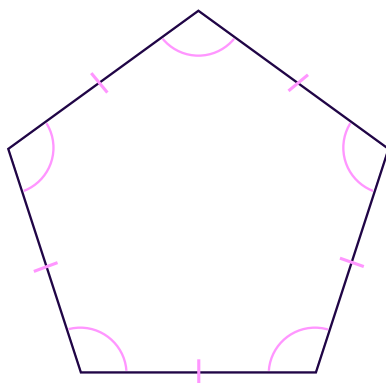


Maths: Angles in Polygons

Worksheet | Answers

Know the names and properties of regular polygons

1. The image shows a **regular** pentagon. The perimeter of the shape is 1.8 metres.

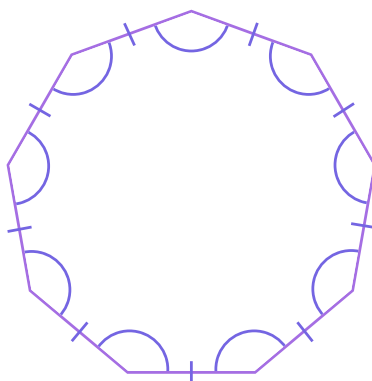


What is the length of each side of the shape in centimetres?

$$1.8 \text{ m} = 180 \text{ cm}$$

$$180 \div 5 = 36 \text{ cm}$$

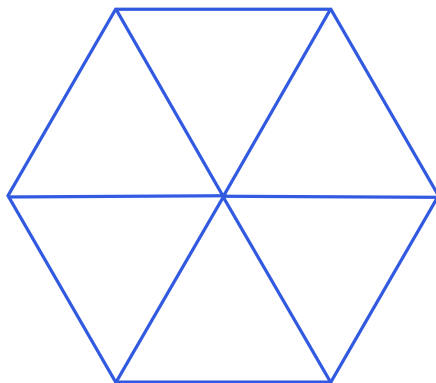
2. The image shows a regular nonagon with side length 12 cm.



What is the perimeter of the shape shown?

$$12 \times 9 = 108 \text{ cm or } 1.08 \text{ m}$$

3. A regular hexagon is constructed using 6 equilateral triangles as shown. Each triangle has a perimeter of 12 cm.

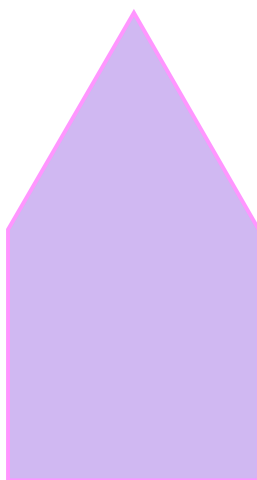


What is the perimeter of the hexagon?

$$\text{Side length of triangle} = 12 \text{ cm} \div 3 = 4 \text{ cm}$$

$$\text{Perimeter of hexagon} = 4 \text{ cm} \times 6 = 24 \text{ cm}$$

4. The image shows a compound shape made up of a square, with side length 14cm, and an equilateral triangle.



What is the perimeter of the shape?

$$\text{Both the square and triangle must have side length } 14 \text{ cm}$$

$$14 \text{ cm} \times 5 = 70 \text{ cm}$$

5. Complete the sentence:

A regular polygon is a **2D** shape made up of **straight lines** which has **equally sized lengths** and **equally sized angles**.