



ST. LAWRENCE HIGH SCHOOL



TOPIC – Internal and External Division of Straight Line Segment

Subject : Mathematics

Class-9

Second Term

F. M. 15

WORKSHEET NO. - 1

Solution

Date: 07.11.2020

Q.1) Choose the correct option:

(1x15=15)

- i) Find the mid-point of the points (6,0) and (0,-6).
a) (3,-3)
- ii) If the two end points of the diameter of a circle are (1,-3) and (-7,9), then the co-ordinates of the centre of the circle are:
a) (-3,3)
- iii) The co-ordinates of the mid-point of the points (a+b, a-b) and (a-b, b-a) are
a) (a,0)
- iv) The co-ordinates of end points of a diameter of a circle are (7,9) and (-1,-3). The co-ordinates of centre of circle is
a) (3,3)
- v) A point which divides the line segment joining two points (2,-5) and (-3,-2) externally in the ratio 4:3. The ordinate of circle
d) 7
- vi) If the co-ordinates of the four consecutive vertices of a parallelogram are (-2,-1), (1,0), (4,3) and (1,t) then the value of t is:
b) 2
- vii) If the points P(1,2), Q(4,6), R(5,7) and S(x,y) are the vertices of a parallelogram PQRS, then
c) x=2, y=3
- viii) The mid-point of line segment joining two points (p,2m), and (-p+2m, 2p-2m) is
d) (m,p)
- ix) The abscissa at the point P which divides the line segment joining two points A (1,5), B(-4,7) internally in the ratio 2:3 is
a) -1
- x) Which of the following are the co-ordinates of the centroid of a triangle having vertices (-2,-5), (4,-1) and (1,0)?
b) (1,-2)
- xi) The co-ordinates of the three consecutive vertices of a triangle are (3,0), (-3,0) and (0,3). The co-ordinates of the point of intersection of the medians of the triangle are
b) (0,1)
- xii) The length of the line segment AB is 10 units. P is a point on AB and AP = 6 units, PB = 4 units. If A(1,2) and B(-9,2), then co-ordinates of P are
b) (-5,2)
- xiii) The co-ordinates of the centroid of the triangle formed by the points (a-b, b-c), (b-c, c-a) and (c-a, a-b) are
d) (0,0)
- xiv) Find the co-ordinate of the point which divides the line segment joining (6,-4) and (-8,10) in the ratio 3 : 4 internally
c) (0, -26/7)
- xv) Find the co-ordinate of the point which divides the line segment joining (-1,2) and (4,-5) in the ratio 3 : 2 externally
a) (14,-19)