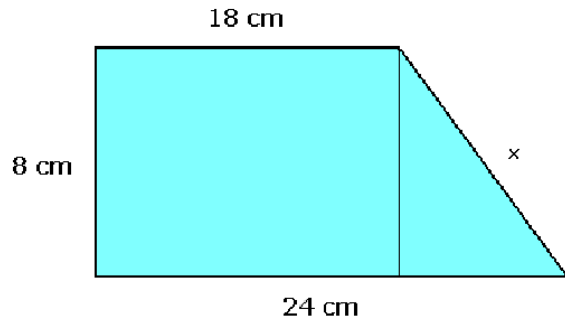


MATC9 Ch2.4 Key Concepts 3 Perimeters of Composite Figures Worked Example

Example: Find the perimeter of the figure shown.

Solution: Divide the figure into a rectangle 8 cm by 18 cm, and a triangle with a base of 6 cm and a height of 8 cm. Use the Pythagorean theorem to find the length of the side x .



$$x^2 = 6^2 + 8^2$$

$$x^2 = 100$$

$$x = \sqrt{100}$$
$$= 10 \text{ cm}$$

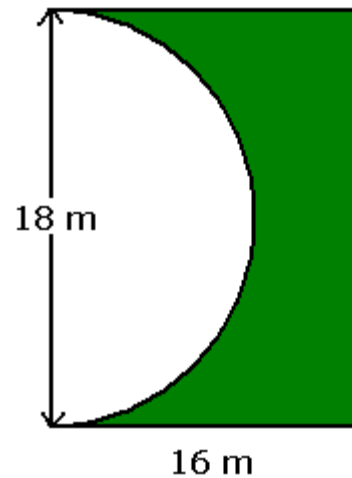
Add the lengths of the four sides of the figure to find the perimeter.

$$P = 8 + 18 + 10 + 24$$
$$= 60 \text{ cm}$$

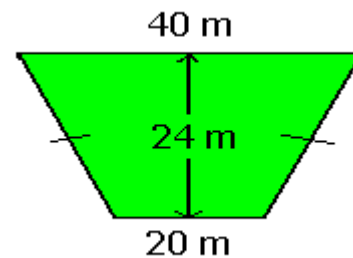
The perimeter of the figure is 60 cm.

Practice:

1. Rohinton built a semi-circular patio in his back yard, as shown. Find the perimeter of the lawn.



2. Elin purchased an irregular piece of farmland as shown. Find the perimeter of the piece.



Answers: 1. 78.3 m 2. 112 m