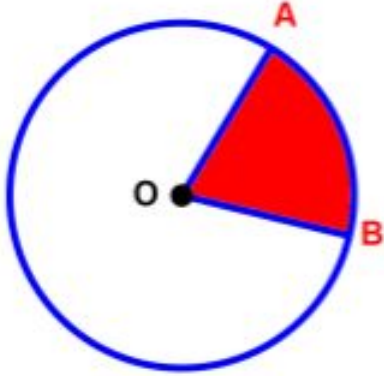


Area of a Circular Sector



The circular sector is in red.

Point O is the center of the circle in black.

The central angle for the circular sector is $\angle AOB$.

There are 360° in a full circle.

To find the area of the sector, we also need to know the area of the full circle.

T

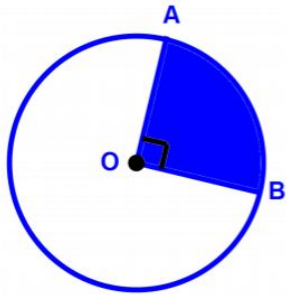
Formula for Sector Area

— — —

$$\frac{A_{\text{Sector}}}{A_{\text{Circle}}} = \frac{m\angle AOB}{360^\circ} \quad \text{or} \quad \frac{A_{AOB}}{A_{\text{Circle}}} = \frac{m\angle AOB}{360^\circ}$$

Example #1

— — —



$$A_{\text{Circle}} = 628\text{cm}^2$$

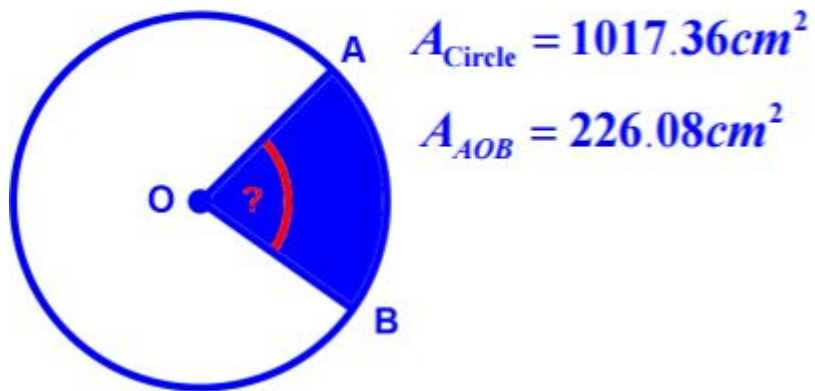
First, we state the information given in the question.

$$A_{\text{Circle}} = 628\text{cm}^2 \quad m\angle AOB = 90^\circ$$

Example #2

— — —

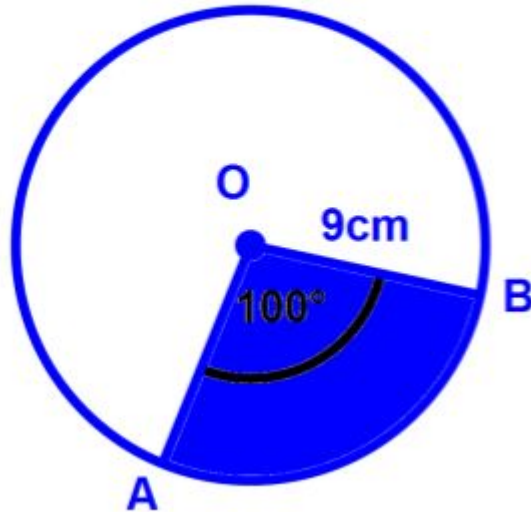
1. Given the circle and the information below, calculate $m\angle AOB$.



Example #3

— — —

Given the information in the circle below, calculate the area of sector AOB.



Example #4

— — —

Calculate the area of the following shape.

