



ST. LAWRENCE HIGH SCHOOL



TOPIC – Transversal & Midpoint Theorem

Subject : Mathematics

Class-9 Second term F. M. 15

WORKSHEET NO. - 1

Solutions

Date: 14.05.2021

Q.1) Choose the correct option:

(1x15=15)

- i) QS and RT are two medians of ΔPQR . If $\angle PQR = 50^\circ$, then the value of $\angle PTS$ is
b) 50°
- ii) In ΔABC , $AB = BC = CA = 8$ cm. BD and CE are two medians. Then the value of $\angle AED$ is
d) 60°
- iii) BE and CD are two medians of ΔABC . If the length of BC is 11 cm, then the length of DE will be
c) 5 cm
- iv) In ΔPQR , S is the midpoint of PQ. The line through S parallel to QR meets PR at T. If $PT = 3.5$ cm, then length of PR will be
a) 7 cm
- v) PQR is an equilateral triangle. On PQ and PR two points S and T are such that $ST \parallel QR$. If $ST = 5$ cm, then length of PS will be
d) 5 cm
- vi) PQR is a rt. angled triangle, where $\angle Q = 90^\circ$. S is the midpoint of PR, where $PR = 12$ cm. Then length of QS is
a) 6 cm
- vii) The length and breadth of a rectangle ABCD are 24 cm and 10 cm. The midpoints of the sides AB and BC are E and F. Then length of EF will be
b) 13 cm
- viii) In ΔABC , X is the midpoint of AB. The line through X parallel to BC meets AC at Y. If $AC = 10$ cm, and $XY = 6$ cm, then length of AY will be _____
c) 5 cm
- ix) In ΔPQR , D, E, F are the midpoints of PQ, QR and RP. Also $EF = 4$ cm, $DF = 4.5$ cm. If the perimeter of ΔPQR is 27 cm, then $DE =$ _____
a) 5 cm
- x) The length of a rectangle is 5 cm. The length of the perpendicular on the breadth from the point of intersection of the diagonals is 2 cm. Then the breadth of the rectangle will be
c) 3 cm
- xi) In ΔPQR , S and T are the midpoints of the sides PQ and PR. If $QR + ST = 12$ units, then $QR - ST$ will be
a) 4 units
- xii) In ΔABC , D and E are the midpoints of the sides AB and AC. If length of DE is 8 cm, the length of BC is ____ cm.
b) 16
- xiii) In ΔMNP , R and S are the midpoints of MN and NP. If $\angle MRS = 70^\circ$, and $\angle RMS = 30^\circ$, then $\angle MPN$ will be
c) 80°
- xiv) In the ΔPQR , $\angle PQR = 90^\circ$, and $PR = 10$ cm. If S is the midpoint of PR, then length of QS is
d) 5 cm
- xv) In the ΔABC , E is the midpoint of the median AD, the extended BE intersects AC at the point F. If $AC = 10.5$ cm, then the length of AF is
d) 3.5 cm

-Chaitali Roy