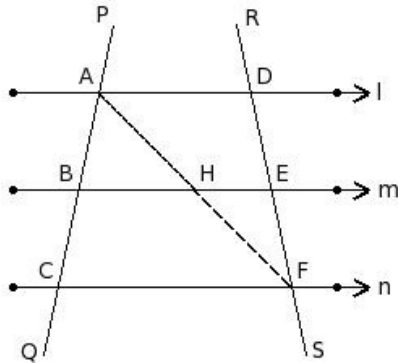




In the given figure, three lines l, m and n are such that $l \parallel m \parallel n$.

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

$\triangle ABH \sim$

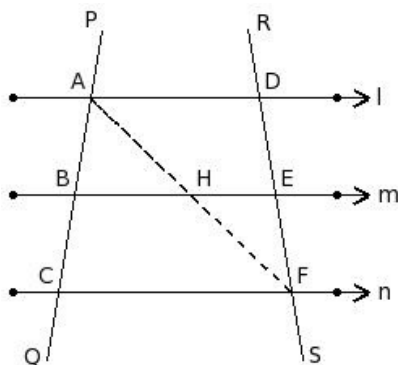


- (i) $\triangle FEH$ (ii) $\triangle FDA$ (iii) $\triangle DAE$ (iv) $\triangle ACF$ (v) $\triangle DCF$

In the given figure, three lines l, m and n are such that $l \parallel m \parallel n$.

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

$\angle FAC =$

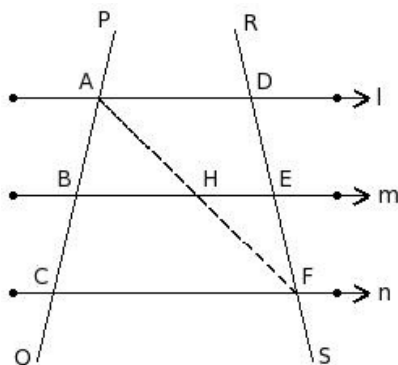


- (i) $\angle FEH$ (ii) $\angle FDA$ (iii) $\angle HAB$ (iv) $\angle HFE$ (v) $\angle AFD$

In the given figure, three lines l, m and n are such that $l \parallel m \parallel n$.

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

$\angle FDA =$

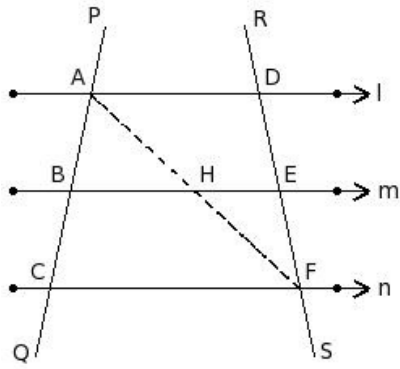


- (i) $\angle ABH$ (ii) $\angle EHF$ (iii) $\angle FEH$ (iv) $\angle DAF$ (v) $\angle ACF$

In the given figure, three lines l , m and n are such that $l \parallel m \parallel n$.

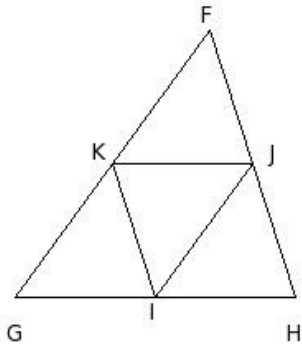
4. Two transversals PQ and RS intersect them at the points A, B, C and D, E, F respectively.

$\angle CFA =$



- (i) $\angle HFE$ (ii) $\angle DAF$ (iii) $\angle EHF$ (iv) $\angle AFD$ (v) $\angle BHA$

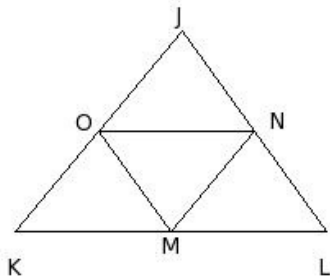
5. In the given figure, the area of the $\triangle FGH$ is x sq.cm. I, J, K are the mid-points of the sides GH, HF and FG respectively. The area of the $\triangle IJK$ is



- (i) $\frac{2}{3}$ of area of $\triangle FGH$ (ii) $\frac{1}{3}$ of area of $\triangle FGH$ (iii) $\frac{1}{4}$ of area of $\triangle FGH$ (iv) $\frac{3}{4}$ of area of $\triangle FGH$
 (v) $\frac{1}{2}$ of area of $\triangle FGH$

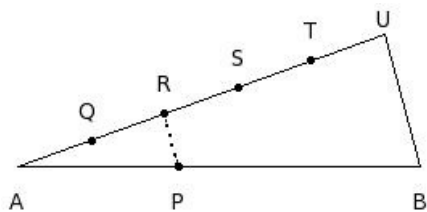
6. In the given figure, points M, N and O are the mid-points of sides KL, LJ and JK of $\triangle JKL$. Which of the following are true?

- a) Area of trapezium $KLNO$ is $\frac{1}{4}$ the area of $\triangle JKL$
 b) Area of $\triangle JKL = \frac{1}{3}$ area of $\triangle MNO$
 c) Area of $\triangle JKL = 4$ times area of $\triangle MNO$
 d) All four small triangles have equal areas
 e) Area of trapezium $KLNO$ is thrice the area of $\triangle JON$



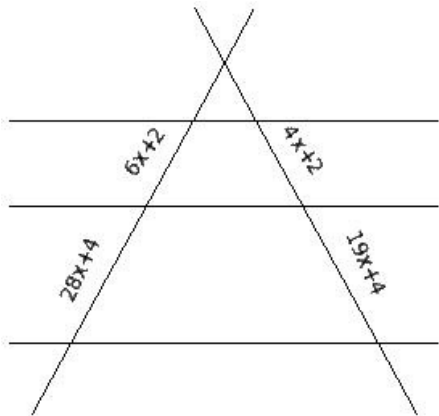
- (i) $\{c, d, e\}$ (ii) $\{b, d\}$ (iii) $\{a, b, e\}$ (iv) $\{a, c, d\}$ (v) $\{a, c\}$

7. In the given figure, if A, Q, R, S, T, U are equidistant and $RP \parallel UB$ and $AB = 25$ cm. Find AP



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

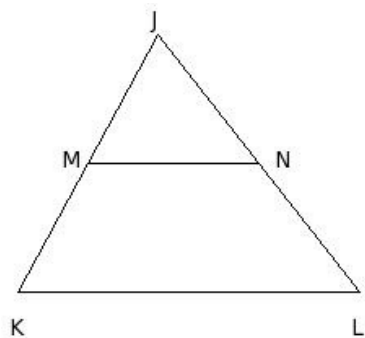
8. From the given figure and values, find x



- (i) (2,7) (ii) (7,0) (iii) (5,-1) (iv) (6,1) (v) (5,0)

In the given figure $\triangle JKL$,

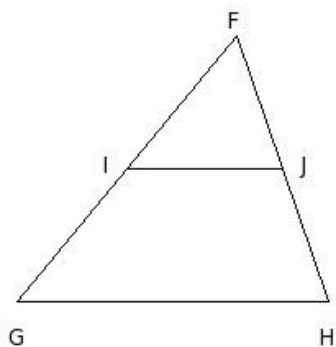
9. M is the mid-point of \overline{JK} and $\overline{MN} \parallel \overline{KL}$, then $JN =$



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

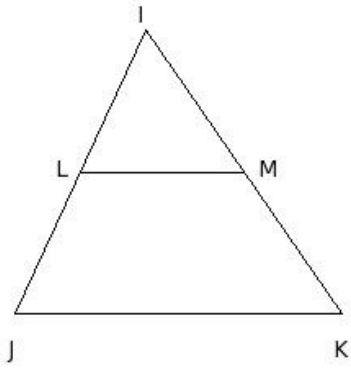
In the given figure $\triangle FGH$,

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



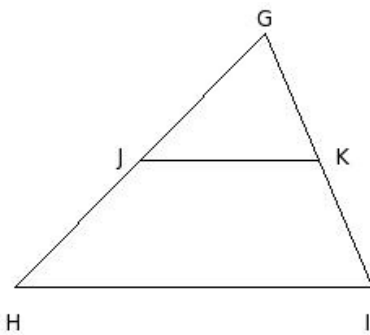
- (i) $\frac{HF}{2}$ (ii) $\frac{GH}{2}$ (iii) GH (iv) $\frac{FG}{2}$ (v) FJ

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



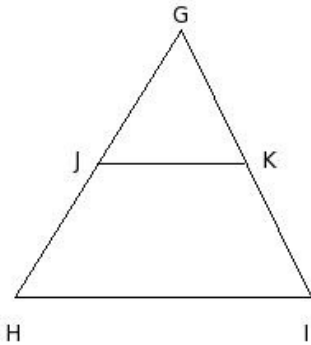
- (i) LJ (ii) IM (iii) KI (iv) IJ (v) MK

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



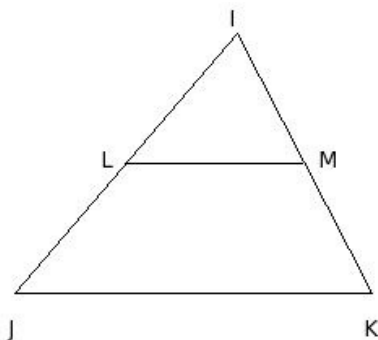
- (i) GK (ii) GH (iii) KI (iv) IG (v) Gj

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



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

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

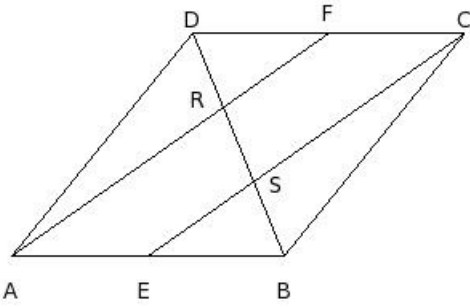


- (i) IJ (ii) IL (iii) LJ (iv) KI (v) IM

In the given figure, ABCD is a parallelogram

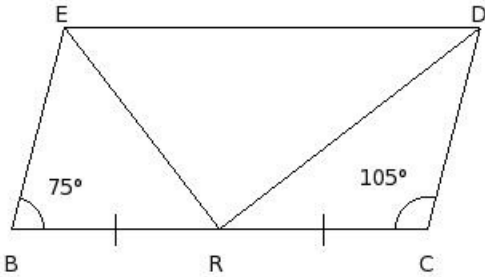
15. such that E and F are mid-points of sides AB & CD.

AF meets BD at R and CE meets BD at S. Given $BD = 15$ cm, find BS



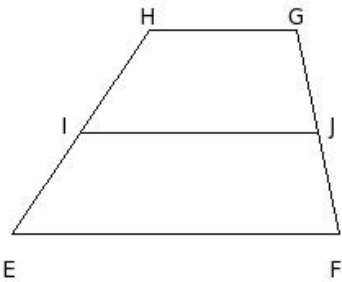
- (i) 7.00 cm (ii) 3.00 cm (iii) 4.00 cm (iv) 5.00 cm (v) 6.00 cm

16. In the given figure, BCDE is a parallelogram such that R is the mid-point of BC and $BC = 2EB$. Find $\angle ERD$



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

17. In the given figure, EFGH is a trapezium. I and J are mid-points of EH and FG. Given $IJ = 14.5$ cm and $EF = 20$ cm, find GH

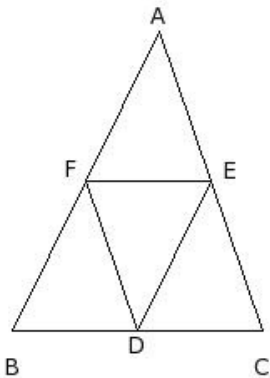


- (i) 10.0 cm (ii) 11.0 cm (iii) 7.0 cm (iv) 8.0 cm (v) 9.0 cm

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

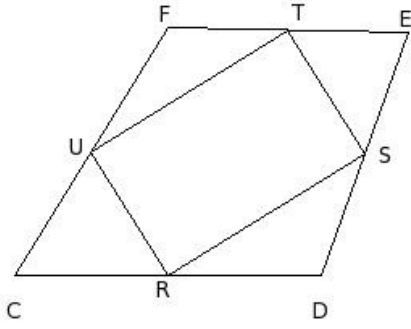
18. D, E & F are mid-points of BC, CA & AB respectively.

Given $DE = 10$ cm, $EF = 8$ cm & $FD = 10$ cm, find the sides of the triangle.



- (i) 20 cm, 15 cm & 20 cm (ii) 20 cm, 16 cm & 22 cm (iii) 20 cm, 16 cm & 20 cm (iv) 17 cm, 16 cm & 20 cm
(v) 21 cm, 16 cm & 20 cm

19. CDEF is a quadrilateral. R, S, T and U are mid-points of CD, DE, EF and FC respectively. If $CE = 29$ cm and $DF = 18$ cm, find the measure of the sides of RSTU.



- (i) 14.5 cm, 6 cm, 14.5 cm, 6 cm (ii) 14.5 cm, 8 cm, 14.5 cm, 8 cm (iii) 14.5 cm, 9 cm, 14.5 cm, 9 cm
(iv) 16 cm, 9 cm, 16 cm, 9 cm (v) 15 cm, 9 cm, 15 cm, 9 cm

Assignment Key

| | | | | | |
|-----------|----------|----------|-----------|----------|-----------|
| 1) (iv) | 2) (iii) | 3) (iii) | 4) (v) | 5) (iii) | 6) (i) |
| 7) (v) | 8) (v) | 9) (v) | 10) (iv) | 11) (i) | 12) (v) |
| 13) (iv) | 14) (v) | 15) (iv) | 16) (iii) | 17) (v) | 18) (iii) |
| 19) (iii) | | | | | |