

# ONLINE MATHS CLASS - X - 16 ( 27 / 07 /2021 )

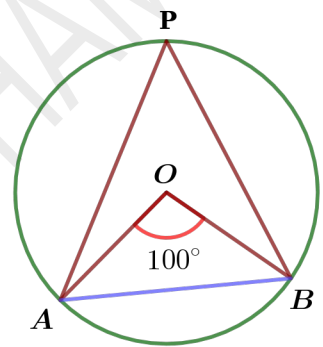
## 2 . CIRCLES – CLASS - 4 - WORKSHEET

### Important point

➤ If we joining the ends of a chord other than a diameter to any point on the larger part of the circle , we get an angle which is half the size of the angle , we get by joining them to the centre of the circle .

1. In the figure  $O$  is the centre of the circle and  $AB$  is a chord on it

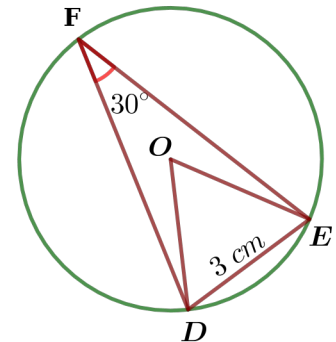
If  $\angle AOB = 100^\circ$  , what is the measure of  $\angle APB$  ?



2. In the figure  $O$  is the centre of the circle and  $DE$  is a chord on it

$\angle DFE = 30^\circ$  ,  $DE = 3$  cm

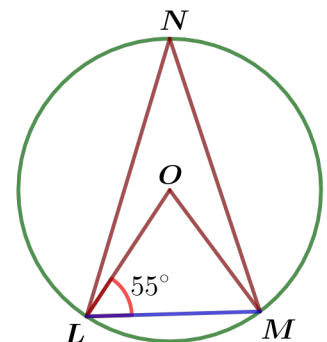
- What is the measure of  $\angle DOE$  ?
- What is the measure of  $\angle ODE$  ?
- What is the perimeter of the circle ?



3. In the figure  $O$  is the centre of the circle and  $LM$  is a chord on it.

$\angle OLM = 55^\circ$

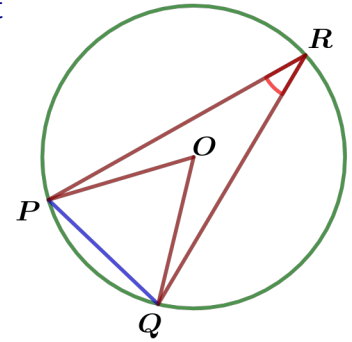
- What is the measure of  $\angle OML$  ?
- What is the measure of  $\angle LOM$  ?
- What is the measure of  $\angle LNM$  ?



4. In the figure  $O$  is the centre of the circle and  $PQ$  is a chord on it

$$OP = OQ$$

- a) What is the measure of  $\angle POQ$  ?
- b) What is the measure of  $\angle PRQ$  ?



5. In the figure  $O$  is the centre of the circle and  $XY$  is a chord on it .

$$\angle OXZ = 35^\circ, \angle OYZ = 25^\circ$$

- a) What is the measure of  $\angle XZY$  ?
- b) What is the measure of  $\angle XOY$  ?
- c) What is the measure of  $\angle OXY$  ?

( Hint : Join  $OZ$  )

