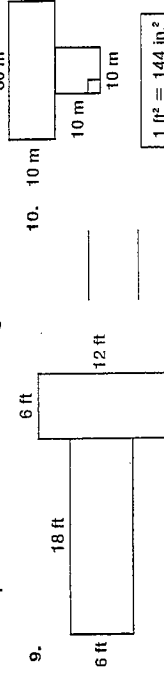
5.  $l = 150$  ft  $w = 240$  ft

6.  $l = 8$  km  $w = 12.4$  km

7.  $l = 18.5$  m  $w = 25.7$  m

8.  $l = 3\frac{1}{2}$  ft  $w = 4\frac{1}{3}$  ft

Find the perimeter and area of each figure.



Use the table on the right for Exercises 11–14.

11.  $35 \text{ ft}^2 =$  \_\_\_\_\_  $\text{in.}^2$

12.  $12 \text{ yd}^2 =$  \_\_\_\_\_  $\text{ft}^2$

13. \_\_\_\_\_  $\text{ft}^2 = 720 \text{ in.}^2$

14.  $25 \text{ yd}^2 =$  \_\_\_\_\_  $\text{ft}^2$

### Test Prep

15. What is the perimeter of a rectangle with a length of 14 meters and a width of 16 meters?

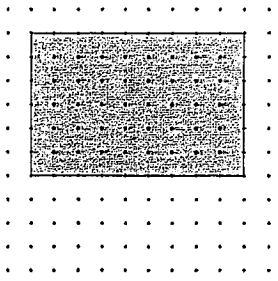
- A 30 m  
B 60 m  
C 224 m  
D Not here

16. A garden measures 14 feet  $\times$  20 feet. Fence is to be placed on all sides but one of the shorter sides. How much fence is needed?

# Perimeter and Area of my Clubhouse

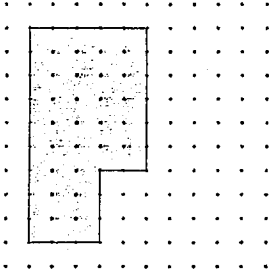
NAME \_\_\_\_\_

My friends and I are making a clubhouse and need to figure out the perimeter (the distance around the walls) and the area (the number of square units inside the figure) of our plans. Please help us figure out the measurements.



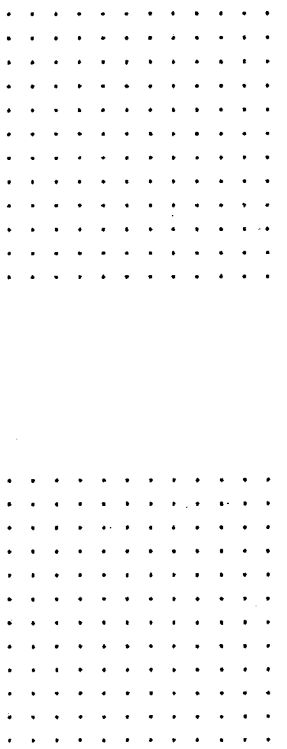
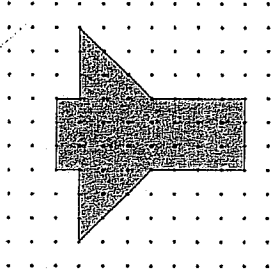
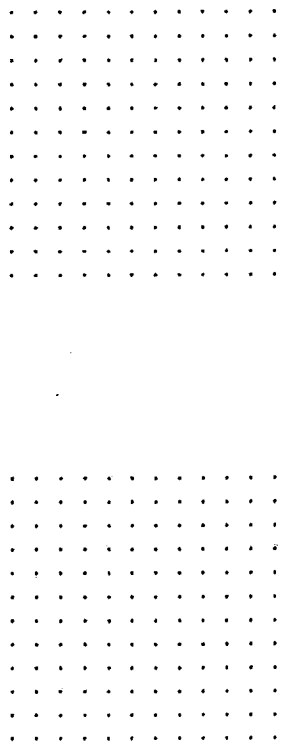
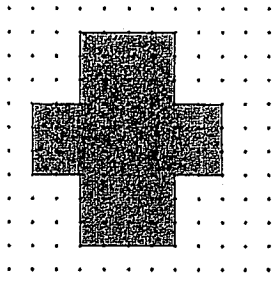
Perimeter: \_\_\_\_\_ Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_ Area: \_\_\_\_\_



Perimeter: \_\_\_\_\_ Area: \_\_\_\_\_

Perimeter: \_\_\_\_\_ Area: \_\_\_\_\_



Now, create several designs for the floor plan of your clubhouse with a geoboard, and record the designs below. Choose the best design, and calculate its perimeter and area.