



ST. LAWRENCE HIGH SCHOOL



A Jesuit Christian minority Institution

Subject: Mathematics

Class- X

Date:11/06/2020

Answer key of Worksheet-34

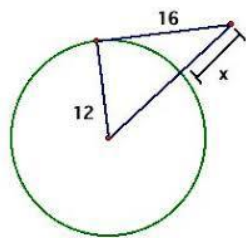
Chapter- Theorems on tangent to a circle

Topic- Theorems on tangent to circle

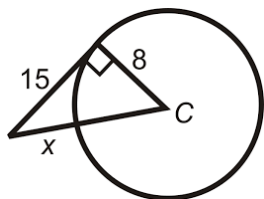
1. Choose the correct alternative.

$$1 \times 15 = 15$$

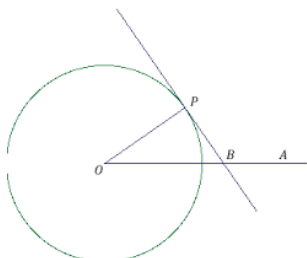
a) Find x. i) 20 units **ii) 8 units** iii) 6 units iv) none of these



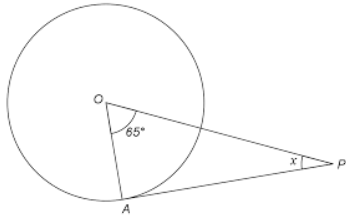
b) Find x, **i) 17 units** ii) 9 units iii) 11 units iv) none of these



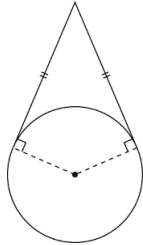
c) $PB = 3$ cm and $OB = 5$ cm, Find radius. i) 6 cm ii) 7 cm **iii) 4 cm** iv) none of these



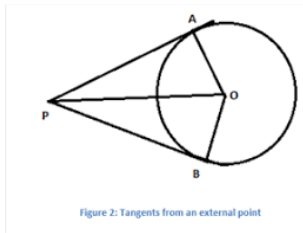
d) Find x , i) 35° ii) 25° iii) 45° iv) none of these



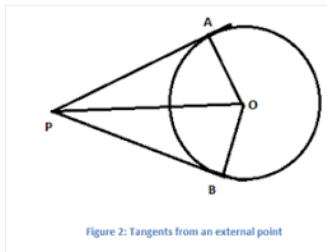
e) There are two tangents to the circle, if measure of one tangent is 7 cm, find the measure of the other. i) 6 cm ii) 4 cm iii) 7 cm iv) none of these



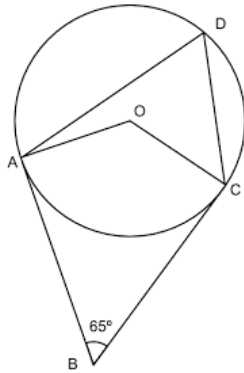
f) If $\angle AOP = 80^\circ$ find $\angle BOP$. i) 70° ii) 80° iii) 85° iv) none of these



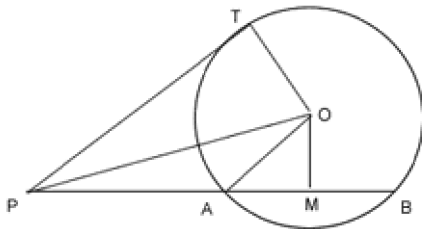
g) If $OA = 5$ cm and $AP = 12$ cm, find OP , i) 13 cm ii) 14 cm iii) 15 cm iv) none of these



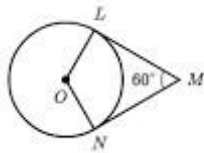
h) Find $\angle AOC$, i) 155° ii) 115° iii) 151° iv) none of these



i) Find $\angle OPM$, if $\angle TOP = 75^\circ$, i) 15° ii) 25° iii) 35° iv) none of these



j) Find $\angle LON$, i) 120° ii) 130° iii) 125° iv) none of these



k) If two circles do not intersect or touch each other, then the maximum number of common tangents can be drawn_____.

i) 3 ii) 2 iii) 4 iv) none of these

l) Two circles touch each other externally at the point A. A common tangent drawn to two circles at the point A is _____ common tangent.

i) transverse ii) direct iii) indirect iv) none of these

m) Two radii OA and OB of a circle with centre O make an angle of 130° between them . Two tangents drawn at the points A and B intersect at the point T, Find $\angle ATB$

i) 50° ii) 25° iii) 35° iv) none of these

n) In a circle with centre o there is 6 cm radius . A point P is 10 cm away from the centre O of a circle . A tangent PT is drawn . Find length of PT.

i) 8 cm ii) 4 cm iii) 5 cm iv) none of these

o) In a circle with centre O , A point P is 26 cm away from the centre of the circle and the length of the tangent drawn from the point P to the circle is 10 cm. find radius

i) 48 cm ii) 24 cm iii) 12 cm iv) none of these

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