



# ST. LAWRENCE HIGH SCHOOL



## TOPIC- Mid point theorem

Sub: Mathematics

Class: 9

F. M. 15

WORK SHEET NO. -20

Solution

Date: 29.4.2020

---

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

- i) The join of mid point of any two sides of the triangle is parallel to the third side and is \_\_\_\_\_ of it.  
a)  $1/2$
- ii) BE and CD are two medians of triangle ABC. If the length of BC =11cm then DE =  
c) 5cm
- iii) In triangle PQR, S is the mid point PQ. The line through S parallel to QR meets PR at T. If PT =3.5cm then the length of PR will be \_\_\_\_\_.  
c) 7cm
- iv) PQR is an equilateral triangle. On PQ and PR two points S and T are such that ST parallel to QR. If ST =5cm then PS=  
d) 5cm
- v) In triangle PQR, S and T are the mid points of PQ and PR. If  $QR + ST = 12$  units then QR - ST will be \_\_\_\_\_ units.  
a) 4
- vi) In triangle PQR, D, E, F are the mid points of PQ, QR, and RP. Also EF =4cm, DF =4.5cm. If the perimeter of triangle is 27cm, then DE = \_\_\_\_\_.  
b) 5cm
- 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
- viii) In triangle ABC, D, E and F are the mid points of the sides BC, CA, and AB. If the perimeter of the triangle ABC is 18cm then the perimeter of triangle DEF is  
c) 9cm
- ix) In triangle ABC, D, E, and F are the mid point of sides BC, CA and AB. If EF intersect AD at the point O and AD =8cm then AO =  
c) 4cm
- x) AD and BE are two medians of the triangle ABC. The straight line through D parallel to BE intersect EC at F. If AC =8cm then EF =  
b) 2cm
- xi) BE and CD are two medians of triangle ABC. If P and Q are the mid point of AD and AE then PQ is equal to  
d)  $1/4$  BC
- xii) In equilateral triangle ABC, mid point of BC, CA, and AB are D, E, and F. Then AEDF is  
a) rhombus
- xiii) In triangle ABC, D and E are the mid point of the sides AB and AC. If DE =8cm, BC =  
a) 16cm
- xiv) If the two medians of a triangle are equal then the triangle is  
a) isosceles
- xv) In triangle PQR, PQ =10cm and PR =15cm. The mid point of PS is T. QT produced meets PR at X. Then PX =  
d) 5cm.

