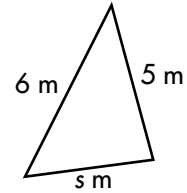


Name \_\_\_\_\_

# Perimeter and Unknown Side Lengths

When you know the perimeter of a polygon and the lengths of all but one side, you can find the length of the unknown side.

The perimeter of the triangle is 14 meters. Another way to write the perimeter is by adding the lengths of its sides.



$$5 + 6 + s = \text{perimeter}$$

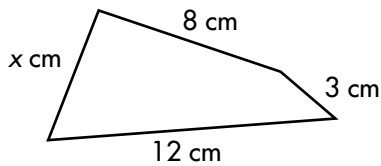
$$\text{So, } 5 + 6 + s = 14$$

$$11 + s = 14$$

Since  $11 + 3 = 14$ ,  $s = 3$  and the length of the unknown side is 3 meters.

Find the length of the missing side for each polygon so it has the perimeter given. Write an equation for each.

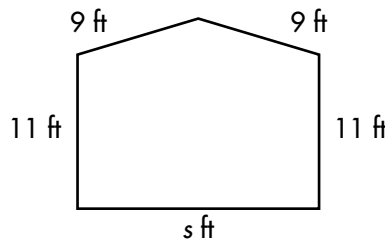
1. perimeter = 29 cm



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\_\_\_\_\_

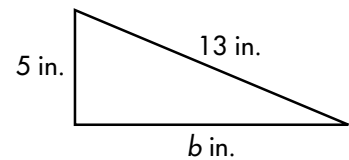
2. perimeter = 55 ft



\_\_\_\_\_

\_\_\_\_\_

3. perimeter = 30 in.



\_\_\_\_\_

\_\_\_\_\_

4. A square has a perimeter of 36 centimeters. What is the length of each side? Explain your answer.

\_\_\_\_\_

\_\_\_\_\_

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