

Math by Design Hint Pages

Finding the Perimeter of a Polygon

Windjammer Center, 3 R's Subtask 3: How many students will fit in the gazebo?

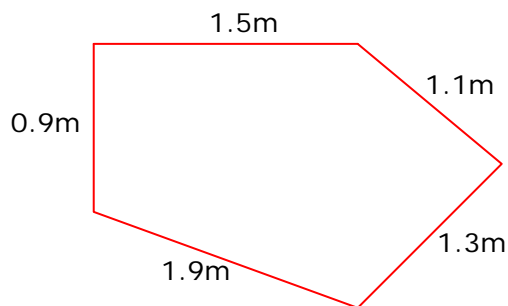
Vocabulary:

The **perimeter** of a polygon is the measurement of the polygon.

Think of it as the border of the figure. The **perimeter** is the combined lengths of the sides of the polygon.

You can find the **perimeter** by *adding the lengths of all the sides*.

Example 1: Andrea has a flower bed in the shape shown below. Find the perimeter of the flower bed.



Find the **sum of the lengths of the sides**:

$$P = 1.5\text{m} + 1.1\text{m} + 1.3\text{m} + 1.9\text{m} + 0.9\text{m}$$
$$P = 6.7\text{m}$$

Answer: The perimeter of the polygon is 6.7 meters.

Example 2: Andrea wants to place bricks along the border of the flower bed. If each brick is 20 cm long, about how many bricks will Andrea need?

Each brick is 20 cm long. One meter = 100 cm so each brick is 0.2m long. The perimeter of the flower bed (from Example 1) is 6.7 meters.

$$\frac{6.7\text{m}}{0.2\text{m/brick}} = 33.5 \text{ bricks}$$

Answer: Andrea needs about 34 bricks to place along the border of the flower bed.