ST. LAWRENCE HIGH SCHOOL

A Christian Jesuit minority Institution

ClassX   Date:20/3/21

Subject- Mathematics

Worksheet-16

Chapter- theorems related to angles in a circle

Topic-in a circle , angle at the centre is double of the angle on the circumference if they are placed on the same arc
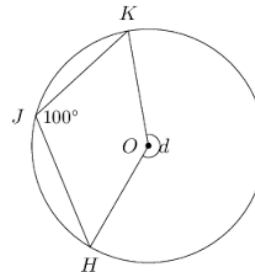
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1. **Choose the correct alternative.   1x15=15**

   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
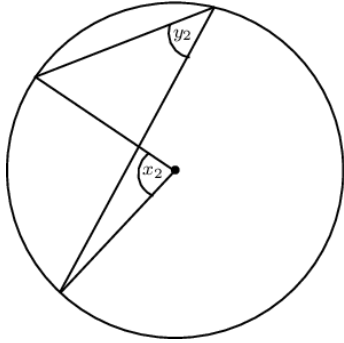
   i) 30°   ii) 60°   iii) 120° iv) none of these

   b) Measure of reflex ∟KOH is

   i)200° ii)100° iii)50° iv) none of these

   c) If X_2=80° ,Value of Y_2 is
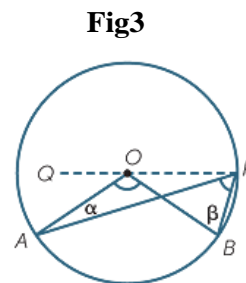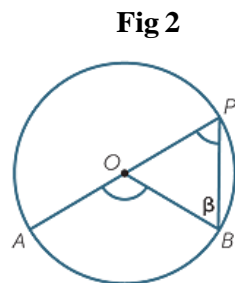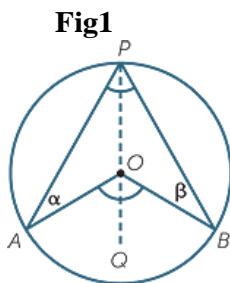
   i) 30° ii) 40°   iii) 80°   iv) none of these

d) A ,B ,C are 3 points lying on the circle with centre O. 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
i)   45° ii) 50° iii) 80° iv) none of these

e) A ,B ,C are 3 points lying on the circle with centre O. 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
i) 45° ii) 160° iii) 80° iv) none of these

e) In referece to fig 1 α=55° ,β =25° . angle AOB is i) 160° ii) 80° iii) 40° iv)100°

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

f)   In reference to the above fig 2 , β =30°, then angle AOB is
i) 70° ii) 60° iii) 45° iv) none of these
g)   In reference to the above fig 3 angle AOB=120° ,then angle APB is
i) 30° ii) 120° iii) 60° iv) none of these

h)   In the following figure If α=50° then the measure of β is i) 200° ii) 100° iii) 150° iv) none of these
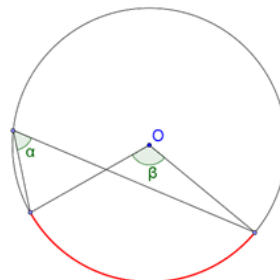
i)   **In the following figure the measure of x is i) 146° ii) 156° iii) 186° iv) none of these**
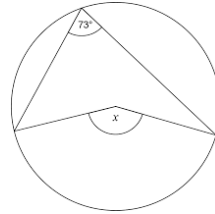
j) In thefigure below x= 60° , y=20°, then angle BOC is i) 60° ii) 80°   iii) 160°   iv) 40°
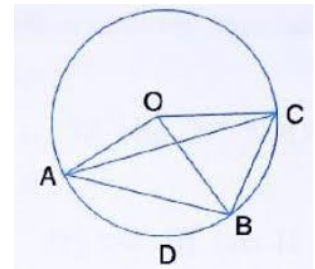
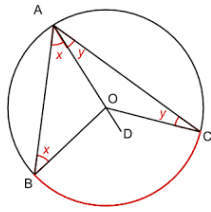**k) Value of x in the figure below is i) 30° ii)40° iii) 20° iv) none of these**
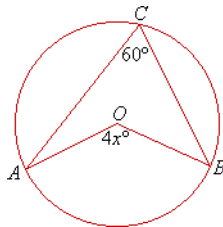
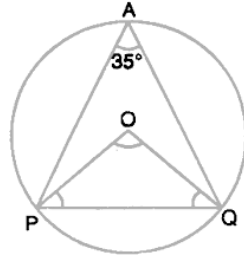**l) A,B,C are such 3 points on the circle with centre O that AOCB parallelogram is obtained, then angle AOC is i)110° ii) 120° iii) 130° iv) none of these**

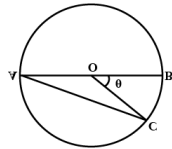**m)In the figure below If angle BOC= 45° ,then angle BAC is**

    i) 22°   ii)   22½°   iii) 23° iV) none of these

m) In the figure below ,the measure of angle OPQ is i) 55° ii) 45° iii) 30° iv) none of these

n) If in the figure below Ө= 44°, then measure of OCA is i) 20° ii) 22° iii) 44° iv) none of these

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