

EduSahara™ Learning Center Assignment

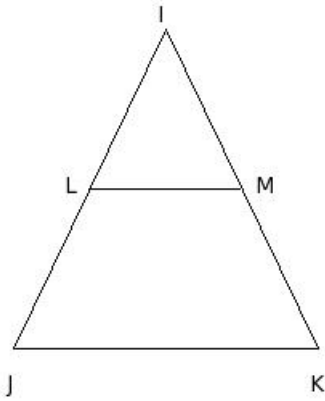
Grade : Class IX, CBSE

Chapter : Quadrilaterals

Name : The Midpoint Theorem of Triangle

In the given figure $\triangle IJK$,

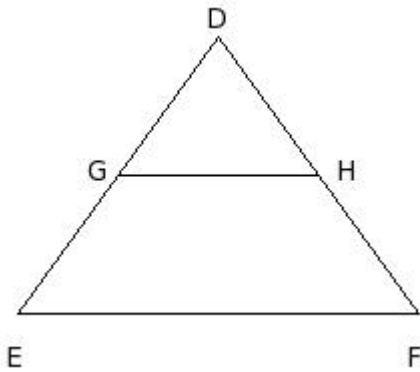
1. L is the mid-point of $\overline{IJ}$ and $\overline{LM} \parallel \overline{JK}$, then $IM =$



- (i) IL (ii) $\frac{IJ}{2}$ (iii) $\frac{JK}{2}$ (iv) JK (v) $\frac{KI}{2}$

In the given figure $\triangle DEF$,

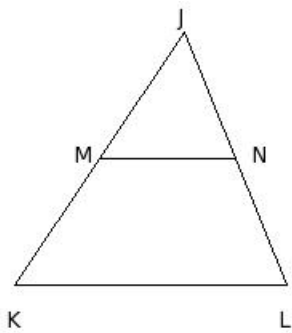
2. G is the mid-point of $\overline{DE}$ and $\overline{GH} \parallel \overline{EF}$, then $DG =$



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

In the given figure $\triangle JKL$,

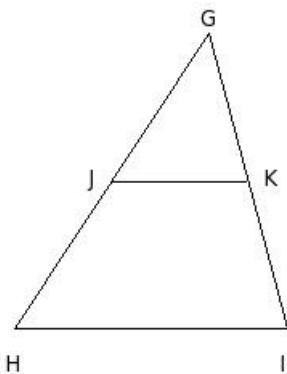
3. M is the mid-point of $\overline{JK}$ and $\overline{MN} \parallel \overline{KL}$, then $JM =$



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

In the given figure $\triangle GHI$,

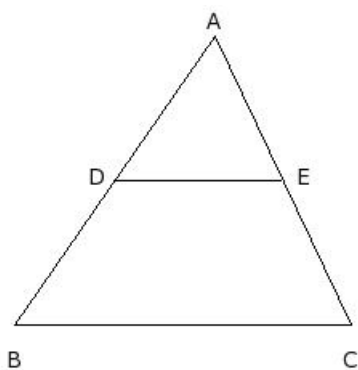
4. J is the mid-point of $\overline{GH}$ and $\overline{JK} \parallel \overline{HI}$, then $JH =$



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

In the given figure $\triangle ABC$,

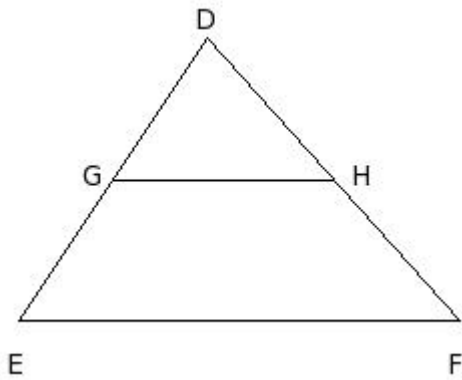
5. D is the mid-point of $\overline{AB}$ and $\overline{DE} \parallel \overline{BC}$, then $AE =$



- (i) AD (ii) CA (iii) EC (iv) DB (v) AB

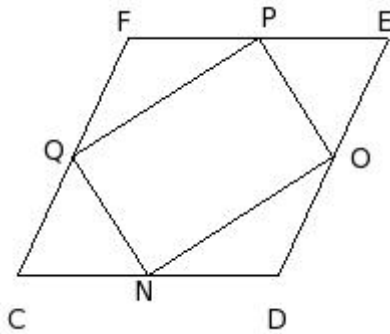
In the given figure $\triangle DEF$,

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



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

7. CDEF is a rhombus. N, O, P and Q are mid-points of sides CD, DE, EF and FC. Find $\angle OPQ$

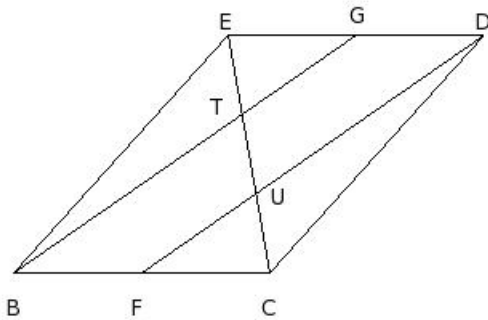


- (i) 91° (ii) 90° (iii) 89° (iv) 88° (v) 92°

In the given figure, BCDE is a parallelogram

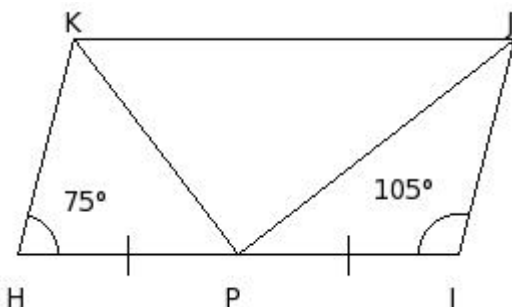
8. such that F and G are mid-points of sides BC & DE .

BG meets CE at T and DF meets CE at U . Given $CE = 15$ cm , find CU



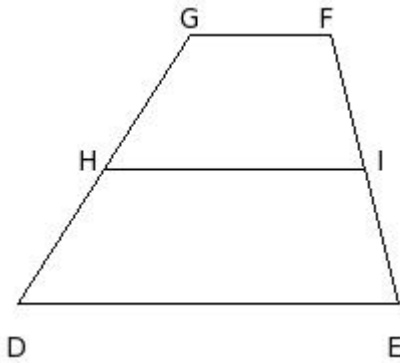
- (i) 6.00 cm (ii) 5.00 cm (iii) 3.00 cm (iv) 4.00 cm (v) 7.00 cm

9. In the given figure, HIJK is a parallelogram such that P is the mid-point of HI and $HI = 2KH$. Find $\angle KPJ$



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

10. In the given figure, DEFG is a trapezium. H and I are mid-points of DG and EF. Given $DE = 19$ cm and $HI = 13$ cm, find FG

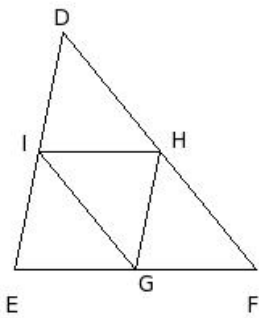


- (i) 7.0 cm (ii) 9.0 cm (iii) 5.0 cm (iv) 6.0 cm (v) 8.0 cm

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

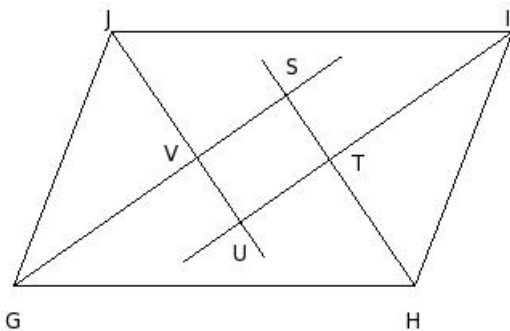
11. G, H & I are mid-points of EF, FD & DE respectively.

Given $GH = 8$ cm, $HI = 8$ cm & $IG = 9$ cm, find the sides of the triangle.



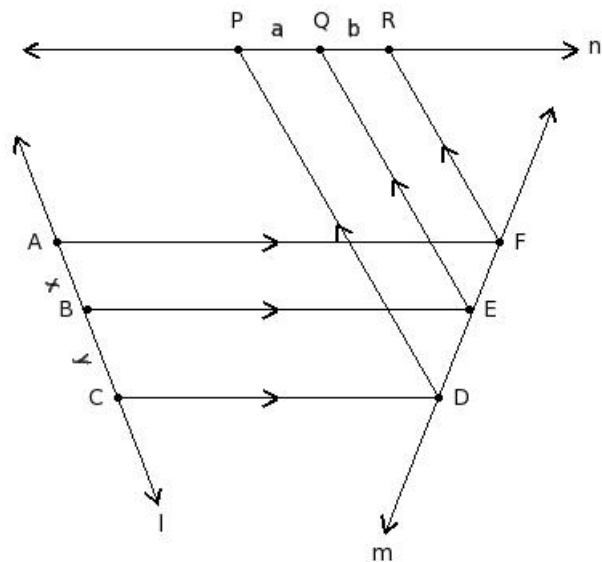
- (i) 16 cm, 16 cm & 18 cm
 (ii) 13 cm, 16 cm & 18 cm
 (iii) 16 cm, 16 cm & 21 cm
 (iv) 16 cm, 15 cm & 18 cm
 (v) 17 cm, 16 cm & 18 cm

12. In the given figure, GHIJ is a parallelogram. The bisector of the angles G, H, I & J intersect at S, T, U & V to form a quadrilateral. Find $\angle TUV$



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

13. In the given figure, l, m & n are three straight lines such that $AF \parallel BE \parallel CD$ and $DP \parallel EQ \parallel FR$. Given $a = 10$ cm, $b = 8.33$ cm and $y = 12$ cm, find 'x'



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

Assignment Key

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