



ST. LAWRENCE HIGH SCHOOL



A Jesuit Christian minority Institution

Subject: Mathematics

Class- X

Date:13/06/2020

Answer key of Worksheet-36

Chapter- Construction of Circumcircle and Incircle

Topic- Construction of Circumcircle and Incircle

1. Choose the correct alternative. $1 \times 15 = 15$
- a) In a triangle the point where all the angle bisectors of the triangle meet is called
i) orthocentre ii) median iii) circumcentre **iv) incentre**
- b) The point where perpendicular bisectors of the sides of a triangle meet is called
i) Incentre **ii) circumcentre** iii) orthocentre iv) median
- c) circumcentre of any right triangle is **i) at the mid point of hypotenuse** ii) at any point on hypotenuse iii) outside the triangle iv) none of these
- d) In an obtuse angled triangle circumcentre is i) within the triangle **ii) outside the circle** iii) at midpoint of the hypotenuse iv) none of these
- e) In an acute angled triangle circumcentre is **i) within the circle** ii) outside the circle iii) at mid point of hypotenuse iv) none of these
- f) The side of a triangle with respect to circumcircle of the triangle is
i) radius **ii) chord** iii) secant iv) none of these
- g) The intersecting point of the perpendicular bisectors of two chords of any circle is **i) centre** ii) any point within the circle iii) at the mid point of the joined perpendicular bisectors of the chords iv) none of these
- h) The distances of the vertices of a triangle from the point of intersection of the

perpendicular bisectors of the sides are i) not equal ii) equal with the diameter of the circumcircle of the triangle **iii) equal** iv) none of these

i) The distance of any vertex from the point of intersection of the perpendicular bisectors of sides of triangle is the length of the i) diameter of the circumcircle **ii) radius of the circumcircle** iii) any chord of the circumcircle iv) none of these

j) To draw the incircle after drawing the required triangle the next step is to draw i) **angle bisectors of any two angles** ii) angle bisector of any one angle iii) draw perpendicular bisectors of any two sides iv) none of these

k) After bisecting two angles, next step is i) draw the incircle **ii) to draw a perpendicular on the opposite sides from the intersecting point of two angle bisectors** iii) to draw perpendicular bisector on each side iv) none of these

l) If three angles of a triangle are 90° , 45° and $^\circ$, then circumcentre is placed at i) outside the triangle ii) inside the triangle **iii) the mid point of the hypotenuse** iv) none of these

m) If three angles of a triangle 30° , 70° and 80° . Then circumcentre is placed i) outside the triangle **ii) inside the triangle** iii) at the mid point of the hypotenuse iv) none of these

n) If three angles of a triangle are 100° , 30° and 50° , then the circumcentre is placed **i) outside the triangle** ii) inside the triangle iii) the mid point of the hypotenuse iv) none of these

o) To draw circumcircle, after drawing the triangle, the next step is i) bisecting any two angles **ii) drawing perpendicular bisectors on any two sides** iii) drawing perpendiculars on any two sides iv) none of these

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