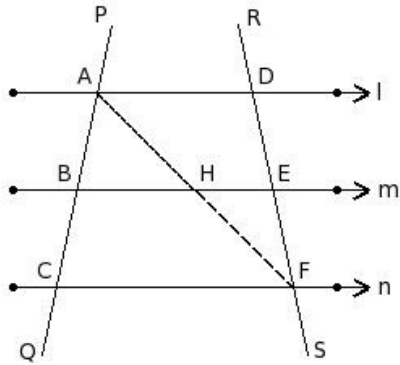




In the given figure, three lines l , m and n are such that $l \parallel m \parallel n$.

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

$\triangle ACF \sim$

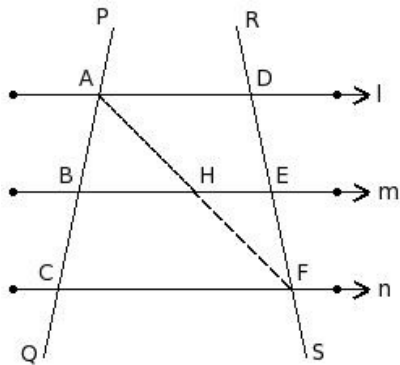


- (i) $\triangle DAE$ (ii) $\triangle DCF$ (iii) $\triangle ABH$ (iv) $\triangle FEH$ (v) $\triangle FDA$

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.

$\angle HFE =$

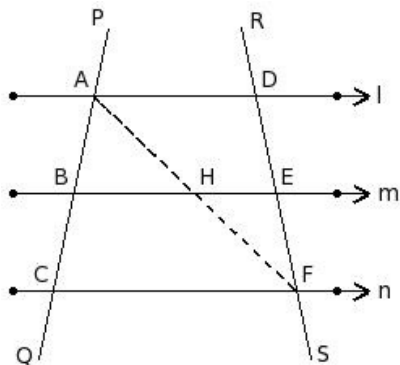


- (i) $\angle FDA$ (ii) $\angle FAC$ (iii) $\angle AFD$ (iv) $\angle HAB$ (v) $\angle FEH$

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.

$\angle FDA =$

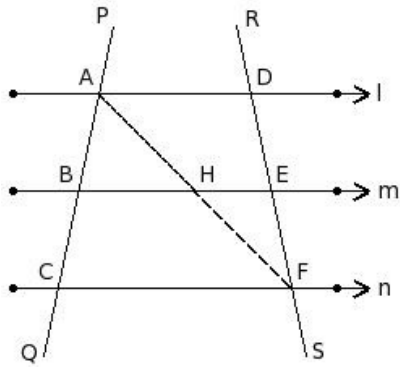


- (i) $\angle EHF$ (ii) $\angle ABH$ (iii) $\angle FEH$ (iv) $\angle ACF$ (v) $\angle DAF$

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

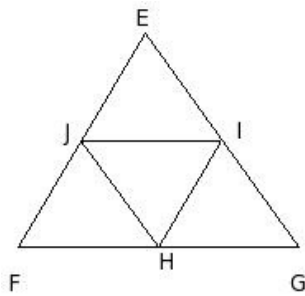
4. Two transversals PQ and RS intersect them at the points A, B, C and D, E, F respectively.

$\angle EHF =$



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

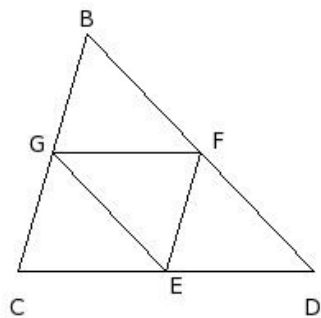
5. In the given figure, the area of the $\triangle EFG$ is x sq.cm. H, I, J are the mid-points of the sides FG, GE and EF respectively. The area of the $\triangle HIJ$ is



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

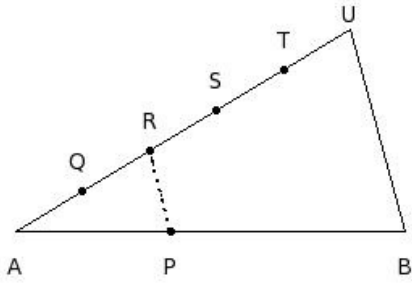
6. In the given figure, points E, F and G are the mid-points of sides CD, DB and BC of $\triangle BCD$. Which of the following are true?

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



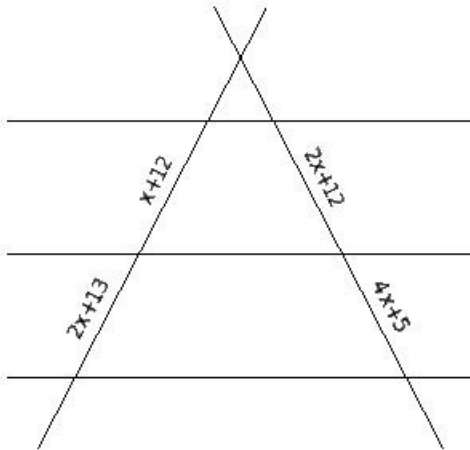
- (i) $\{a, c, e\}$ (ii) $\{b, d, e\}$ (iii) $\{b, a\}$ (iv) $\{d, c\}$ (v) $\{b, a, c\}$

7. In the given figure, if A, Q, R, S, T, U are equidistant and $RP \parallel UB$ and $AB = 24$ cm and $AP = 10$ cm. Find PB



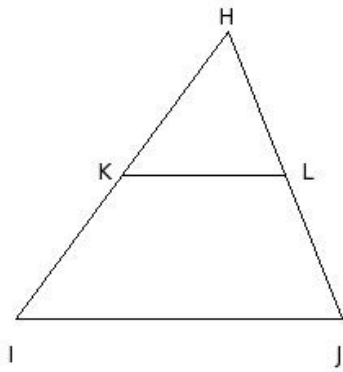
- (i) 12.00 cm (ii) 15.00 cm (iii) 14.00 cm (iv) 13.00 cm (v) 16.00 cm

8. From the given figure and values, find x



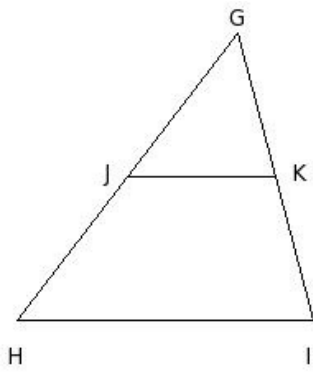
- (i) (35,32) (ii) (33,33) (iii) (32,32) (iv) (34,34) (v) (32,31)

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



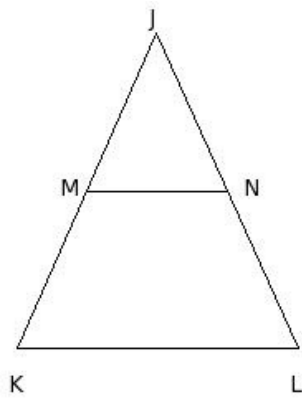
- (i) $\frac{HI}{2}$ (ii) $\frac{JH}{2}$ (iii) IJ (iv) HK (v) $\frac{IJ}{2}$

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



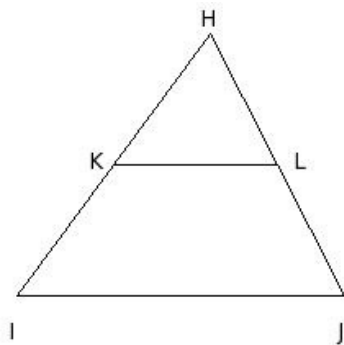
- (i) $\frac{HI}{2}$ (ii) $\frac{IG}{2}$ (iii) $\frac{GH}{2}$ (iv) HI (v) GK

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



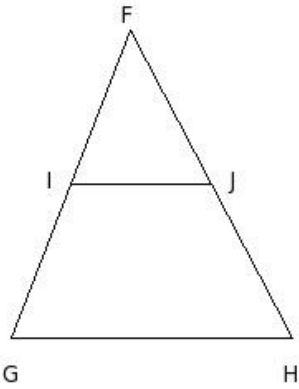
- (i) NL (ii) MK (iii) JN (iv) LJ (v) JK

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



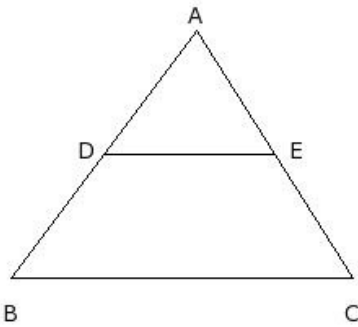
- (i) LJ (ii) HK (iii) JH (iv) HL (v) HI

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



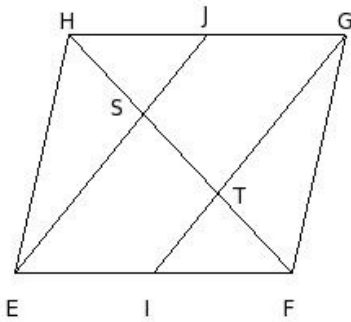
- (i) JH (ii) FG (iii) FI (iv) HF (v) IG

14. In the given figure $\triangle ABC$,
D is the mid-point of \overline{AB} and $\overline{DE} \parallel \overline{BC}$, then $EC =$



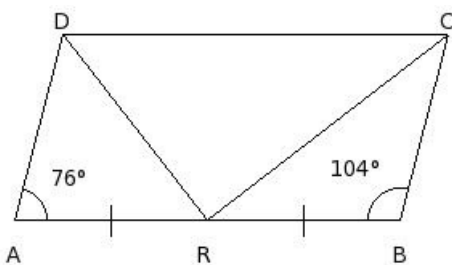
- (i) AB (ii) CA (iii) DB (iv) AE (v) AD

15. In the given figure, EFGH is a parallelogram
such that I and J are mid-points of sides EF & GH.
EJ meets FH at S and GI meets FH at T. Given $FH = 20$ cm, find FT



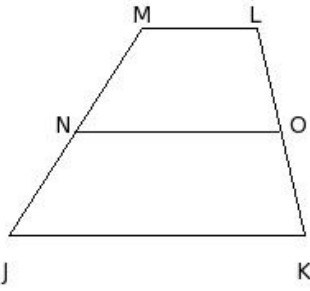
- (i) 8.67 cm (ii) 6.67 cm (iii) 4.67 cm (iv) 5.67 cm (v) 7.67 cm

16. In the given figure, ABCD is a parallelogram such that R is the mid-point of AB and $AB = 2DA$. Find $\angle DRC$



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

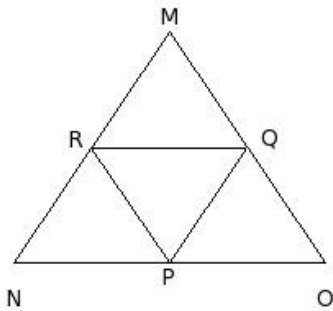
17. In the given figure, JKLM is a trapezium. N and O are mid-points of JM and KL. Given $NO = 12.5$ cm and $LM = 7$ cm, find JK



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

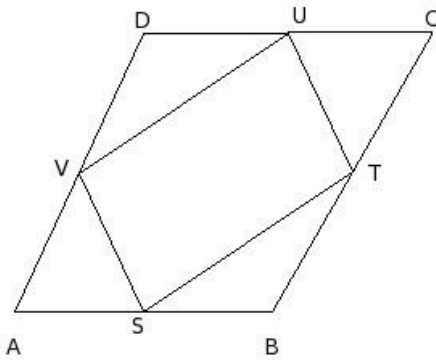
In the given figure, $\triangle MNO$ is a triangle.

18. P, Q & R are mid-points of NO, OM & MN respectively. Given $PQ = 8$ cm, $QR = 10$ cm & $RP = 9$ cm, find the sides of the triangle.



- (i) 13 cm, 20 cm & 18 cm (ii) 16 cm, 20 cm & 18 cm (iii) 17 cm, 20 cm & 18 cm (iv) 16 cm, 20 cm & 21 cm
(v) 16 cm, 19 cm & 18 cm

19. ABCD is a quadrilateral. S, T, U and V are mid-points of AB, BC, CD and DA respectively. If $AC = 31$ cm and $BD = 19$ cm, find the measure of the sides of STUV.



- (i) 15.5 cm, 8 cm, 15.5 cm, 8 cm (ii) 15.5 cm, 9.5 cm, 15.5 cm, 9.5 cm (iii) 18 cm, 9.5 cm, 18 cm, 9.5 cm
(iv) 15.5 cm, 7 cm, 15.5 cm, 7 cm (v) 16 cm, 9.5 cm, 16 cm, 9.5 cm

Assignment Key

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