



ST. LAWRENCE HIGH SCHOOL



TOPIC-Mid-point Theorem.

Sub: Mathematics

Class-9

F. M. 15

WORK SHEET NO. -21

Solution

Date: 30.4.2020

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

- i) The quadrilateral formed by joining in order the mid points of the sides of parallelogram is a
c) parallelogram
- ii) The quadrilateral formed by joining in order the mid points of the sides of a rhombus is a
b) rectangle
- iii) QS and RT are the two medians of triangle PQR. If $\angle PQR=50^\circ$ then the value of $\angle PTS$ is ____.
d) 50°
- iv) In triangle ABC, $AB=BC=CA=8\text{cm}$. BD and CE are two medians. Then the value of $\angle AED=$ ____.
d) 60°
- v) PQR is a right angled triangle, where $\angle Q=90^\circ$. S is the mid point of PR where $PR=12\text{cm}$ then $QS =$
a) 6cm
- vi) The length and breadth of a rectangle ABCD are 24cm and 10cm. If the mid points of AB and BC are E and F then EF will be ____.
d) 13cm.
- vii) The length of a rectangle is 5cm. The length of the perpendicular on the breadth from the point of intersection of the diagonal is 2cm. Then the breadth of the rectangle is ____.
c) 3cm
- viii) In triangle MNP, R and S are the mid points of MN and NP. If $\angle MRS=70^\circ$ and $\angle RMS=30^\circ$ then $\angle MPN=$ ____.
d) 80°
- ix) In a parallelogram ABCD, the point of intersection of diagonals AC and BD is O. If $\angle AOD=120^\circ$ and $\angle BAC=2\angle AOD$, then $\angle ACD$ is
d) 80°
- x) In triangle ABC, D, E, F are the mid points of BC, CA and AB. If $AB=AC$ then DF ____ EF .
a) equal
- xi) ABC is a right angled triangle where $\angle B=90^\circ$. D, E, F are the mid points of BC, CA, AB. Then $\angle E=$ ____.
c) 90°
- xii) In triangle ABC, $\angle ABC=90^\circ$, $AB=5\text{cm}$ and $BC=12\text{cm}$. If D is mid point of AC then BD will be
d) 6.5cm.
- xiii) In triangle PQR, X is the mid point of median PS. QS produced meets PR at Y. If $PY=3.5\text{cm}$ then the length of PR will be
d) 10.5cm
- xiv) In triangle PQR, $\angle Q=90^\circ$ and $PQ=1/2 PR$. If S is the mid point of PR then $\angle PQS$ is
c) 60°
- xv) In triangle ABC, E and F are the mid points of AB and AC. If AD is the median and EF intersects AD at O and if $BC=10\text{cm}$ then OE is equal to
b) 2.5cm

