



ST. LAWRENCE HIGH SCHOOL



A Jesuit Christian minority Institution

Subject: Mathematics

Class- X

Date:28/06/2021

Answer key of Worksheet-4

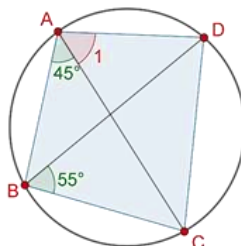
Chapter- Theorem on cyclic quadrilateral

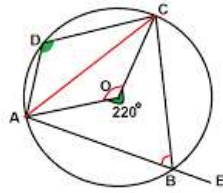
Topic- properties of cyclic quadrilateral

1. Choose the correct alternative

1x15=15

- a) In a cyclic quadrilateral ABCD ,AB is a diameter and AC is a diagonal.
 $\angle ADC = 120^\circ$, the value of $\angle BAC$ is i) 50° ii) 60° **iii) 30°** iv) 40°
- b) In a cyclic quadrilateral ABCD, AB is a diameter and AC is a diagonal . If
 $\angle ABC = 65^\circ$, $\angle DAC = 40^\circ$, the value of angle BCD is i) 75° ii) 105° **iii) 115°**
iv) 80°
- c) In a cyclic quadrilateral ABCD, AB is a diameter and AC is a diagonal
 $\angle CAB = 25^\circ$, then find $\angle DAC$ i) 50° ii) 25° iii) 130° **iv) 40°**
- d) ABCD is a cyclic quadrilateral. AB and CD are extended and they meet at P. AD and BC are extended and they meet at Q. $\angle P : \angle Q = 2:1$, Find angles P and Q i) 30° and 60° ii) 45° and 50° **iii) 60° and 30°** iv) 120° and 60°
- e) Find $\angle BCD$ **i) 100°** ii) 120° iii) 150° iv) none of these

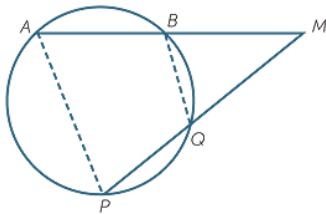




f) Find angle ABC i) 50° ii) 70° iii) 85° iv) none of these

g) $\angle BMQ = 70^\circ$ and $AM = PM$. Find angle ABQ i) 120° ii) 110° iii) 125°

iv) none of these



h) ABCD is a cyclic quadrilateral. BA is extended to the point F. If $AE \parallel CD$,

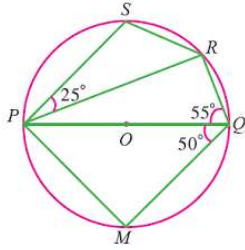
$\angle ABC = 92^\circ$ and $\angle FAE = 20^\circ$, then find $\angle BCD$ i) 20° ii) 88° iii) 108°

iv) none of these

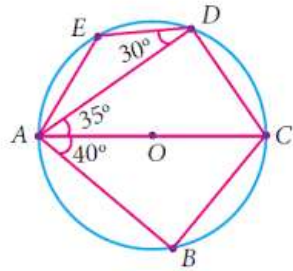
i) Two circles intersect each other at two points C and D. Two straight lines through the points D and C intersect one circle at A and B points and intersect other circle at E and F. If $\angle DAB = 75^\circ$, Find $\angle DEF$

i) 75° ii) 60° iii) 70° iv) none of these

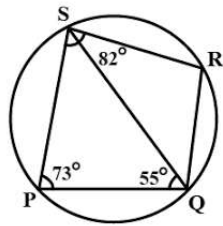
j) Find $\angle SPM$ i) 105° ii) 100° iii) 95° iv) none of these



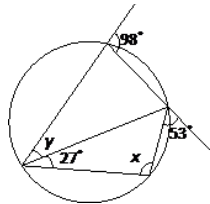
k) Find $\angle EAD$ i) 30° ii) 75° **iii) 25°** iv) none of these



l) Find $\angle SQR$, i) 43° ii) 65° iii) 60° iv) none of these

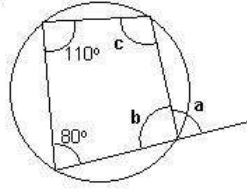


m) Find y , i) 25° ii) 36° **iii) 26°** iv) none of these

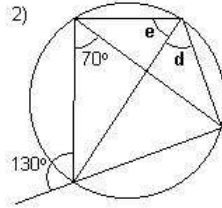


n) In reference to figure 1, Find C and B i) 100° and 70° ii) 110° and 80°
 iii) 85° and 95° iv) none of these

1)



2)



o) with reference to the above diagram no. 2 find e i) 60° ii) 70° iii) 75° iv) none of these

Aparajita Mondal