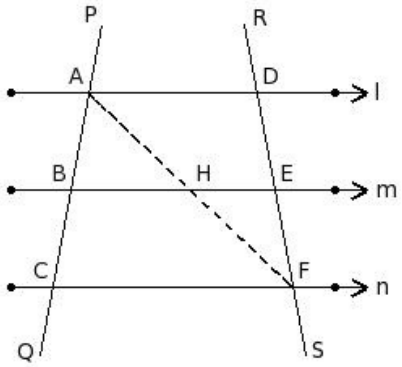
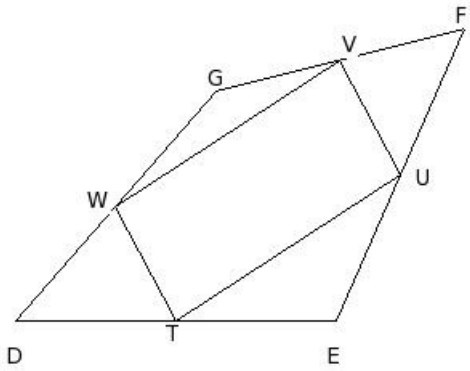
In the given figure, three lines l , m and n are such that l ∥ m ∥ n.

1. Two transversals PQ and RS intersect them at the points A , B , C and D , E , F respectively.
△FDA ~



(i) △FEH (ii) △DCF (iii) △ACF (iv) △DAE (v) △ABH

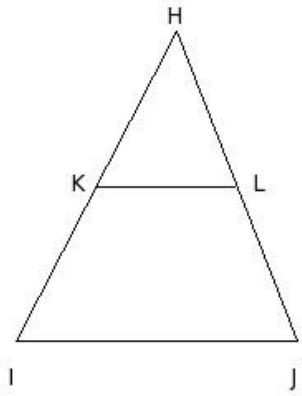
2. DEFG is a quadrilateral. T, U, V and W are mid-points of DE, EF, FG and GD respectively.If DF = 33 cm and EG = 16 cm, find the measure of the sides of TUVW.



(i) 17 cm, 8 cm, 17 cm, 8 cm (ii) 16.5 cm, 8 cm, 16.5 cm, 8 cm (iii) 16.5 cm, 7 cm, 16.5 cm, 7 cm

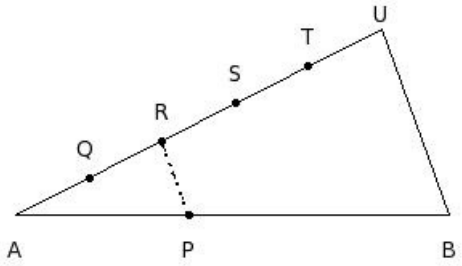
(iv) 16.5 cm, 6 cm, 16.5 cm, 6 cm (v) 18 cm, 8 cm, 18 cm, 8 cm

3. In the given figure△HIJ,
Kis the mid-point of $\overline{HI}$ and $\overline{KL} \parallel \overline{IJ}$,then HL=



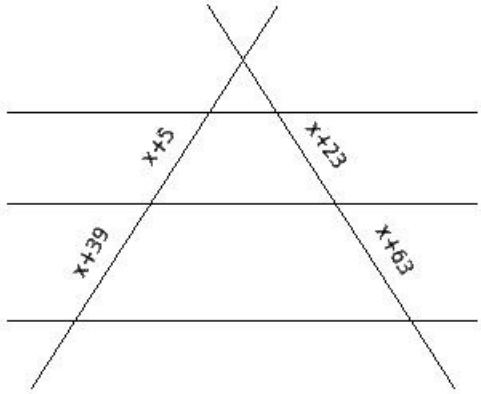
(i) KI (ii) HI (iii) HK (iv) JH (v) LJ

4. In the given figure, if A, Q, R, S, T, U are equidistant and RP ∥ UB and AB = 27 cm. Find AP



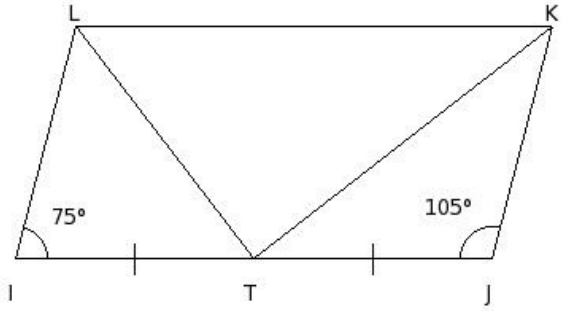
(i) 10.80 cm (ii) 12.80 cm (iii) 8.80 cm (iv) 9.80 cm (v) 11.80 cm

5. From the given figure and values, find x



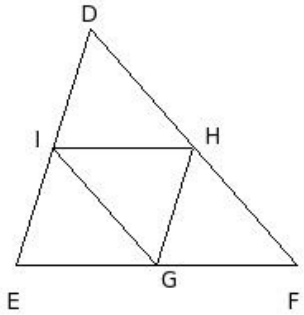
(i) (100,97) (ii) (99,99) (iii) (97,97) (iv) (97,96) (v) (98,98)

6. In the given figure, IJKL is a parallelogram such that T is the mid-point of IJ and IJ = 2LI. Find ∠LTK



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

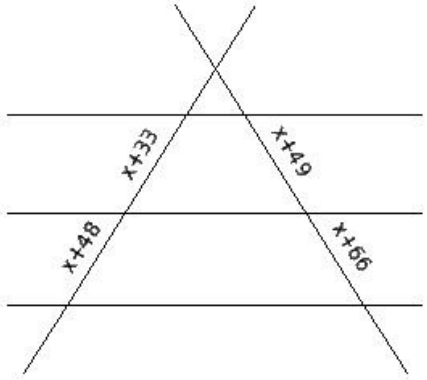
7. In the given figure, the area of the △DEF is x sq.cm. G,H,I are the mid-points of the sides EF , FD and DE respectively. The area of the △GHI is



(i) $\frac{1}{3}$ of area of △DEF (ii) $\frac{3}{4}$ of area of △DEF (iii) $\frac{1}{2}$ of area of △DEF (iv) $\frac{1}{4}$ of area of △DEF

(v) $\frac{2}{3}$ of area of △DEF

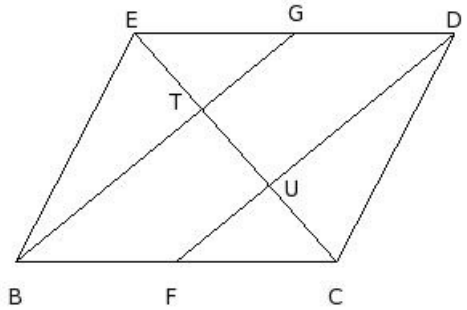
8. From the given figure and values, find x



(i) (89,87) (ii) (87,87) (iii) (88,88) (iv) (87,86) (v) (89,89)

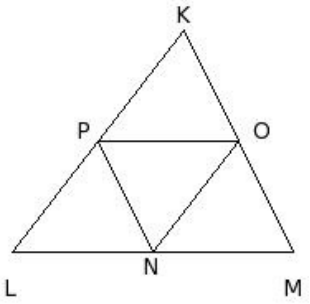
In the given figure, BCDE is a parallelogram

9. 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 = 19 cm, find CU



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

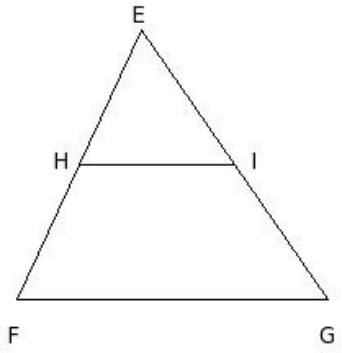
10. In the given figure, the area of the △KLM is x sq.cm. N,O,P are the mid-points of the sides LM , MK and KL respectively. The area of the △NOP is



(i) $\frac{3}{4}$ of area of △KLM (ii) $\frac{1}{2}$ of area of △KLM (iii) $\frac{1}{3}$ of area of △KLM (iv) $\frac{2}{3}$ of area of △KLM

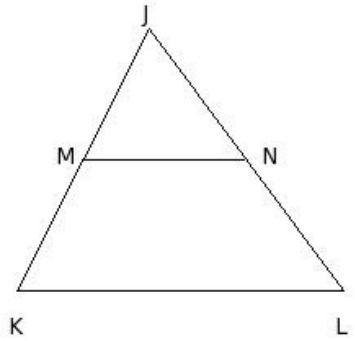
(v) $\frac{1}{4}$ of area of △KLM

11. In the given figure $\triangle EFG$,
H is the mid-point of $\overline{EF}$ and $\overline{HI} \parallel \overline{FG}$, then EH =



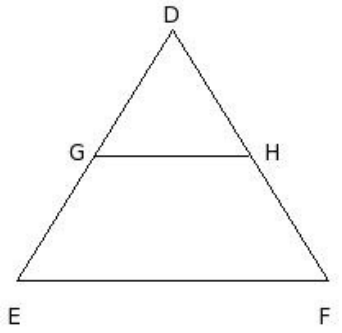
(i) EF (ii) GE (iii) IG (iv) HF (v) EI

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



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

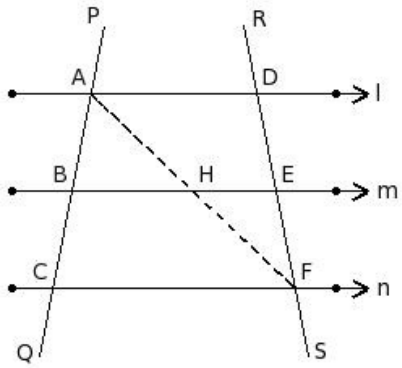
13. In the given figure $\triangle DEF$,
G is the mid-point of $\overline{DE}$ and $\overline{GH} \parallel \overline{EF}$, then DH =



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

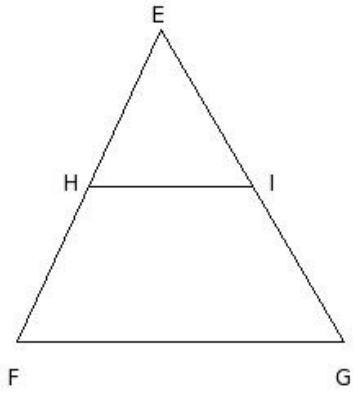
In the given figure, three lines l , m and n are such that l ∥ m ∥ n.

14. Two transversals PQ and RS intersect them at the points A , B , C and D , E , F respectively.
∠BHA =



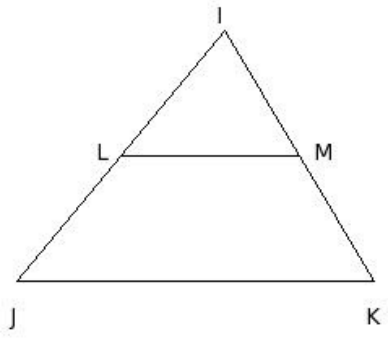
(i) ∠DAF (ii) ∠AFD (iii) ∠EHF (iv) ∠HFE (v) ∠CFA

15. In the given figure △EFG,
H is the mid-point of $\overline{EF}$ and $\overline{HI} \parallel \overline{FG}$, then EH =



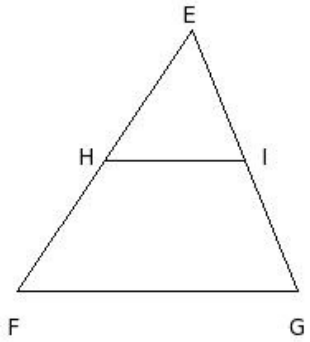
(i) IG (ii) GE (iii) HF (iv) EI (v) EF

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



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

17. In the given figure $\triangle EFG$,
H is the mid-point of $\overline{EF}$ and $\overline{HI} \parallel \overline{FG}$, then $HF =$



(i) GE (ii) IG (iii) EH (iv) EI (v) EF

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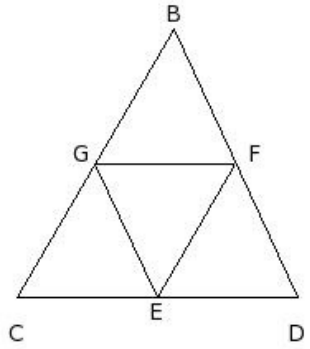
18. In the given figure, $\triangle BCD$ is a triangle.
E, F & G are mid-points of CD, DB & BC respectively.
Given EF = 9 cm, FG = 9 cm & GE = 9 cm, find the sides of the triangle.



(i) 18 cm, 18 cm & 21 cm (ii) 15 cm, 18 cm & 18 cm (iii) 18 cm, 18 cm & 18 cm (iv) 18 cm, 17 cm & 18 cm

(v) 19 cm, 18 cm & 18 cm

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19. In the given figure, points H , I and J are the mid-points of sides FG, GE and EF of $\triangle EFG$. Which of the following are true?

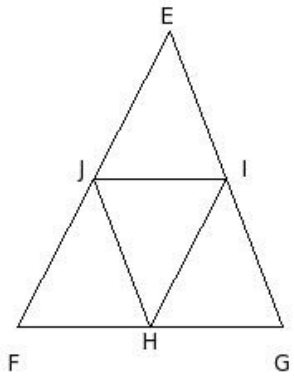
a) All four small triangles have equal areas

b) Area of $\triangle EFG$ = 4 times area of $\triangle HIJ$

c) Area of trapezium FGIJ is $\frac{1}{4}$ the area of $\triangle EFG$

d) Area of $\triangle EFG = \frac{1}{3}$ area of $\triangle HIJ$

e) Area of trapezium FGIJ is thrice the area of $\triangle EJI$

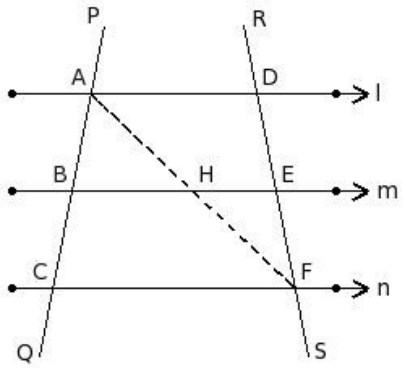


(i) {d,b} (ii) {c,a} (iii) {c,a,b} (iv) {c,d,e} (v) {a,b,e}

In the given figure, three lines l , m and n are such that l ∥ m ∥ n.

20. Two transversals PQ and RS intersect them at the points A , B , C and D , E , F respectively.

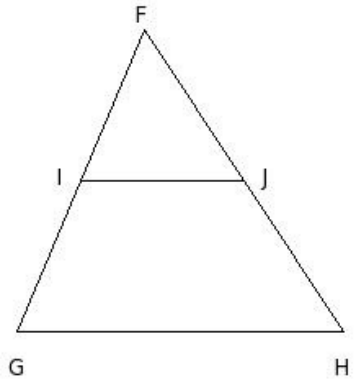
∠FDA =



(i) ∠ACF (ii) ∠ABH (iii) ∠FEH (iv) ∠DAF (v) ∠EHF

In the given figure △FGH,

21. I is the mid-point of $\overline{FG}$ and $\overline{IJ} \parallel \overline{GH}$, then JH =

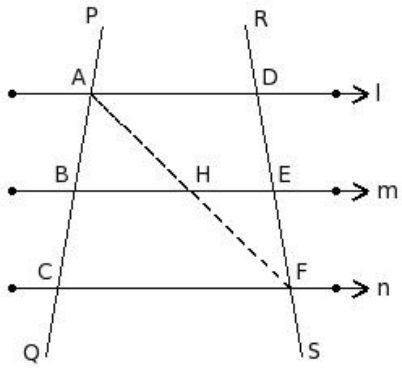


(i) FI (ii) FJ (iii) IG (iv) FG (v) HF

In the given figure, three lines l , m and n are such that l ∥ m ∥ n.

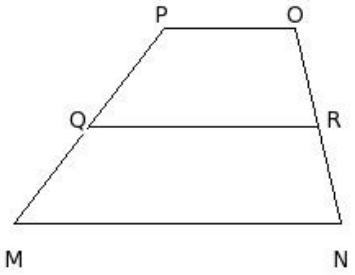
22. Two transversals PQ and RS intersect them at the points A , B , C and D , E , F respectively.

∠FAC =



(i) ∠AFD (ii) ∠HFE (iii) ∠HAB (iv) ∠FDA (v) ∠FEH

23. In the given figure, MNOP is a trapezium. Q and R are mid-points of MP and NO.Given OP = 8 cm and QR = 14 cm, find MN



(i) 20.0 cm (ii) 19.0 cm (iii) 21.0 cm (iv) 18.0 cm (v) 22.0 cm

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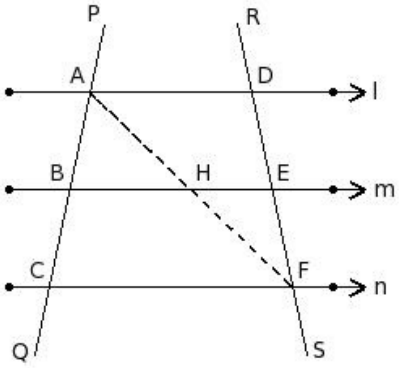
In the given figure, three lines l , m and n are such that l ∥ m ∥ n.

24. Two transversals PQ and RS intersect them at the points A , B , C and D , E , F respectively.

∠CFA =



(i) ∠HFE (ii) ∠BHA (iii) ∠EHF (iv) ∠DAF (v) ∠AFD

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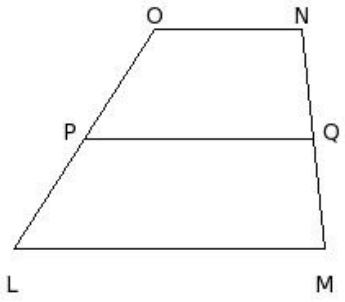
25. In the given figure, LMNO is a trapezium. P and Q are mid-points of LO and MN.Given PQ = 14 cm and NO = 9 cm, find LM



(i) 17.0 cm (ii) 20.0 cm (iii) 19.0 cm (iv) 21.0 cm (v) 18.0 cm

Assignment Key

1) (i)	2) (ii)	3) (v)	4) (i)	5) (iii)	6) (iv)
7) (iv)	8) (ii)	9) (v)	10) (v)	11) (iv)	12) (iii)
13) (ii)	14) (v)	15) (iii)	16) (iv)	17) (iii)	18) (iii)
19) (v)	20) (iii)	21) (ii)	22) (iii)	23) (i)	24) (ii)
25) (iii)					