

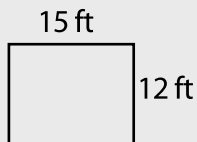
25

Perimeter

3.C.1.a

Example

Heather is going to put a border around the walls of her bedroom. She needs to find the room's perimeter to determine how much border to buy. Her room is shown below.

**Part A**

What is the room's perimeter?

54 feet

Part B

Use what you know about perimeter to explain why your answer is correct. Use words, numbers, and/or symbols in your explanation.

I found the sum of the length + width: $15\text{ ft} + 12\text{ ft} = 27\text{ ft}$. Then

I multiplied the sum by 2, since the perimeter is the sum of twice the length and twice the width:

$27\text{ ft} \times 2 = 54\text{ ft}$.

Review

Perimeter is the distance *around* the outside of a figure. To find the perimeter, add the lengths of the figure's sides.

To find the perimeter of a **rectangle**, use the formula $P = 2l + 2w$, which means to double the length and add that sum to double the width.

To find the perimeter of a **regular polygon**, such as a **square**, multiply the length of one of the sides by the number of sides.

Thinking It Through

Skim Make sure you read the labels in the diagram. It tells you which units to use.

To find the perimeter of a rectangle, double the length and add it to double the width:

$$P = 2l + 2w$$

$$P = (2 \times 15\text{ ft}) + (2 \times 12\text{ ft})$$

$$P = 30\text{ ft} + 24\text{ ft}$$

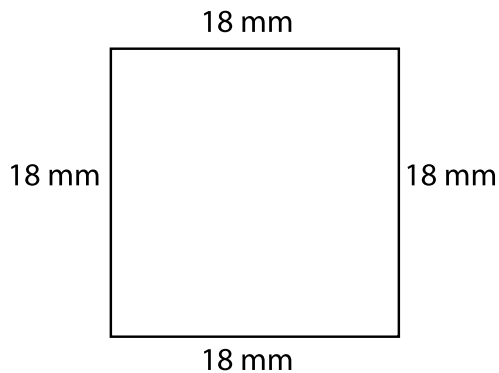
$$P = 54\text{ ft}$$

The perimeter is 54 feet.

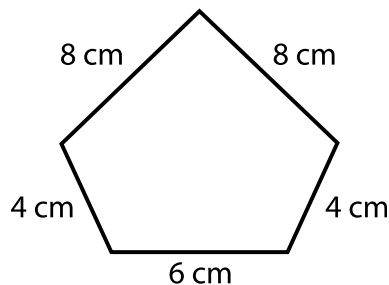
Perimeter

Directions: Mark the circle with the letter of the best answer.

- 1 What is the perimeter of the figure below?



- (A) 36 millimeters
 (B) 54 millimeters
 (C) 72 millimeters
 (D) 90 millimeters
- 2 What is the perimeter of the figure below?



- (F) 26 centimeters
 (G) 30 centimeters
 (H) 36 centimeters
 (J) 40 centimeters

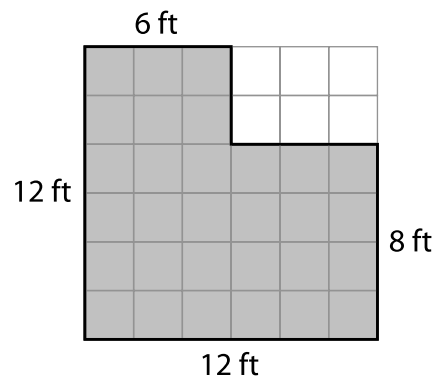
- 3 Ms. Fingers is erecting a fence for a dog run. The fence will be rectangular. It is 24 yards long and 15 yards wide. How much fencing will Ms. Fingers need to buy?

- (A) 30 yards
 (B) 39 yards
 (C) 48 yards
 (D) 78 yards



You can make a drawing if it helps you to see the solution to the problem.

- 4 What is the perimeter of the shaded figure below?



- (F) 38 feet
 (G) 42 feet
 (H) 44 feet
 (J) 48 feet