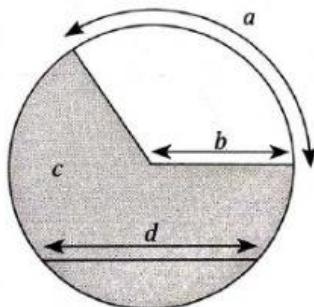


Revision

Chapter 5 – Circles

1. Match the parts of circle with their correct names based on the diagram below.



[4 marks]

Answer:

a

Circumference

b

Arc

c

Chord

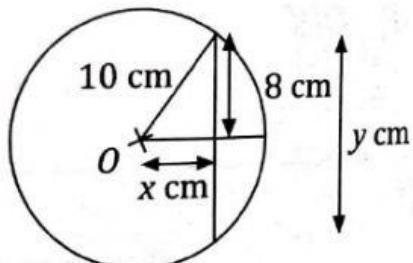
d

Radius

Sector

Semicircle

2. O is the centre of circle. Find the values of x and y.



$$x = \sqrt{10^2 - 8^2}$$

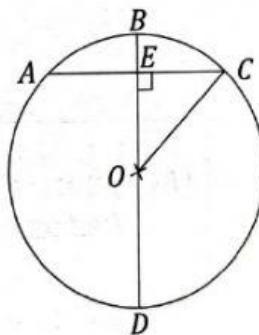
$$= \sqrt{$$

$$= \boxed{\quad} \text{ cm}$$

$$y = 2x \boxed{\quad}$$

$$= \boxed{\quad} \text{ cm}$$

3. The following diagram shows a circle with centre O and radius 13cm. AEC and BEOD are straight lines.



Given AEC = 24cm, find the length, in cm of DOE.

$$\begin{aligned} EC &= \frac{1}{2} \times \boxed{} \\ &= \boxed{} \text{ cm} \end{aligned}$$

$$\begin{aligned} EO &= \sqrt{\boxed{}^2 - \boxed{}^2} \\ &= \sqrt{\boxed{}} \\ &= \boxed{} \text{ cm} \end{aligned}$$

$$\begin{aligned} DOE &= OD + EO \\ &= \boxed{} + \boxed{} \\ &= \boxed{} \text{ cm} \end{aligned}$$

4. Calculate the circumference of the circles.

Given radius = 9cm [$\pi = 3.142$]

$$\text{Circumference} = 2\pi r$$

$$= 2 \times 3.142 \times \boxed{}$$

$$= \boxed{} \text{ cm}$$

5. Calculate the area of the circle.

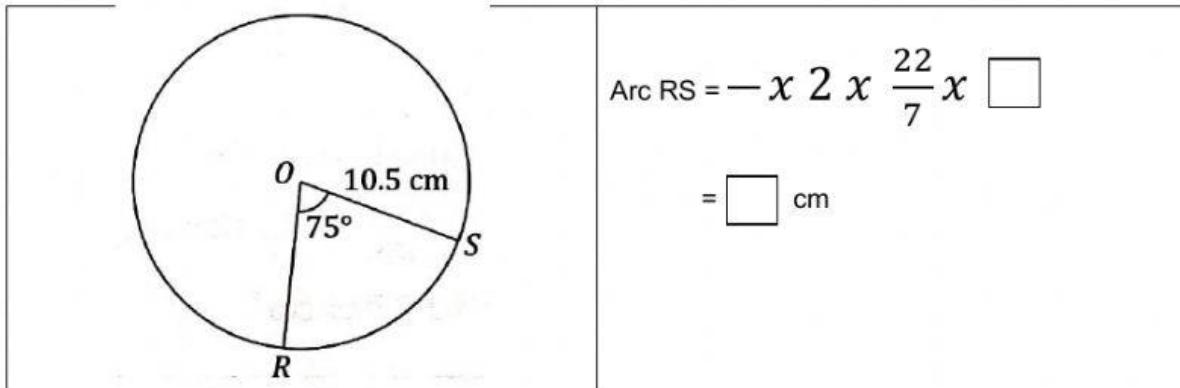
Given radius = 14 cm [$\pi = \frac{22}{7}$]

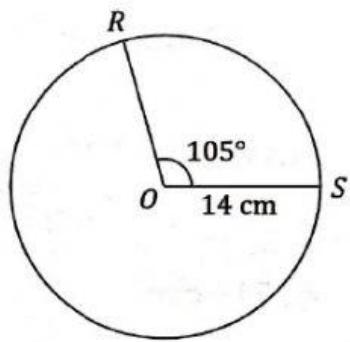
$$\text{Area} = \pi r^2$$

$$= \pi \times \boxed{}^2$$

$$= \boxed{} \text{ cm}^2$$

6. Calculate the length, in cm of the following arc RS. Give your answer correct to two decimal places. [$\pi = \frac{22}{7}$]

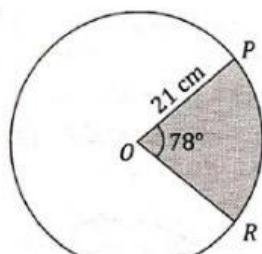




$$\text{Arc RS} = -x 2 \times \frac{22}{7} x \boxed{}$$

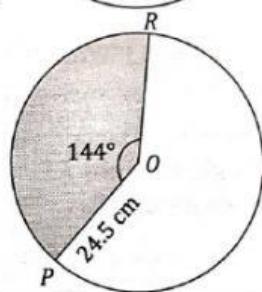
$$= \boxed{} \text{ cm}$$

5. Calculate the area, in cm^2 of the following sector POR. Give your answer correct to one decimal place. $[\pi = \frac{22}{7}]$



$$\text{Area sector POR} = -x \frac{22}{7} x$$

$$= \boxed{} \text{ cm}^2$$



$$\text{Area sector POR} = -x \frac{22}{7} x$$

$$= \boxed{} \text{ cm}^2$$