



# ST. LAWRENCE HIGH SCHOOL



## TOPIC- Mid point theorem

Sub: Mathematics

Class: 9

F. M. 15

WORK SHEET NO. -23

Solution

Date: 2.5.2020

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**Q.1) Choose the correct options: 1x15=15**

- i) In the Parallelogram ABCD, P and Q are mid points of AD and BC. Then AQ and CP \_\_\_ BD.  
a) bisect  
b) trisect
- ii) C is the mid point of line AB. XY is any straight line. From A, B, C the perpendiculars AP, BQ and CR are drawn on XY. Then AP + BQ =  
a) CR  
b) 2CR
- iii) The quadrilateral formed by joining the mid points of the sides of the square form a \_\_\_\_\_.  
a) square  
b) rectangle
- iv) The quadrilateral formed by joining the mid points of the sides of rhombus is a \_\_\_\_\_.  
a) square  
b) rectangle
- v) In triangle ABC, the mid points of BC is O and BP and CP are perpendicular on a straight line through A. Then OP \_\_\_ OQ.  
a) equal  
b) perpendicular
- vi) In triangle ABC, AD is the perpendicular upon the bisector of  $\angle ABC$ . The line DE through D parallel to BC is drawn which meets AC at E. Then AE \_\_\_ EC.  
a) equal  
b) perpendicular
- vii) In triangle ABC, P is the mid point of BC. Through P, the lines parallel to AC and AB are drawn which meet AB and AC at Q and R. Then QR \_\_\_ to BC.  
a) parallel  
b) perpendicular
- viii) In triangle ABC, E is the mid point of median AD. Extended BE intersect AC at F. Then AF is equal to  
a)  $\frac{1}{3} AC$   
b)  $\frac{2}{3} AC$   
c)  $\frac{1}{2} AC$
- ix) In triangle ABC, D, E, and F are the mid point of sides AB, AC and BC. Then DE and EF will \_\_\_ each other.  
a) bisect  
b) be parallel to  
c) be perpendicular to
- x) The line segment joining the mid points of two oblique sides of a trapezium is \_\_\_ to the parallel sides.  
a) parallel  
b) perpendicular
- xi) AD is a median of triangle ABC. O is the mid point of AD. Extended BO intersect AC at point E. Then BO = \_\_\_\_\_.  
a) OE  
b) 2OE  
c) 3OE
- xii) In equilateral triangle ABC, mid point of BC, CA, and AB are D, E, and F. Then AEDF is  
a) rhombus  
b) square
- xiii) P and Q are the mid points of AB and AC of triangle ABC. The median AD intersect the line segment PQ at O. If BC = 12cm then OP =  
a) 3cm  
b) 6cm
- xiv) If the two medians of a triangle are equal then the triangle is  
a) isosceles  
b) equilateral
- xv) In triangle ABC, AC = 8cm and BC = 6cm. From the mid point D of AB, DE is drawn  $\parallel$  BC which intersect AC at E then DE =  
a) 3cm  
b) 4cm

