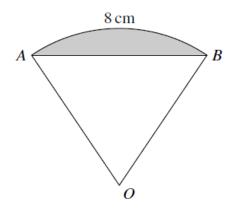
<u>Circular Measure – 2022 AS Nov</u>

1. Nov/2022/Paper_9709_11/No.5

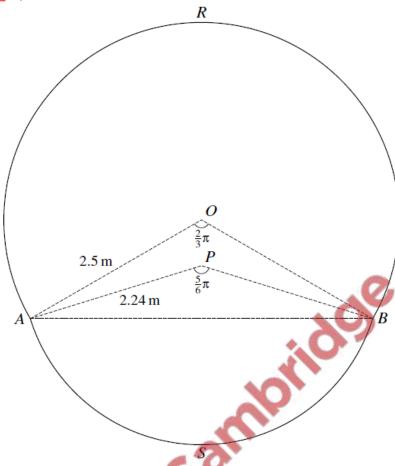


The diagram shows a sector OAB of a circle with centre O. The length of the arc AB is 8 cm. It is given that the perimeter of the sector is 20 cm.

Find the perimeter of the shaded segment.	[4]
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2. Nov/2022/Paper_9709_12/No.10



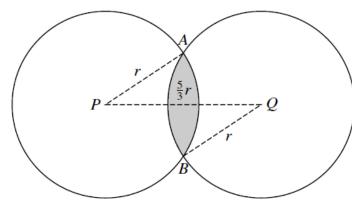
The diagram shows a cross-section *RASB* of the body of an aircraft. The cross-section consists of a sector *OARB* of a circle of radius 2.5 m, with centre O, a sector *PASB* of another circle of radius 2.24 m with centre P and a quadrilateral OAPB. Angle $AOB = \frac{2}{3}\pi$ and angle $APB = \frac{5}{6}\pi$.

Find the perimeter of the cross-section <i>RASB</i> , giving your answer correct to 2 decimal places	5.
	[3]

(b)	Find the difference in area of the two triangles <i>AOB</i> and <i>APB</i> , giving your answer correct to 2 decimal places. [2]
(c)	Find the area of the cross-section <i>RASB</i> , giving your answer correct to 1 decimal place. [3]
(0)	1 and the area of the cross-section <i>KASB</i> , giving your answer correct to 1 decimal place.
	C

3. Nov/2022/Paper_9709_13/No.8

(a)



The diagram shows two identical circles intersecting at points A and B and with centres at P and Q. The radius of each circle is r and the distance PQ is $\frac{5}{3}r$.

Find the perimeter of the shaded region in terms of r .	
	NO.
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Co	
100%	
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Find the area of the shaded region in terms of 7.	[3]
100	