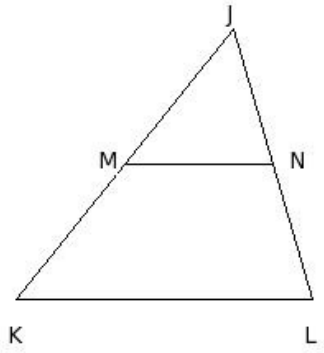
EduSahara™ Assignment

Name : The Midpoint Theorem of Triangle

Chapter : Quadrilaterals

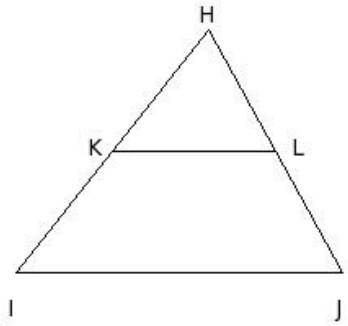
Grade : SSC Grade IX

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



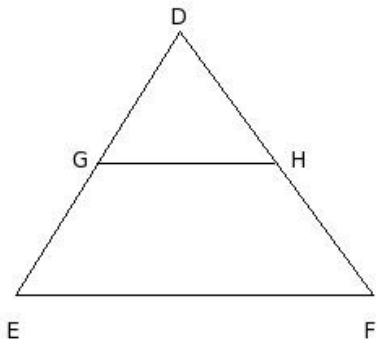
(i) $\frac{LJ}{2}$ (ii) $\frac{JK}{2}$ (iii) $\frac{KL}{2}$ (iv) JM (v) KL

2. In the given figure $\triangle HIJ$,
K is the mid-point of $\overline{HI}$ and $\overline{KL} \parallel \overline{IJ}$, then $HK =$



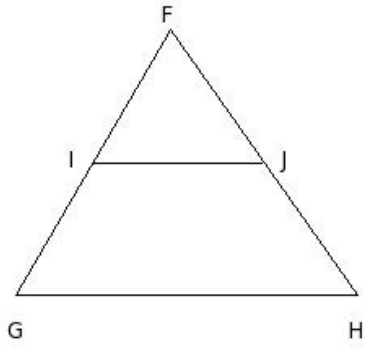
(i) $\frac{JH}{2}$ (ii) IJ (iii) HL (iv) $\frac{IJ}{2}$ (v) $\frac{HI}{2}$

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



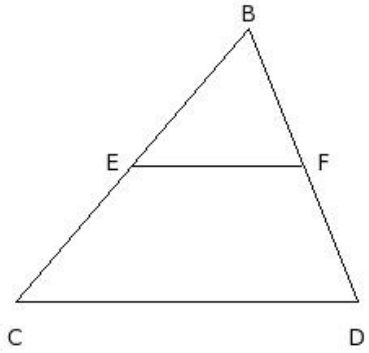
(i) GE (ii) HF (iii) FD (iv) DH (v) DE

4. In the given figure $\triangle FGH$,
I is the mid-point of $\overline{FG}$ and $\overline{IJ} \parallel \overline{GH}$, then IG =



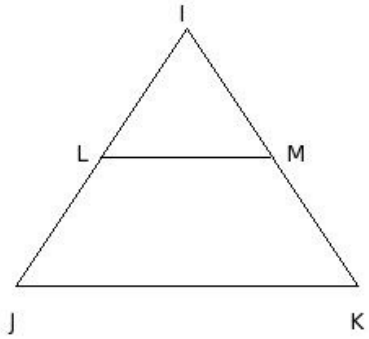
(i) FJ (ii) FG (iii) JH (iv) FI (v) HF

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



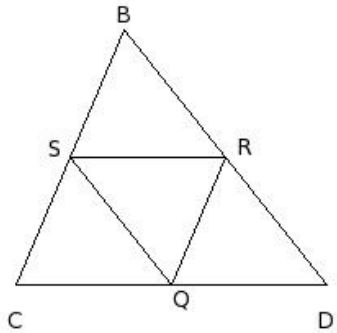
(i) EC (ii) FD (iii) DB (iv) BE (v) BC

6. In the given figure $\triangle IJK$,
L is the mid-point of $\overline{IJ}$ and $\overline{LM} \parallel \overline{JK}$, then MK =



(i) IL (ii) IM (iii) LJ (iv) IJ (v) KI

7. Q, R, S are the mid-points of the sides of triangle BCD.
If the perimeter of the $\triangle BCD$ is 56 cm, the perimeter of $\triangle QRS$ is



(i) 29.0 cm (ii) 26.0 cm (iii) 30.0 cm (iv) 27.0 cm (v) 28.0 cm

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

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

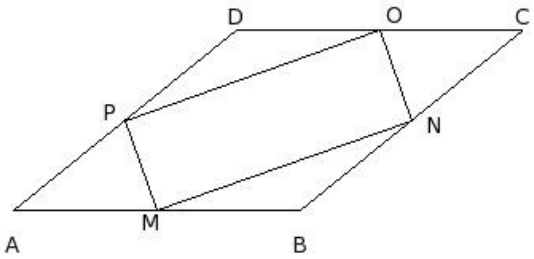
9. The figure formed by successively joining the mid-points of the sides of a rectangle is

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

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

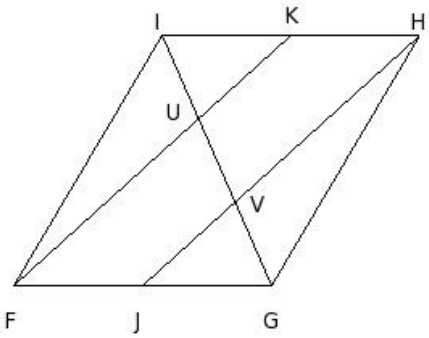
(i) rectangle (ii) square (iii) rhombus (iv) parallelogram

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



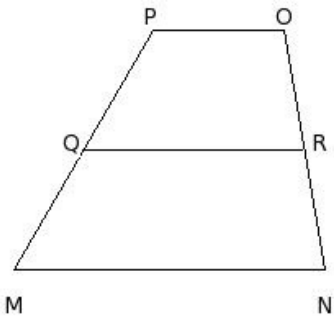
(i) 91° (ii) 89° (iii) 88° (iv) 92° (v) 90°

12. In the given figure, FGHI is a parallelogram such that J and K are mid-points of sides FG & HI. FK meets GI at U and HJ meets GI at V. Given GI = 17 cm, find UV



(i) 4.67 cm (ii) 7.67 cm (iii) 6.67 cm (iv) 3.67 cm (v) 5.67 cm

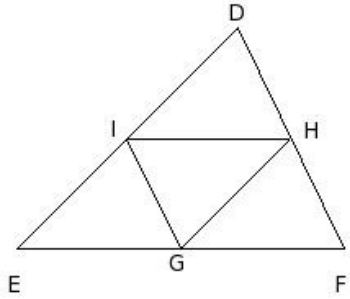
13. In the given figure, MNOP is a trapezium. Q and R are mid-points of MP and NO.Given OP = 8 cm and MN = 19 cm, find QR



(i) 15.5 cm (ii) 12.5 cm (iii) 11.5 cm (iv) 14.5 cm (v) 13.5 cm

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

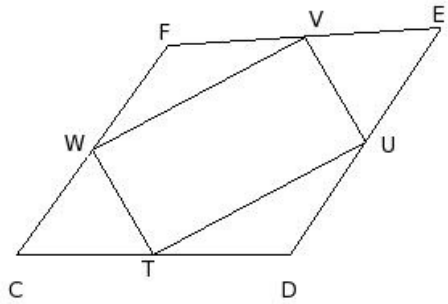
14. G, H & I are mid-points of EF, FD & DE respectively.
Given GH = 10 cm, HI = 10 cm & IG = 8 cm, find the sides of the triangle.



(i) 21 cm, 20 cm & 16 cm (ii) 20 cm, 20 cm & 16 cm (iii) 20 cm, 19 cm & 16 cm (iv) 20 cm, 20 cm & 18 cm

(v) 17 cm, 20 cm & 16 cm

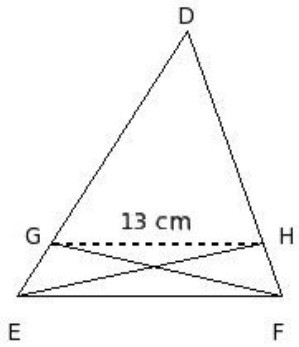
15. CDEF is a quadrilateral. T, U, V and W are mid-points of CD, DE, EF and FC respectively.If CE = 30 cm and DF = 15 cm, find the measure of the sides of TUVW.



(i) 16 cm, 7.5 cm, 16 cm, 7.5 cm (ii) 15 cm, 6 cm, 15 cm, 6 cm (iii) 15 cm, 7.5 cm, 15 cm, 7.5 cm

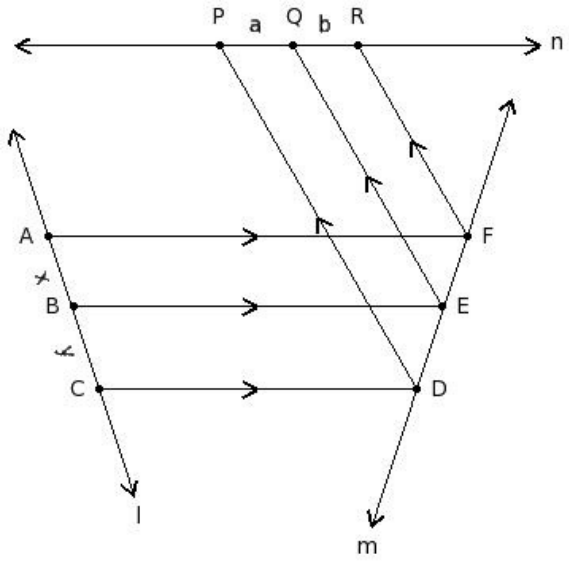
(iv) 15 cm, 4 cm, 15 cm, 4 cm (v) 17 cm, 7.5 cm, 17 cm, 7.5 cm

16. In the given $\triangle DEF$, $GE = \frac{1}{4}$ DE and $HF = \frac{1}{4}$ DF. If GH = 13 cm, find EF



(i) 16.33 cm (ii) 19.33 cm (iii) 15.33 cm (iv) 18.33 cm (v) 17.33 cm

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



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

Assignment Key

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