ST. LAWRENCE HIGH SCHOOL

FOR GOD AND COUNTRY

A Jesuit Christian Minority Institution

Subject: Mathematics ,   Worksheet -1

Chapter-theorems related To circle

Topic-If a line segment Passing through the centre is perpendicular on a chord also bisects the chord

Date:7.04.2020

Class-X

1. <u>**Choose the correct alternative.**</u>   **1×15=15**
   a)The largest chord in a circle is
   i) diameter ii)radius iii) Secant iv) none of these
   b) In a circle radius is 13cm and there is a chord of the length 10 cm. Diatance between the centre and the chord is
   i)12 cm ii) 5 cm iii) 10 cm iv) none of these
   c)The distance of the centre of a circle having 17 cm radius from a chord is 8 cm. Length of the chord is
   i)15 cm ii) 30 cm iii) 10 cm iv) none of these
   d)Ratio of 2 chords PQ and RS in a circle with centre O is 1:1. Then angle POQ: angle ROS is
   i)2:1 ii) 1:2 iii) 1:1 iv) none of these
   e) A circle with centre O has 5 cm radius. AB is a chord of 8 cm. Distance between O and AB is
   i)3 cm ii) 4 cm iii) 5 cm iv) none of these
   f)In a circle with centre O, AB and CD are 2 equal chords . angle AOB =60°, then angle COD is
   i) 40° ii) 30° iii)60° iv) none of these
   g) In a circle with centre O, AB and CD are 2 equal chords . Distance of AB from O is 4 cm. Distance of CD from O is
   i) 4 cm   ii) 2 cm iii) 6 cm   iv) none of these
   h) In a circle with centre O ,AB and CD equal and parallel chords . Length of the chord is 16 cm Radius of the circle is 10 cm .distance between 2 chords is
   i) 12 cm   ii) 16 cm iii) 20 cm iv) none of these
   i)A perpendicular bisector of a chord in a circle is
   i) passing through the centre ii) diameter iii) radius   iv) none of these
   j) Number chords present in a circle

i) 2   ii) 1   iii) infinite   iv) none of these

k)Circles having same centre but different radius are known as

i) congruent circles ii) concentric circles   iii) semi circles   iv) none of these

l) Radius of 2 congruent circles are

i) equal   ii) not equal   iii) half or double of each other iv) none of these

m)In a circle having 10 cm radius there are 2 parallel chords having length of 16 cm and 12 cm respectively. Find the distance between 2 chords when the chords are placed on the same side of the centre.

i) 2 cm   ii) 4 cm   iii) 5 cm   iv) none of these

n) In a circle having 10 cm radius there are 2 parallel chords having length of 16 cm and 12 cm respectively. Find the distance between 2 chords when they are placed on 2 different sides of the centre.

i)24 cm   ii) 14 cm   iii) 12 cm   iv) none of these

o) All diameters in a circle are passing through

i) centre   ii) secant   iii) chord   iv) none of these

<div align="right">Aparajita Mondal</div>