

10.

May 04 3H

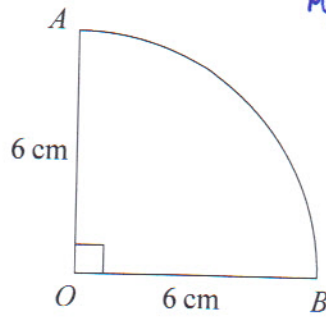


Diagram **NOT** accurately drawn

Leave blank

The diagram shows a shape.
 AB is an arc of a circle, centre O .
Angle $AOB = 90^\circ$.
 $OA = OB = 6$ cm.

Calculate the perimeter of the shape.
Give your answer correct to 3 significant figures.

..... cm

(Total 4 marks)

Q10

Leave blank

15. Work out the area of the shaded sector of the circle.
Give your answer correct to 3 significant figures.

Nov 07 3H

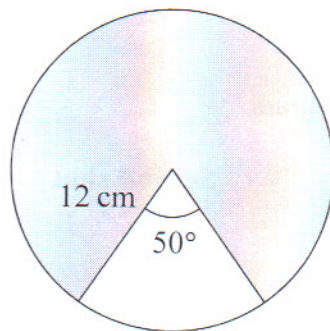


Diagram **NOT** accurately drawn

..... cm²

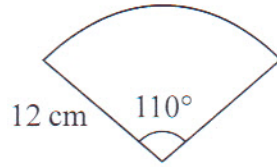
(Total 4 marks)

Q15

15. A fan is shaped as a sector of a circle, radius 12 cm, with angle 110° at the centre.

May 05 4H

Diagram **NOT** accurately drawn



(a) Calculate the area of the fan.

..... cm^2
(2)

Another fan is shaped as a sector of a circle, radius r cm, with angle 120° at the centre.

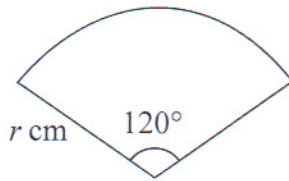


Diagram **NOT** accurately drawn

(b) Show that the total perimeter of this fan is $\frac{2}{3}r(3 + \pi)$ cm.

(3)

Q15

(Total 5 marks)



NOV 08 34

19.

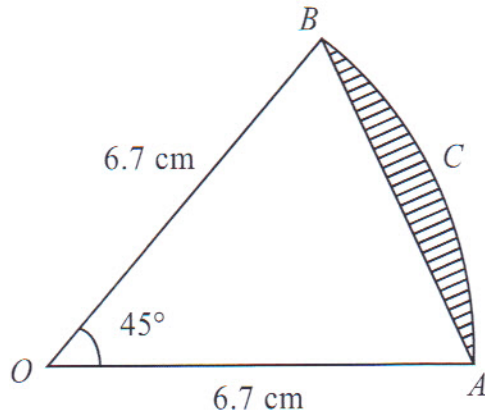


Diagram **NOT** accurately drawn

AB is a chord of a circle, centre O .
 ACB is an arc of the circle.
 $OA = OB = 6.7$ cm.
 Angle $AOB = 45^\circ$.

Calculate the area of the shaded segment.
 Give your answer correct to 3 significant figures.

..... cm²
 (Total 5 marks)

Q19



18. In the diagram, a sector of a circle of radius 12 cm is shaded. The area of the sector is $112\pi\text{cm}^2$. Calculate the value of x .

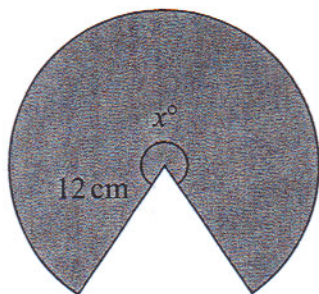


Diagram NOT accurately drawn

$x = \dots\dots\dots$

(Total 4 marks)

Q18

17.

NOV 06 4H

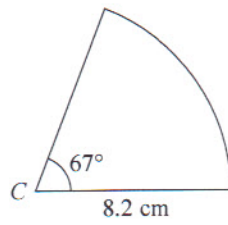


Diagram NOT accurately drawn

The diagram shows a sector of a circle, centre C .
 The radius of the circle is 8.2 cm.
 The angle at the centre of the circle is 67° .

Calculate the area of the sector.
 Give your answer correct to 3 significant figures.

..... cm²

Q17

(Total 3 marks)

19.

May 09 3H

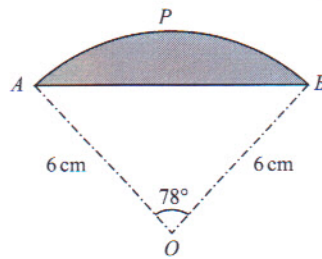


Diagram NOT accurately drawn

The diagram shows a sector $OAPB$ of a circle, centre O .
 AB is a chord of the circle.
 The radius of the circle is 6 cm.
 Angle $AOB = 78^\circ$.

Calculate the perimeter of the shaded segment APB .
 Give your answer correct to 3 significant figures.

Leave blank

..... cm

Q19

(Total 6 marks)

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20.

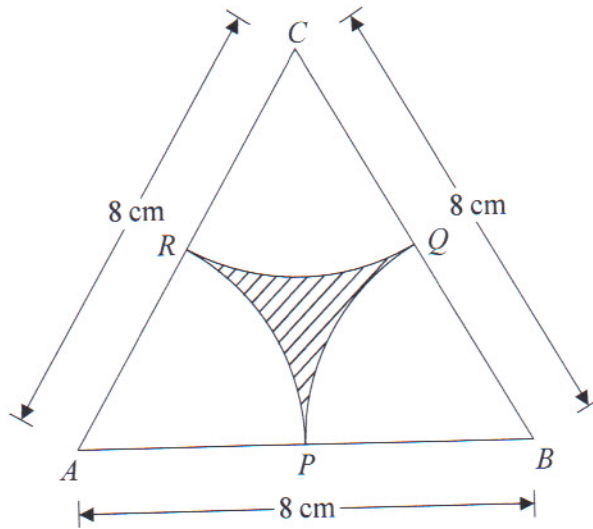


Diagram **NOT** accurately drawn

ABC is an equilateral triangle of side 8 cm .
 With the vertices A , B and C as centres, arcs of radius 4 cm are drawn to cut the sides of the triangle at P , Q and R .
 The shape formed by the arcs is shaded.

- (a) Calculate the perimeter of the shaded shape.
 Give your answer correct to 1 decimal place.

..... cm
 (3)

- (b) Calculate the area of the shaded shape.
Give your answer correct to 1 decimal place.

Nov 04 4H
Q20 cont

Leave
blank

..... cm²
(4)

Q20

(Total 7 marks)