



## Homework 13-1

### Perimeter

#### Another Look!

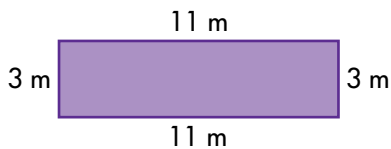
Perimeter is the distance around a figure. When a figure has sides of equal length, you can use multiplication to find the perimeter.



The formula for the perimeter of a rectangle is  $P = (2 \times \ell) + (2 \times w)$ .

$\ell$  is the length of the rectangle.  
 $w$  is the width of the rectangle.

In the figure below,  $\ell = 11$  and  $w = 3$ .



$$P = (2 \times \ell) + (2 \times w)$$

$$P = (2 \times 11) + (2 \times 3)$$

$$P = 22 + 6$$

$$P = 28 \text{ m}$$

The formula for the perimeter of a square is  $P = 4 \times s$ .

$s$  is the length of one side of the square.

In the figure below,  $s = 6$ .

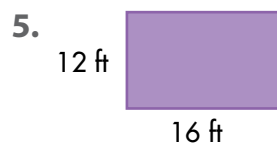
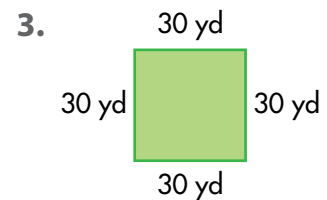
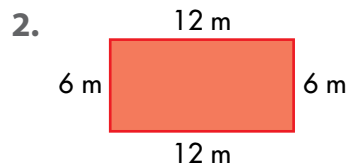
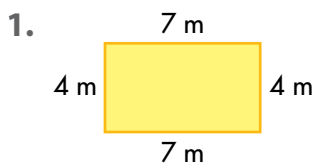


$$P = 4 \times s$$

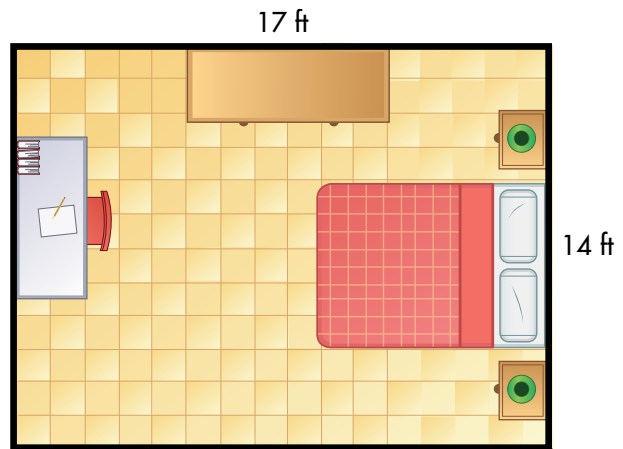
$$P = 4 \times 6$$

$$P = 24 \text{ ft}$$

In **1** through **6**, use a formula to find the perimeter. Use estimation to check the reasonableness of your solution.




7. **Analyze Information** Jody wants to put a wallpaper border around the walls of her bedroom. The border will go along the top of the walls, staying above the door and windows. How many feet of border will she need?



8. **Reason** A square is 8 inches along each side. A rectangle is 6 inches wide and 10 inches long. Which shape has the greater perimeter? Explain.

9. **★** Daryl drew a square with a side length equal to 4 inches. Larry drew a square with a side length equal to 5 inches. What is the difference between the two perimeters?

- A 12 inches
- B 8 inches
- C 4 inches
- D 2 inches

10. **Personal Financial Literacy** Trevor  earns \$6 for each meter of fishing net he repairs. He repaired 250 centimeters of net on Friday and 450 centimeters on Saturday. How much money did he earn? Explain.

11. **Check for Reasonableness** Clark says a rectangle with a length of 309 cm and a width of 249 cm has a perimeter of 1,500 cm. Do you agree? Explain.

12. **Extend Your Thinking** The perimeter of a rectangle is 50 inches. The width of the rectangle is 10 inches. What is the length of the rectangle?

