°°

ST. LAWRENCE HIGH SCHOOL

A Christian Jesuit minority Institution

Subject: Mathematics **Class-x** **Date- 20/3/21**

Answer key of Worksheet-16
Chapter- angles related to angles in a circle
Topic - in a circle angles at the centre are double of angles on the circumference. If they are Placed on the same arc.

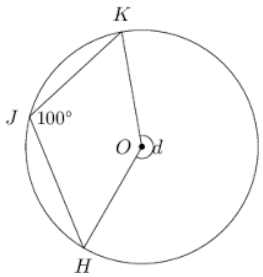
---

1. **Cho se the correct alternative. 1x15=15**

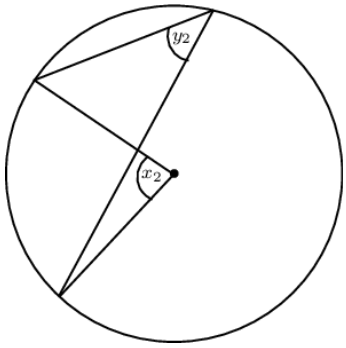
a) In a circle with centre O there is a triangle ABC. A,B, C are lying on the circle. Angle BOC is 120° . Then angle BAC is
Ans ii) 60°

b) Measure of reflex

∟KOH is Ans i)200°



c) If X_2=80° ,Value of Y_2 is
Ans ii) 40°

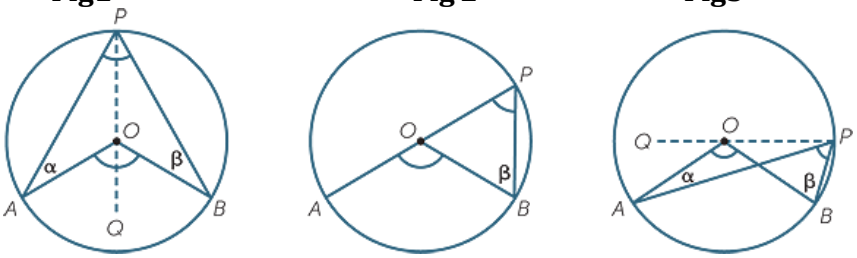


d) A ,B ,C are 3 points lying on the circle with centre O. where OB and Oc are 2 radii. Now O,A ; O,B ; O,C ; A,B and A,C are joined. angle ABO =35° and angle ACO =45° then angle BAC is
Ans iii) 80°

e) A ,B ,C are 3 points lying on the circle with centre O. Where OB and OC are 2 radii. Now O,A ; O,B ; O,C ; A,B and A,C are joined. angle ABO =35° and angle ACO =45° then angle BOC is
Ans ii) 160°

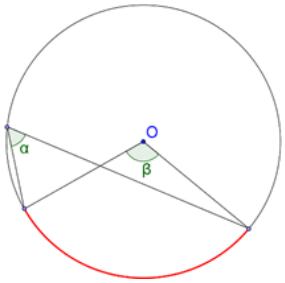
e) In referece to fig 1 α=55° ,β =25° . angle AOB is Ans i) 160°

Fig1 **Fig 2** **Fig3**

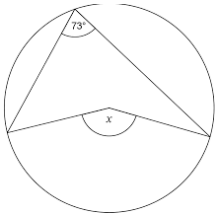


f) In reference to the above fig 2 , β =30°, then angle AOB is Ans ii) 60°
g) In reference to the above fig 3 angle AOB=120° ,then angle APB is Ans iii) 60°

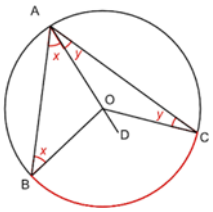
h) In the following figure If α=50° then the measure of β is Ans ii) 100°



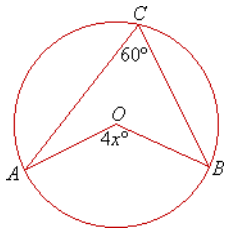
i) In the following figure the measure of x is Ans i) 146°



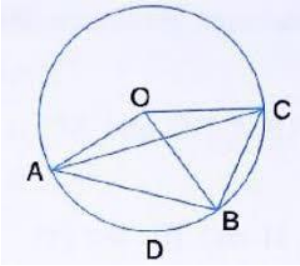
j) In the figure below x= 60° , y=20°, then angle BOC is Ans iii) 160°



k) Value of x in the figure below is Ansi) 30°

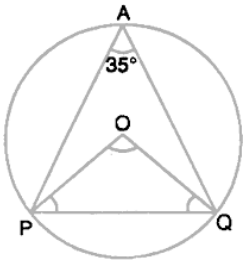


l) A,B,C are such 3 points on the circle with centre O that AOCB parallelogram is obtained ,then angle AOCis Ansii) 120°

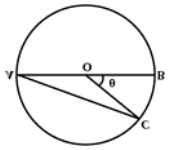


m)In the figurebelow If angle BOC= 45° ,then angle BAC is
Ans ii) 22°

n)In the figure below ,the measure of angle OPQ is
Ans i) 55°



o) If in the figure below θ= 44°, then measure of OCA is Ans ii) 22°



Aparajita Mondal