

Summer Term Maths Year 10

Length of an Arc

Day 4

Week 4

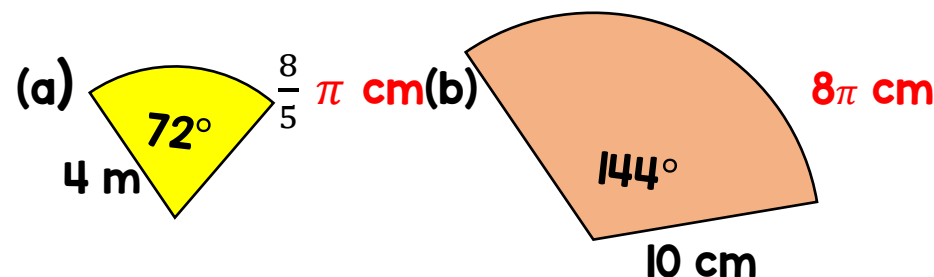
- 1** The circles below have a circumference of 60 cm. Find the lengths of the arcs.



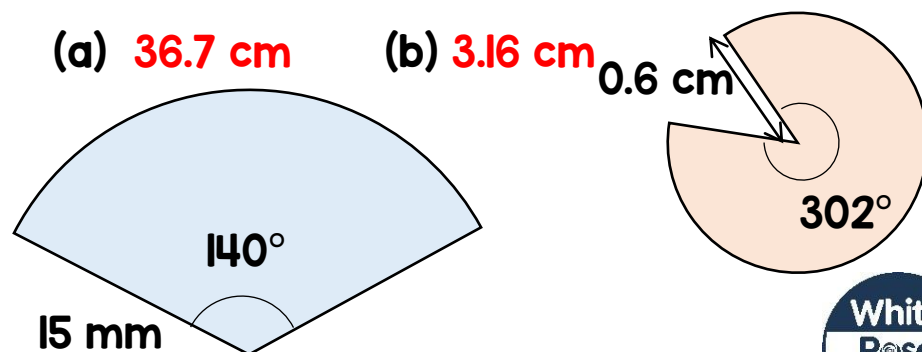
- 2** Fill in the blanks giving your answer in terms of π where appropriate.

Angle at centre	Circumference	Arc Length
60°	72π	12π
270°	72π	54π
240°	45π	30π
240°	90π	60π

- 3** Find the lengths of the arcs below in terms of π .



- 4** Find the lengths of the arcs below giving your answer to 3 significant figures.



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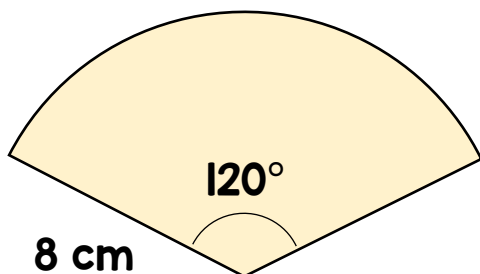
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- 5 Find the perimeter of this sector.

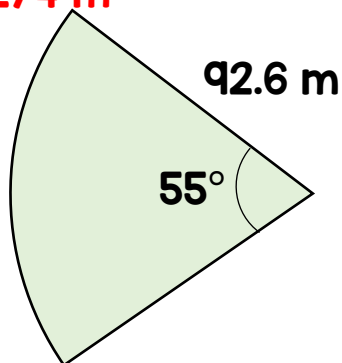
Give your answer in terms of pi. $\frac{16}{3}\pi + 16$

cm



- 6 Find the perimeter of this sector.

Give your answer to a suitable degree of accuracy. 274 m

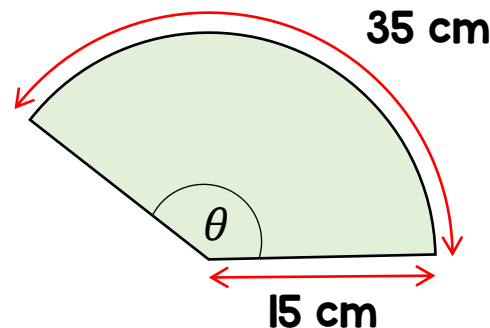


- 7 A sector has arc length of 8 cm.

The angle subtended by the radius is 62°

Find the radius of the circle. 7.4 cm

- 8 Find the angle marked θ . 134°



- 9 Write an expression for the perimeter of this shape? The length of the rectangle is twice the width.

$$5x + \frac{3}{4}\pi x$$

