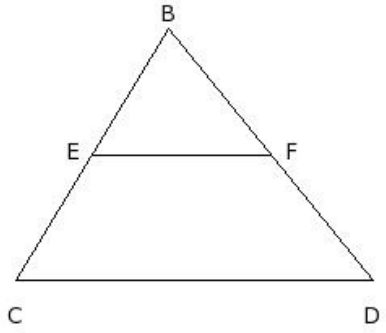
EduSahara™ Assignment

Name : The Midpoint Theorem of Triangle

Chapter : Quadrilaterals

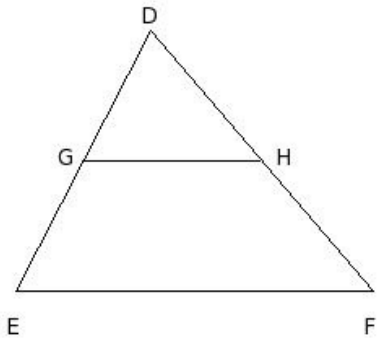
Grade : SSC Grade IX

1. In the given figure $\triangle BCD$,
E is the mid-point of $\overline{BC}$ and $\overline{EF} \parallel \overline{CD}$, then $BF =$



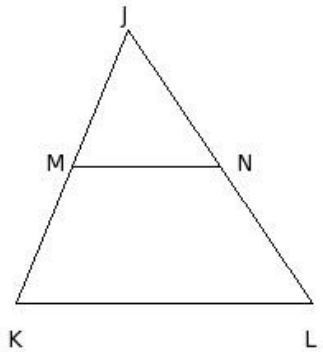
(i) $\frac{BC}{2}$ (ii) $\frac{DB}{2}$ (iii) CD (iv) $\frac{CD}{2}$ (v) BE

2. In the given figure $\triangle DEF$,
G is the mid-point of $\overline{DE}$ and $\overline{GH} \parallel \overline{EF}$, then $DG =$



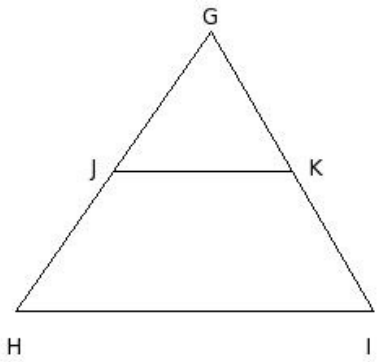
(i) $\frac{FD}{2}$ (ii) $\frac{EF}{2}$ (iii) EF (iv) DH (v) $\frac{DE}{2}$

3. In the given figure $\triangle JKL$,
M is the mid-point of $\overline{JK}$ and $\overline{MN} \parallel \overline{KL}$, then $JM =$



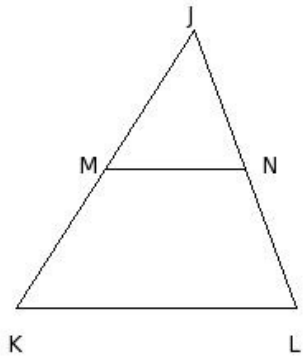
(i) JK (ii) JN (iii) MK (iv) LJ (v) NL

4. In the given figure $\triangle GHI$,
J is the mid-point of $\overline{GH}$ and $\overline{JK} \parallel \overline{HI}$, then JH =



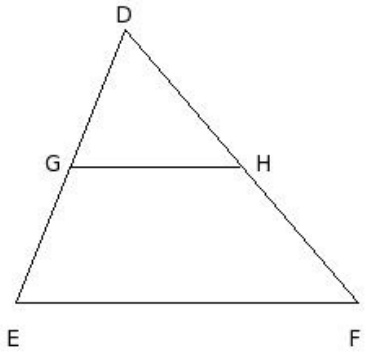
(i) GJ (ii) IG (iii) GK (iv) KI (v) GH

5. In the given figure $\triangle JKL$,
M is the mid-point of $\overline{JK}$ and $\overline{MN} \parallel \overline{KL}$, then JN =



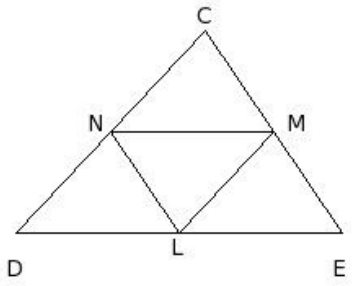
(i) JM (ii) JK (iii) MK (iv) LJ (v) NL

6. In the given figure $\triangle DEF$,
G is the mid-point of $\overline{DE}$ and $\overline{GH} \parallel \overline{EF}$, then HF =



(i) FD (ii) GE (iii) DE (iv) DG (v) DH

7. L, M, N are the mid-points of the sides of triangle CDE.
If the perimeter of the $\triangle CDE$ is 52 cm, the perimeter of $\triangle LMN$ is



(i) 26.0 cm (ii) 24.0 cm (iii) 28.0 cm (iv) 27.0 cm (v) 25.0 cm

8. The figure formed by successively joining the mid-points of the sides of a parallelogram is

(i) square (ii) rhombus (iii) parallelogram (iv) rectangle

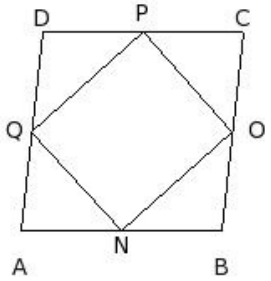
9. The figure formed by successively joining the mid-points of the sides of a rectangle is

(i) parallelogram (ii) rhombus (iii) square (iv) rectangle

10. The figure formed by successively joining the mid-points of the sides of a rhombus is

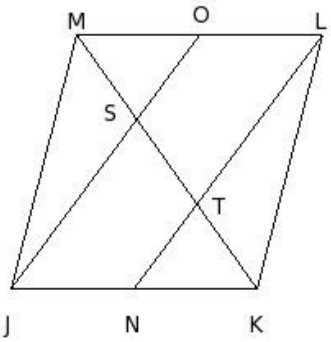
(i) square (ii) rectangle (iii) parallelogram (iv) rhombus

11. ABCD is a rhombus. N, O, P and Q are mid-points of sides AB, BC, CD and DA. Find ∠OPQ



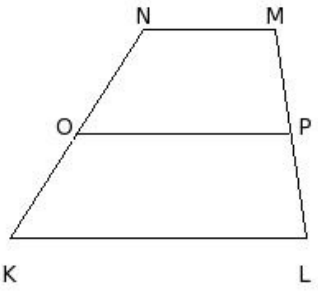
(i) 88° (ii) 91° (iii) 89° (iv) 90° (v) 92°

12. In the given figure, JKLM is a parallelogram such that N and O are mid-points of sides JK & LM. JO meets KM at S and LN meets KM at T. Given KM = 19 cm, find SM



(i) 4.33 cm (ii) 6.33 cm (iii) 7.33 cm (iv) 8.33 cm (v) 5.33 cm

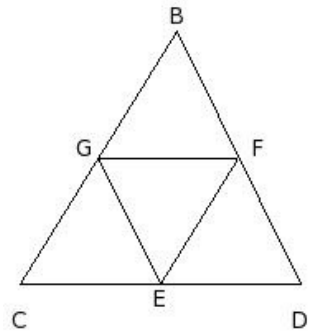
13. In the given figure, KLMN is a trapezium. O and P are mid-points of KN and LM.Given MN = 8 cm and OP = 13 cm, find KL



(i) 19.0 cm (ii) 18.0 cm (iii) 20.0 cm (iv) 16.0 cm (v) 17.0 cm

In the given figure, $\triangle BCD$ is a triangle.

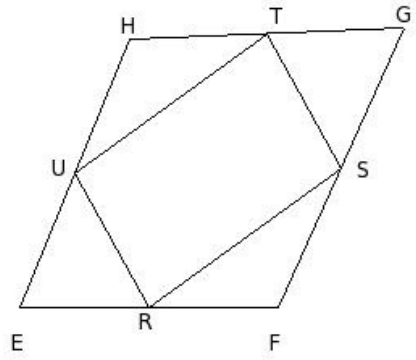
14. E, F & G are mid-points of CD, DB & BC respectively.
Given EF = 9 cm, FG = 9 cm & GE = 9 cm, find the sides of the triangle.



(i) 18 cm, 18 cm & 18 cm (ii) 19 cm, 18 cm & 18 cm (iii) 16 cm, 18 cm & 18 cm (iv) 18 cm, 17 cm & 18 cm

(v) 18 cm, 18 cm & 21 cm

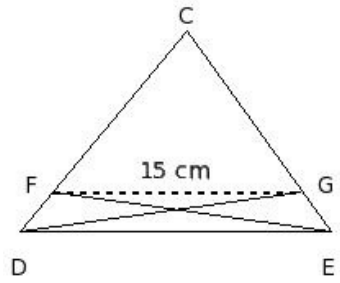
15. EFGH is a quadrilateral. R, S, T and U are mid-points of EF, FG, GH and HE respectively.If EG = 29 cm and FH = 19 cm, find the measure of the sides of RSTU.



(i) 15 cm, 9.5 cm, 15 cm, 9.5 cm (ii) 14.5 cm, 9.5 cm, 14.5 cm, 9.5 cm (iii) 14.5 cm, 8 cm, 14.5 cm, 8 cm

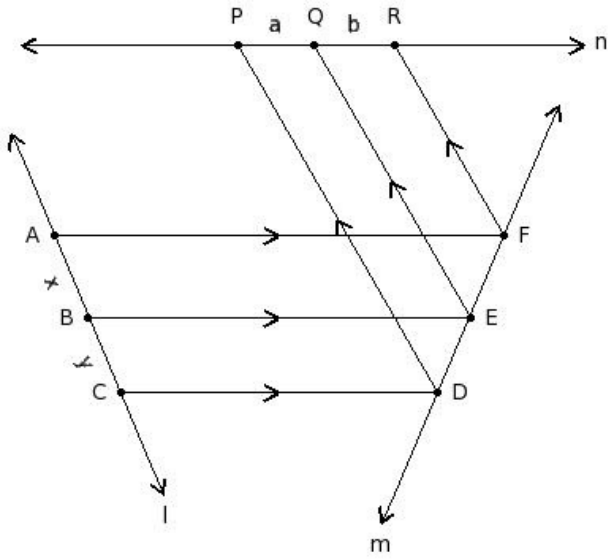
(iv) 17 cm, 9.5 cm, 17 cm, 9.5 cm (v) 14.5 cm, 7 cm, 14.5 cm, 7 cm

16. In the given $\triangle CDE$, $FD = \frac{1}{4}$ CD and $GE = \frac{1}{4}$ CE. If FG = 15 cm, find DE



(i) 21.00 cm (ii) 22.00 cm (iii) 18.00 cm (iv) 20.00 cm (v) 19.00 cm

17. In the given figure, l, m & n are three straight lines such that AF ∥ BE ∥ CD and DP ∥ EQ ∥ FR.Given b = 12 cm, y = 10 cm and x = 12 cm, find 'a'



(i) 8.00 cm (ii) 11.00 cm (iii) 9.00 cm (iv) 10.00 cm (v) 12.00 cm

Assignment Key

1) (ii)	2) (v)	3) (iii)	4) (i)	5) (v)	6) (v)
7) (i)	8) (iii)	9) (ii)	10) (ii)	11) (iv)	12) (ii)
13) (ii)	14) (i)	15) (ii)	16) (iv)	17) (iv)	