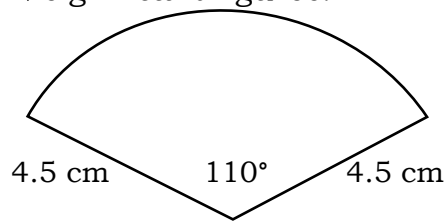
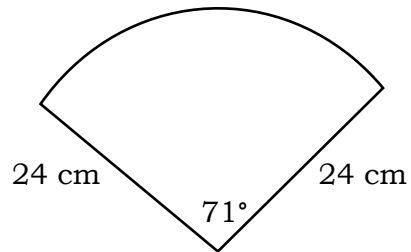


## SECTORS AND ARCS – PRACTICE QUESTIONS

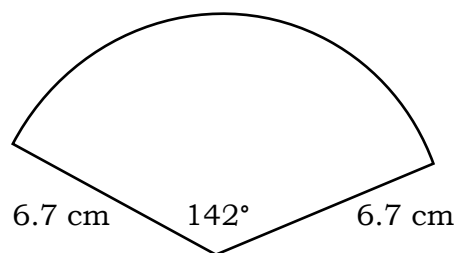
1.  
Find the area of the sector, to 2 significant figures.



2.  
Find the area of the sector, to 3 significant figures.

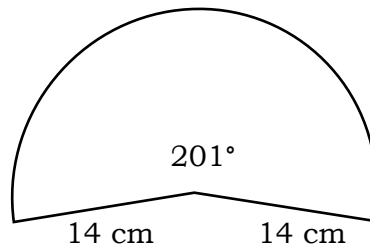


3.  
Find the area of the sector, to the nearest square centimetre.



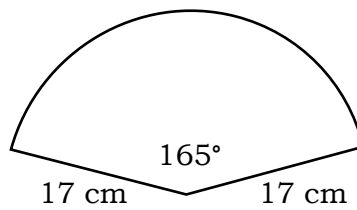
4.

Find the length of the arc, to 1 decimal place.



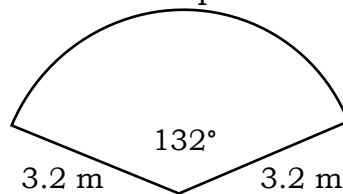
5.

Find the length of the arc, to 3 significant figures.



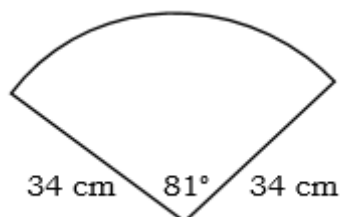
6.

Find the perimeter of the sector, to 1 decimal place.



7.

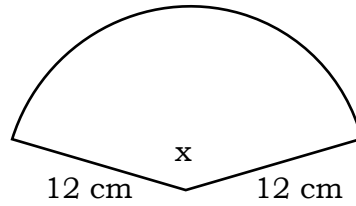
Find the perimeter of the sector, to 3 significant figures.



8.

The area of the sector below is  $198 \text{ cm}^2$ .

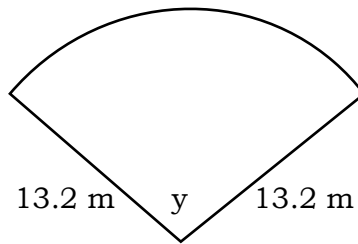
Find the size of angle  $x$ , to the nearest degree.



9.

The sector below has an arc length of 26.6 metres.

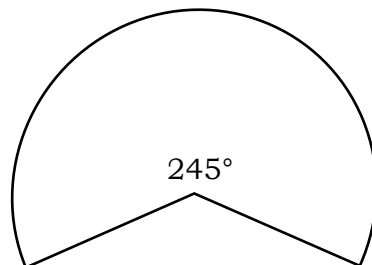
Find the size of angle  $y$ , to 3 significant figures.



10.

The area of the sector below is  $307 \text{ cm}^2$ .

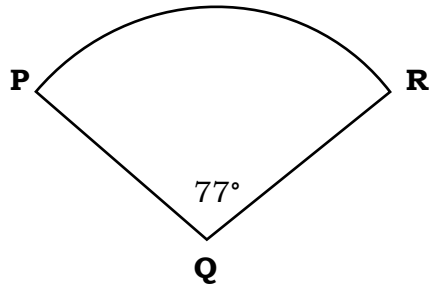
Find the radius of the sector, to 3 significant figures.



11.

The length of the arc PR is 58 cm.

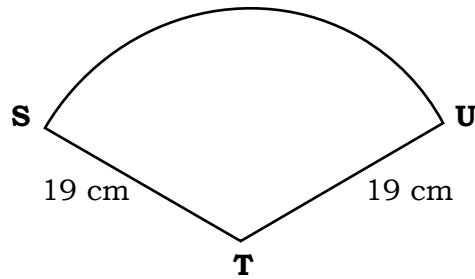
Find the length of PQ, to 2 significant figures.



12.

The area of the sector STU is 456 cm<sup>2</sup>.

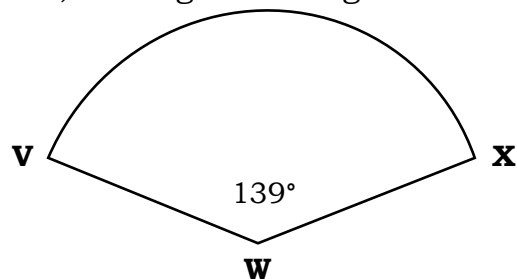
Find the length of the arc SU, to 2 significant figures.



13.

The length of the arc VX is 79 cm.

Find the area of the sector VWX, to 3 significant figures.

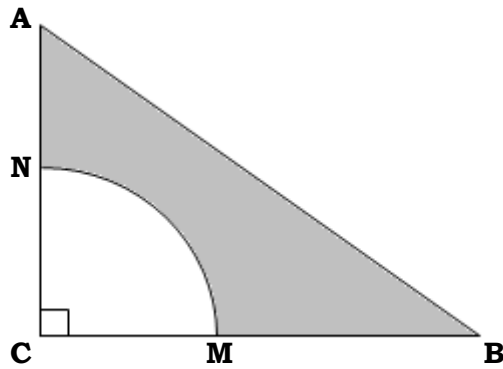


14.

NMC is a sector of a circle which has radius 5 cm.

AN = 3.5 cm and MB = 6.4 cm.

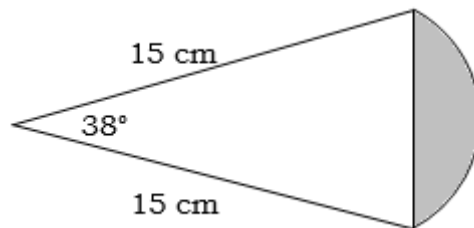
Find the area of the shaded region, to the nearest square centimetre.



15.

The shape below is a sector of a circle.

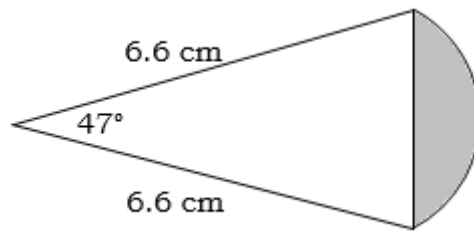
Find the area of the shaded region, to 3 significant figures.



16.

The shape below is a sector of a circle.

Find the area of the shaded region, to 3 significant figures.



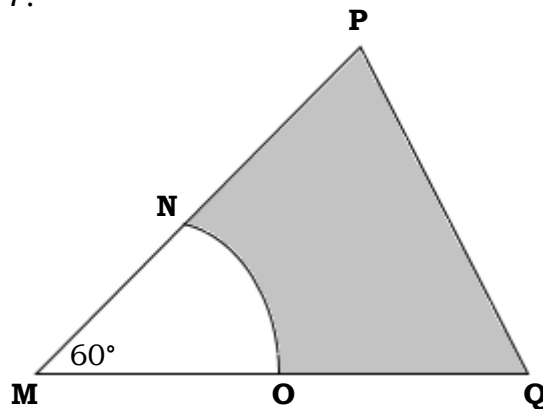
17.

Pictured below is a sector MNO contained within a scalene triangle MPQ.

The radius of the sector is 6 cm.

The ratio of MN : NP is 2 : 3.

The ratio of MO : OQ is 6 : 7.



Find the area of the shaded region, to 3 significant figures.