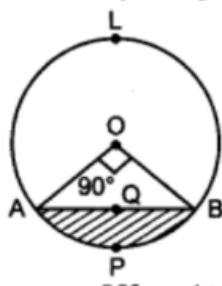


## Chapter-Areas Related to Circles

Q1.

In figure, is a chord AB of a circle, with centre O and radius 10 cm, that subtends a right angle at the centre of the circle. Find the area of the minor segment AQB. Hence, find the area of major segment ALBQA

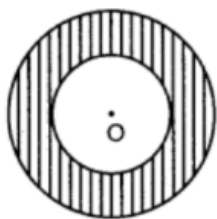


Q2.

Find the area of the minor segment of a circle of radius 14 cm, when its central angle is  $60^\circ$ . Also find the area of the corresponding major segment

Q3.

In the given figure, the area of the shaded region between two concentric circles is  $286 \text{ cm}^2$ . If the difference of the radii of the two circles is 7 cm, find the sum of their radii.



Q4.

In a circle of radius 21 cm, an arc subtends an angle of  $60^\circ$  at the centre. Find

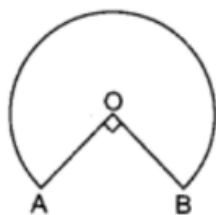
1. the length of the arc
2. area of the sector formed by the arc.

Q5.

A chord of length 10 cm divides a circle of radius  $5\sqrt{2}$  cm in two segments. Find the area of the minor segment

Q6.

In the given figure, the shape of the top of a table is that a sector of a circle with centre O and  $\angle AOB = 90^\circ$ . If  $AO = OB = 42$  cm, then find the perimeter of the top of the table



Q7.

A chord of a circle of radius 21 cm subtends an angle of  $60^\circ$  at the centre. Find the area of the corresponding minor segment of the circle

Q8.

- Find the area of the sector of a circle of radius 6 cm whose central angle is  $30^\circ$ . (Take  $\pi = 3.14$ )

Q9.

What is the perimeter of the sector with radius 10.5 cm and sector angle  $60^\circ$ .

Q10.

A chord of a circle of radius 10 cm subtends a right angle at the centre. Find area of minor segment.  
( $\pi = 3.14$ )