

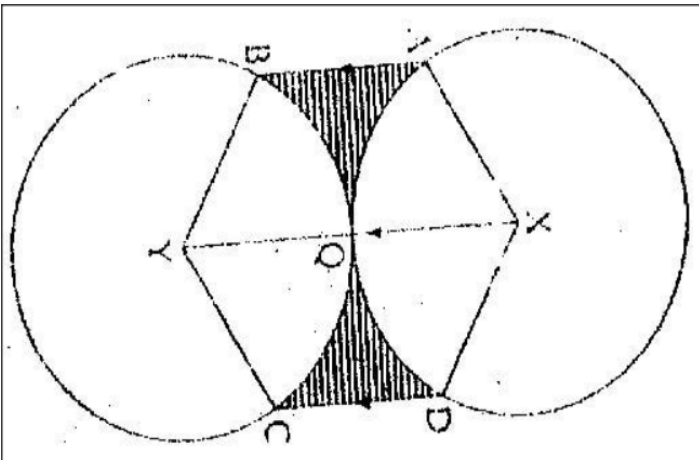
AREA PART OF A CIRCLE

REVISION KIT

An arc 11 cm long, subtends an angle of 70° at the centre of a circle. Calculate the length, correct to one decimal place, of a chord that subtends an angle of 90° at the centre of the same circle.

A minor arc of a circle subtends an angle of 105° at the centre of the circle. If the radius of the circle is 8.4 cm, find the length of the major arc (Take $\pi = 22/7$).

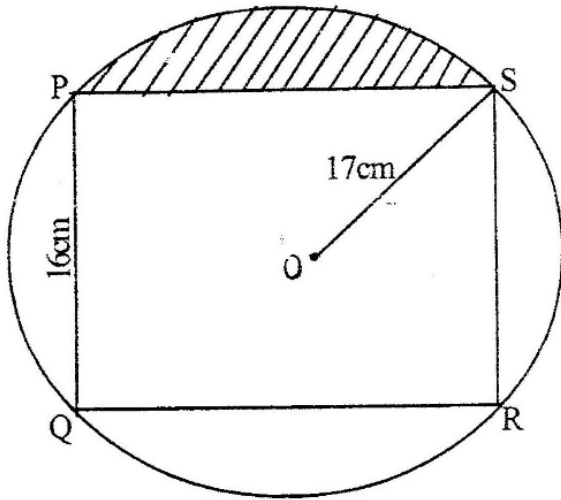
The figure below shows two circles each of radius 7cm, with centers at X and Y. The circles touch each other at point Q



Give that $\angle AXD = \angle BYC = 120^\circ$ and lines AB, XQY and DC are parallel, calculate the area of:

- Minor sector XAQD (Take $\pi = 22/7$)
- The shaded regions.

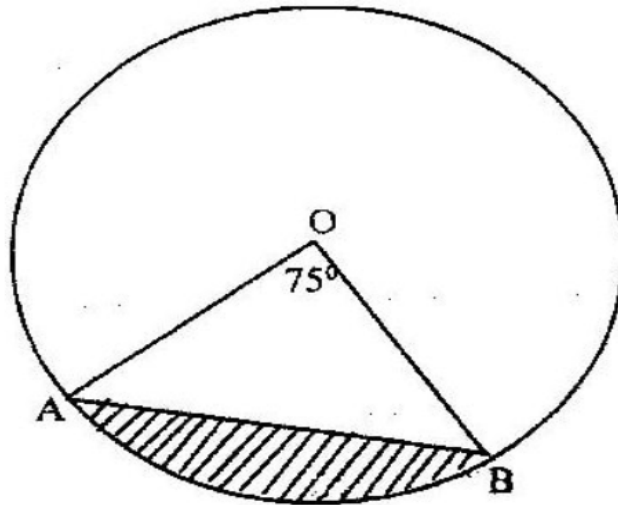
The figure below represents a rectangle PQRS inscribed in a circle centre O and radius 17cm . PQ = 16 cm.



Calculate

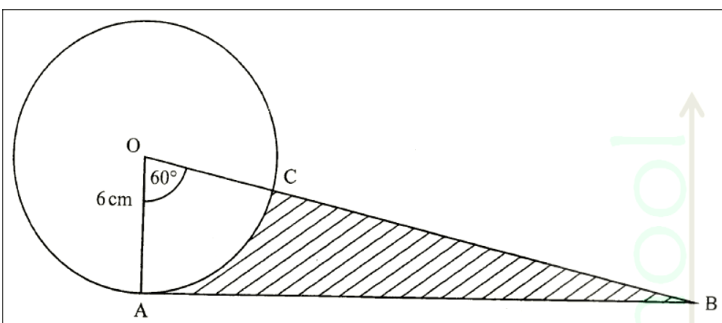
- The length PS of the rectangle
- The angle POS
- The area of the shaded region

THE FIGURE BELOW REPRESENTS A CIRCLE A DIAMETER 28 CM WITH A SECTOR SUBTENDING AN ANGLE OF 75° AT THE CENTRE.



Find the area of the shaded segment to 4 significant figures

In the figure below, AB is a tangent to the circle, centre O and radius 6 cm. The arc AC subtends an angle of 60° at the centre of the circle.



Calculate the area of the shaded region, correct to 1 decimal place.