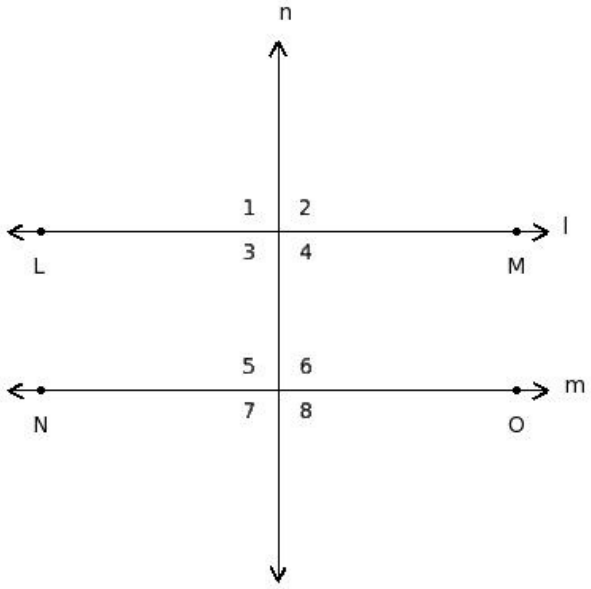
EduSahara™ Assignment

Name : Parallel Lines and Transversal

Chapter : Parallel Lines

Grade : ICSE Grade VI

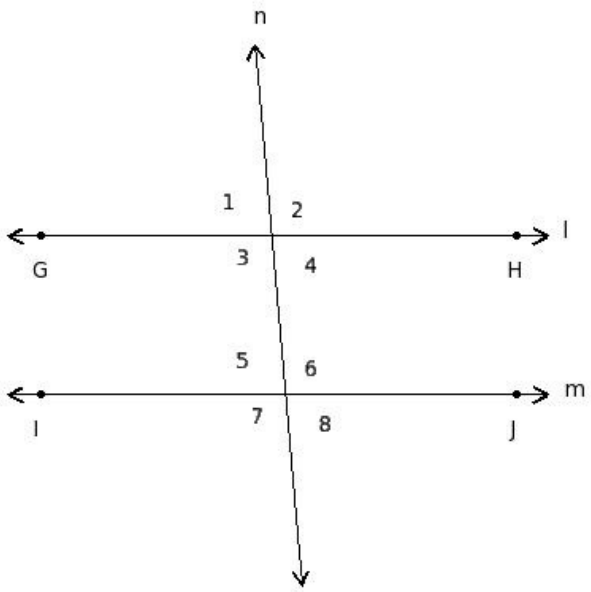
1. Find the adjacent angles in the given figure



(i) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (ii) ∠3 , ∠4 , ∠5 , ∠6 (iii) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7

(iv) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5 (v) ∠3 , ∠5 ; ∠4 , ∠6

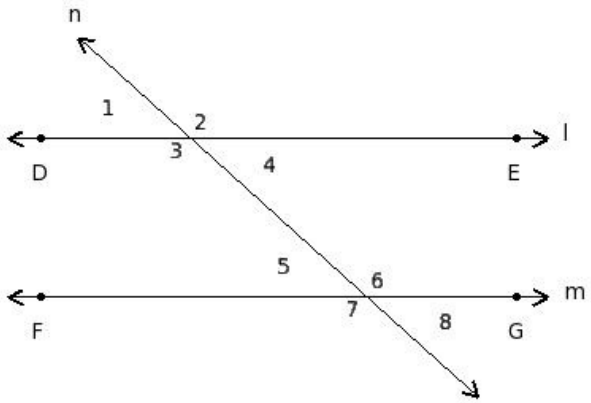
2. Find the vertically opposite angles in the given figure



(i) ∠1 , ∠2 , ∠7 , ∠8 (ii) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5

(iii) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7 (iv) ∠3 , ∠5 ; ∠4 , ∠6 (v) ∠3 , ∠6 ; ∠4 , ∠5

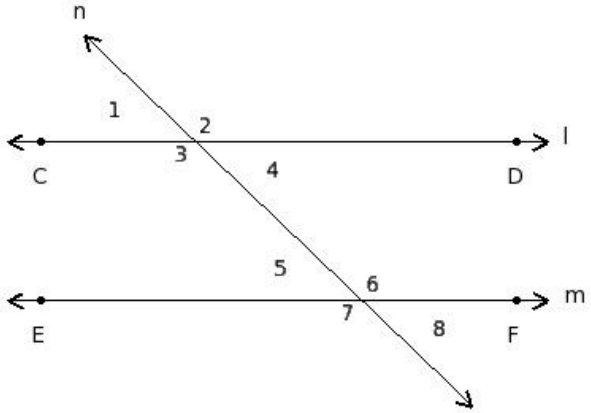
3. Find the interior angles in the given figure



(i) ∠1 , ∠8 ; ∠2 , ∠7 (ii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (iii) ∠1 , ∠2 , ∠7 , ∠8

(iv) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5 (v) ∠3 , ∠4 , ∠5 , ∠6

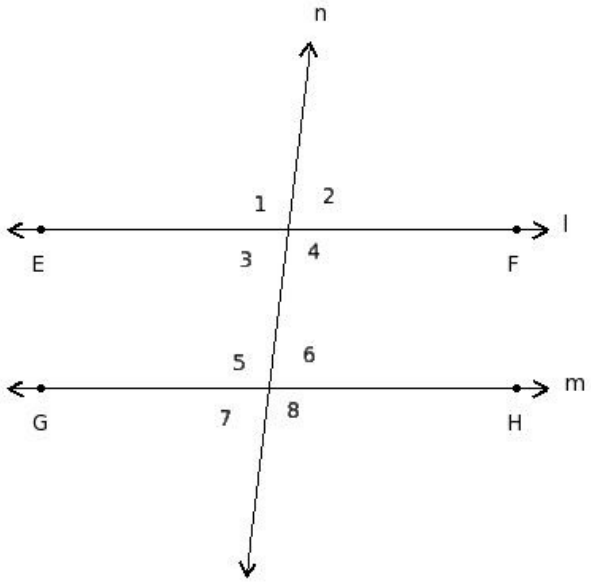
4. Find the exterior angles in the given figure



(i) ∠3 , ∠5 ; ∠4 , ∠6 (ii) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5

(iii) ∠1 , ∠8 ; ∠2 , ∠7 (iv) ∠3 , ∠4 , ∠5 , ∠6 (v) ∠1 , ∠2 , ∠7 , ∠8

5. Find the interior alternate angles in the given figure

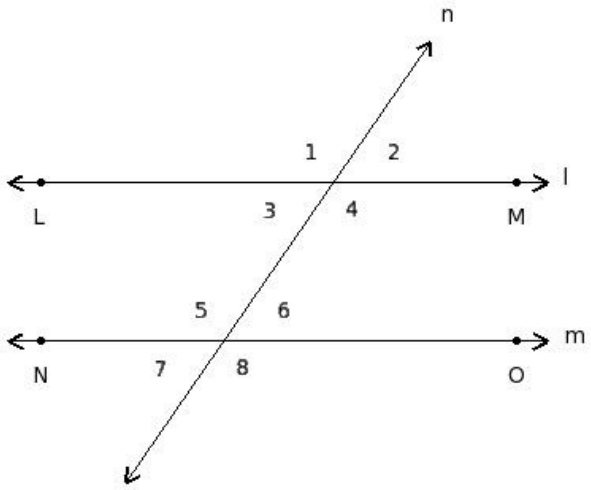


(i) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5

(ii) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7 (iii) ∠3 , ∠5 ; ∠4 , ∠6 (iv) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8

(v) ∠3 , ∠6 ; ∠4 , ∠5

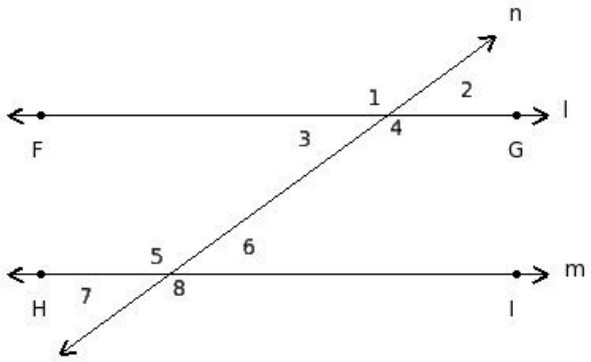
6. Find the exterior alternate angles in the given figure



(i) ∠1 , ∠8 ; ∠2 , ∠7 (ii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (iii) ∠3 , ∠6 ; ∠4 , ∠5

(iv) ∠3 , ∠5 ; ∠4 , ∠6 (v) ∠1 , ∠2 , ∠7 , ∠8

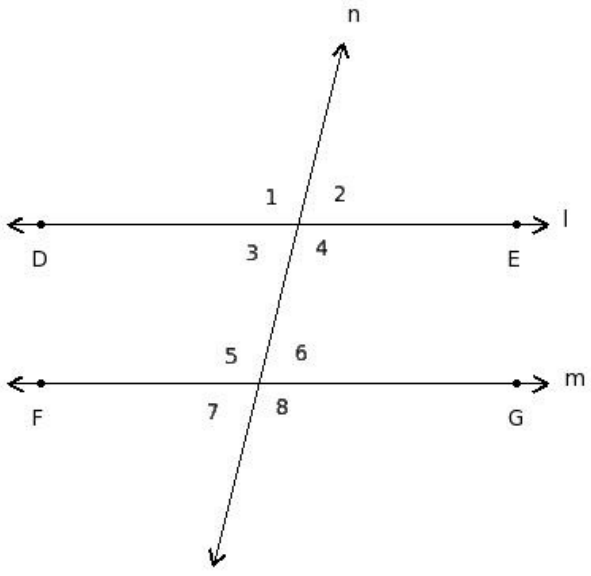
7. Find the corresponding angles in the given figure



(i) ∠1 , ∠8 ; ∠2 , ∠7 (ii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (iii) ∠3 , ∠5 ; ∠4 , ∠6

(iv) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5 (v) ∠3 , ∠4 , ∠5 , ∠6

8. Find the co-interior angles in the given figure

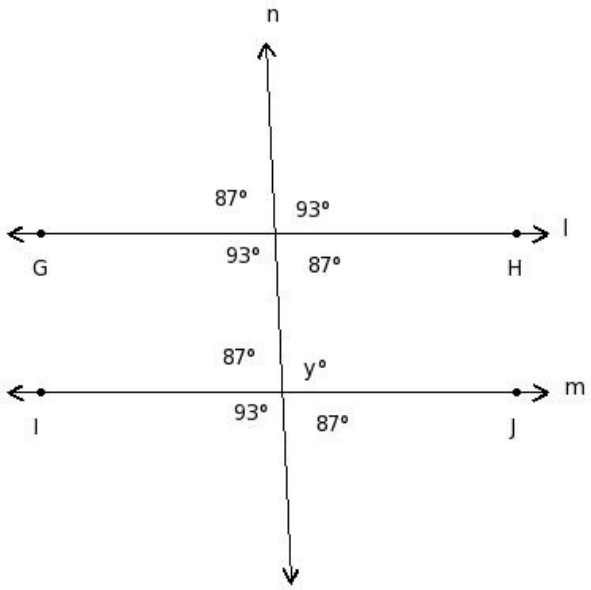


(i) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5

(ii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (iii) ∠1 , ∠8 ; ∠2 , ∠7 (iv) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7

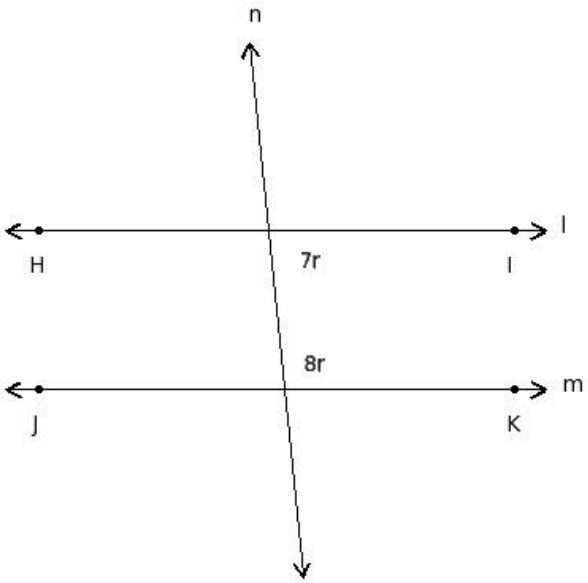
(v) ∠3 , ∠5 ; ∠4 , ∠6

9. Find the value of 'y'



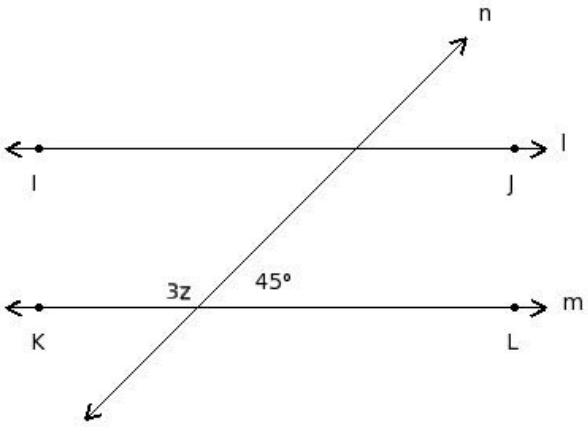
(i) 98° (ii) 123° (iii) 93° (iv) 108° (v) 103°

10. In the given figure l ‖ m. Find the value of 'r'



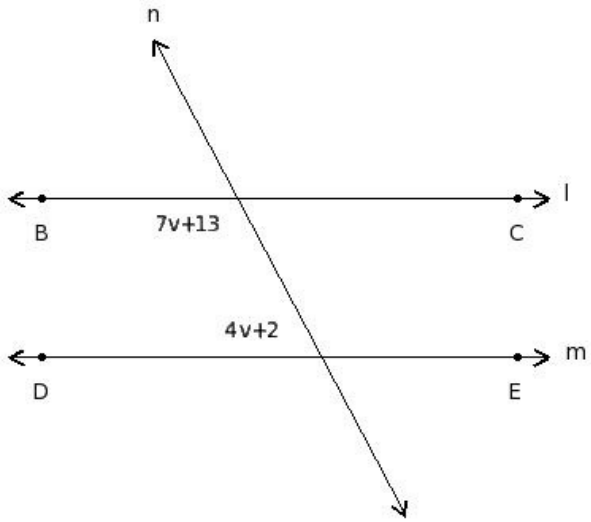
(i) 12 (ii) 10 (iii) 11 (iv) 13 (v) 15

11. In the given figure l ‖ m. Find the value of 'z'



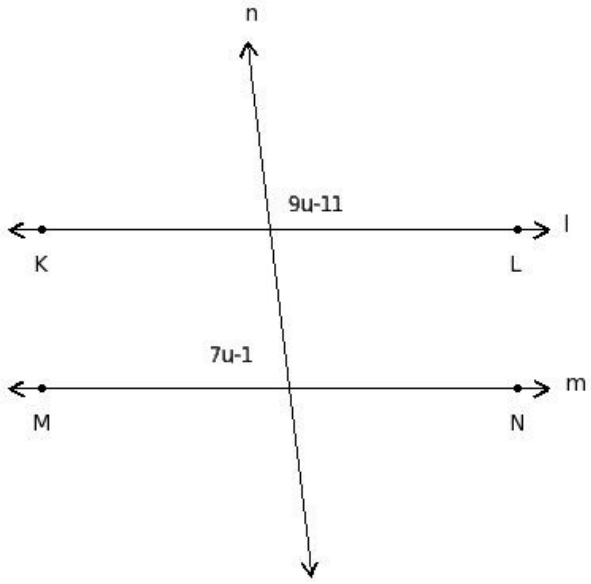
(i) 42 (ii) 47 (iii) 45 (iv) 44 (v) 46

12. In the given figure l ∥ m. Find the value of 'v'



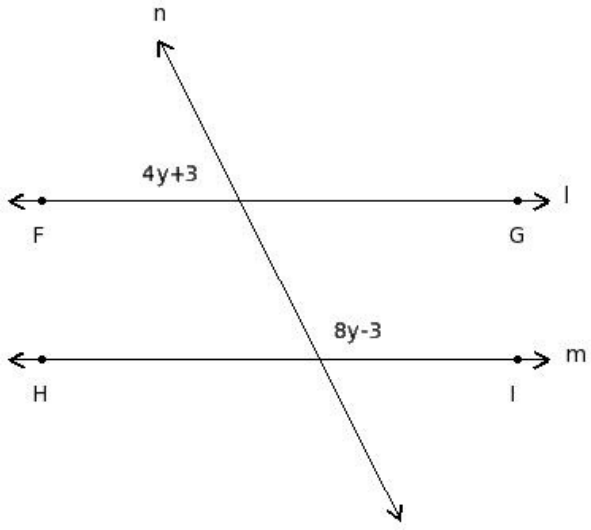
(i) 17 (ii) 15 (iii) 12 (iv) 16 (v) 14

13. In the given figure l ∥ m. Find the value of 'u'



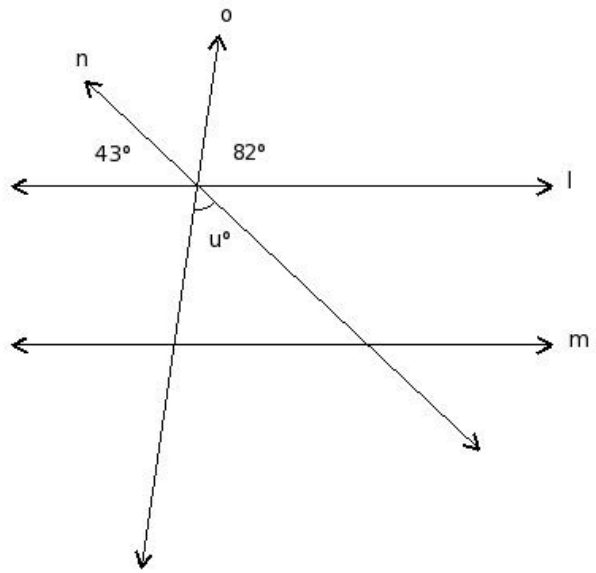
(i) 13 (ii) 11 (iii) 14 (iv) 9 (v) 12

14. In the given figure l ∥ m. Find the value of 'y'



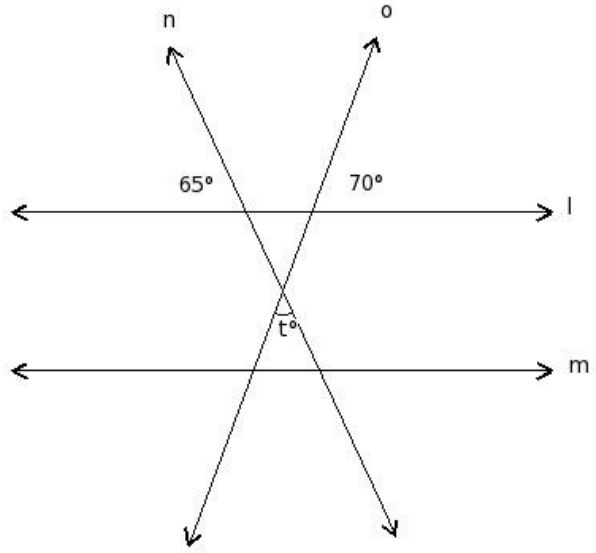
(i) 13 (ii) 14 (iii) 18 (iv) 15 (v) 16

15. In the given figure l ∥ m. Find the value of 'u'



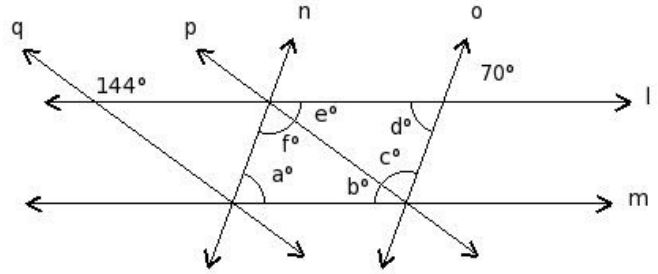
(i) 60° (ii) 85° (iii) 70° (iv) 55° (v) 65°

16. In the given figurel ∥ m. Find the value of 't'



(i) 50° (ii) 55° (iii) 75° (iv) 45° (v) 60°

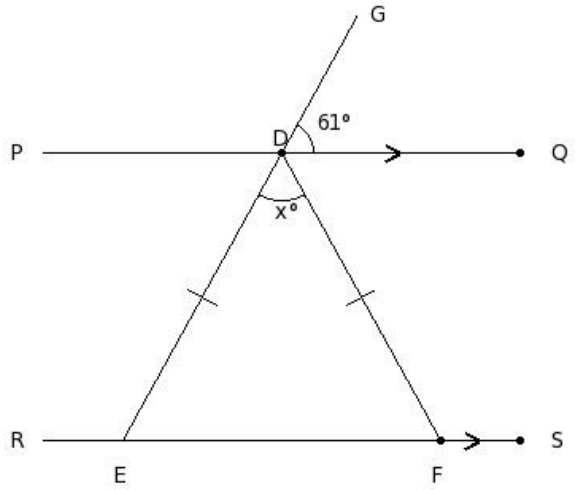
17. In the given figure, l ∥ m and n ∥ o and p ∥ q. Find the values of {a,b,c,d,e,f}



(i) 36°,74°,74°,70°,36°,70° (ii) 70°,70°,36°,74°,74°,36° (iii) 70°,36°,74°,70°,36°,74°

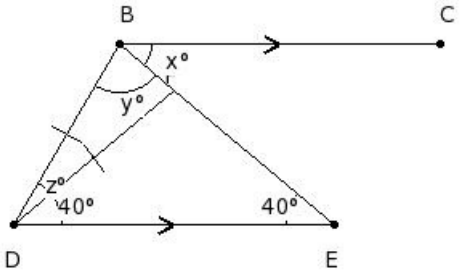
(iv) 70°,36°,74°,36°,70°,74° (v) 36°,70°,74°,70°,36°,74°

18. In the given figure, PQ ∥ RS, ∠GDQ = 61° and DE = FD. Find the measure of x.



(i) x=59° (ii) x=60° (iii) x=56° (iv) x=58° (v) x=57°

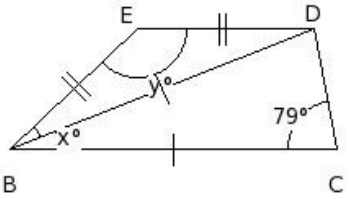
19. In the given figure, BC ∥ DE and BD = DF. Find the values of x,y and z.



(i) x=42°,y=80°,z=18° (ii) x=38°,y=82°,z=20° (iii) x=40°,y=80°,z=20° (iv) x=40°,y=78°,z=22°

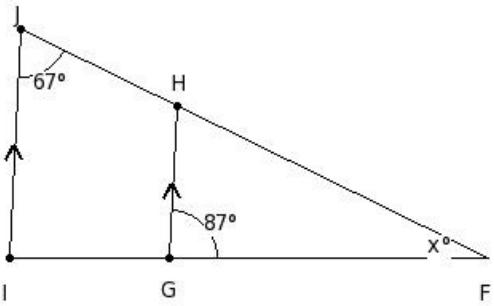
(v) x=38°,y=80°,z=22°

20. In the following figure BC ∥ ED, find the values of x and y.



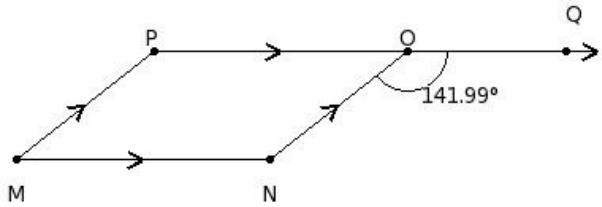
(i) x=20°,y=134° (ii) x=24°,y=138° (iii) x=22°,y=136° (iv) x=21°,y=135° (v) x=23°,y=137°

21. In the given figure, it is given that HG ∥ JI , ∠HJI = 67° and ∠HGF = 87°. Find the value of x.



(i) x=24° (ii) x=26° (iii) x=28° (iv) x=25° (v) x=27°

22. In the adjoining figure, side OP of parallelogram MNOP has been produced to Q. If ∠NOQ = 141.99° , find the measure of each angle of the parallelogram.

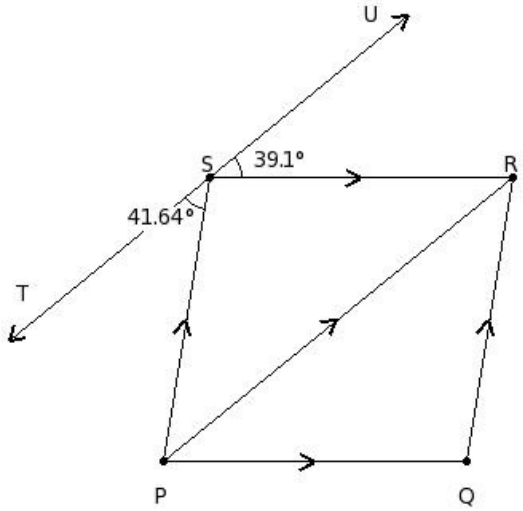


(i) M=37.01°,N=139.99°,O=39.01°,P=143.99° (ii) M=40.01°,N=140.99°,O=36.01°,P=142.99°

(iii) M=39.01°,N=140.99°,O=40.01°,P=139.99° (iv) M=36.01°,N=143.99°,O=37.01°,P=142.99°

(v) M=38.01°,N=141.99°,O=38.01°,P=141.99°

23. In the adjoining figure, PQRS is a parallelogram and TU is such that $\overline{TU} \parallel \overline{PR}$
If ∠PST = 41.64° and ∠RSU = 39.1° , find the measure of ∠PQR .



(i) 98.25° (ii) 97.25° (iii) 101.25° (iv) 99.25° (v) 100.25°

24. Which of the following are true for alternate angles?

a) They are in the same side of the transversal
b) Both are interior angles
c) They are adjacent angles
d) They are not adjacent angles
e) They are on either side of the transversal
f) One is interior angle and the other is exterior

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

25. Which of the following are true for corresponding angles?

a) They are on the same side of the transversal
b) They are on either side of the transversal
c) They are not adjacent angles
d) Both are interior angles
e) They are adjacent angles
f) One is interior angle and the other is exterior angle

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

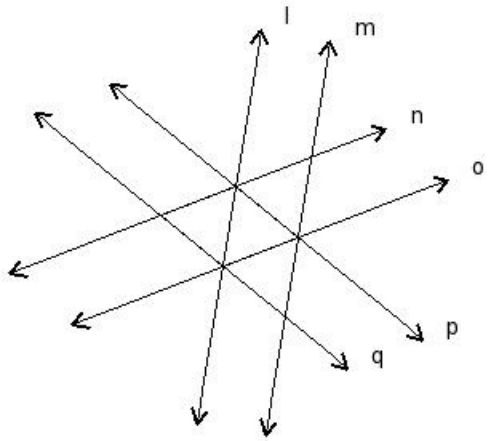
26. Which of the following are true?

a) If $c \parallel d$ and $d \parallel e$, then $c \parallel e$
b) If two lines are parallel to the same line, then they are perpendicular to each other
c) If $c \perp d$ and $d \perp e$, then $c \perp e$
d) If $c \perp d$ and $c \perp e$, then $d \perp e$
e) If two lines are parallel to the same line, then they are parallel to each other

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

27. In the given figure, l , m , n , o , p , q are lines in a plane. By looking at the figure, which of the following are true?

a) q is the transversal of n & l
b) $l \parallel m$
c) l is the transversal of n & p
d) $l \parallel o$
e) o is the transversal of l & m
f) p is the transversal of n & o



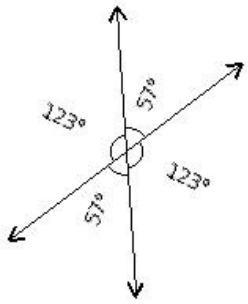
(i) {c,a} (ii) {c,d,e} (iii) {a,b,e,f} (iv) {c,f,a} (v) {d,b}

28. Which of the following are true with respect to lines n , o , p , q where $n \parallel o$, $o \perp p$, $p \perp q$?

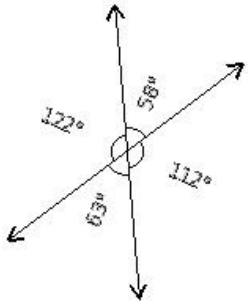
a) $p \parallel q$
b) $o \parallel q$
c) $n \parallel q$
d) $n \parallel p$
e) $n \perp q$

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

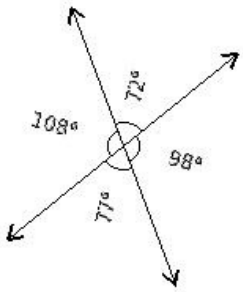
29. Which of the given figures is correct?



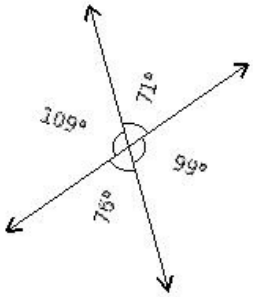
I



II



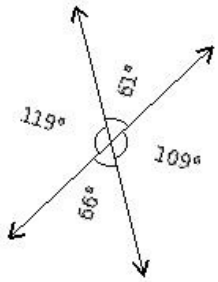
III



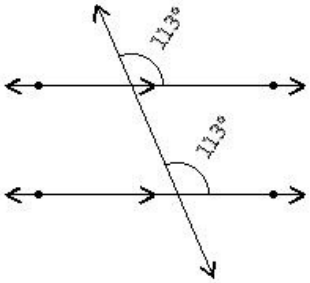
IV

(i) III (ii) I (iii) II (iv) IV

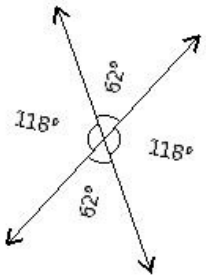
30. Which of the given figures is wrong?



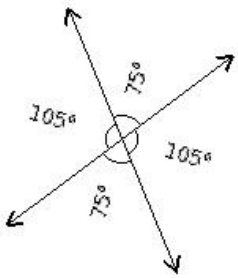
I



II



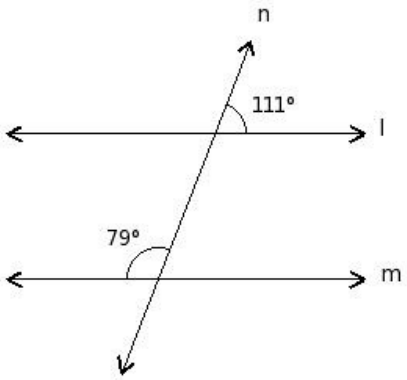
III



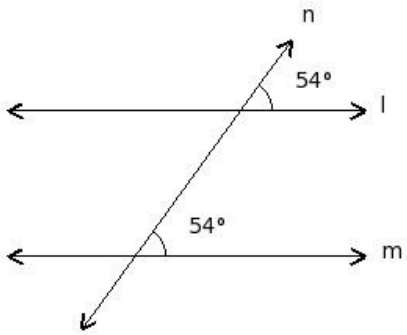
IV

(i) II (ii) IV (iii) III (iv) I

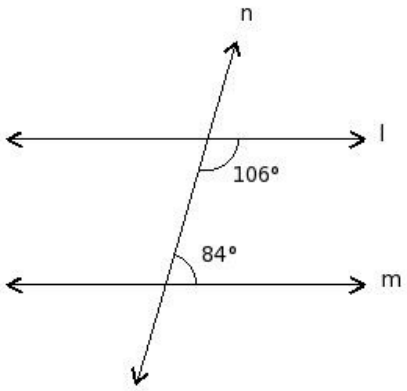
31. In which of the figures given bellow, l ‖ m?



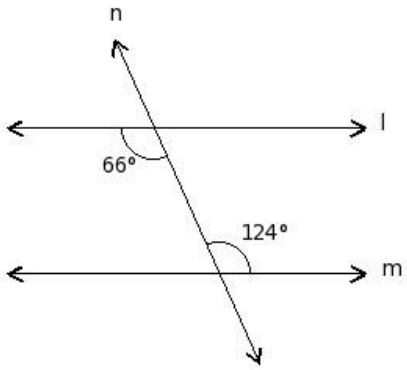
I



II



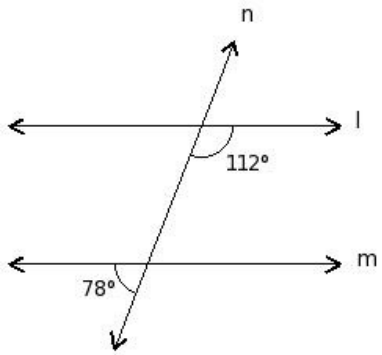
III



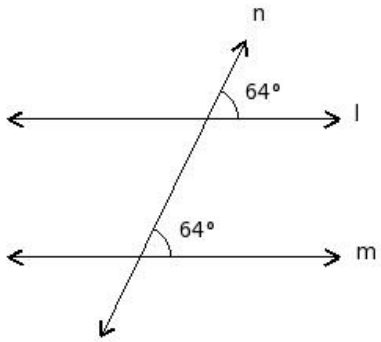
IV

(i) III (ii) I (iii) II (iv) IV

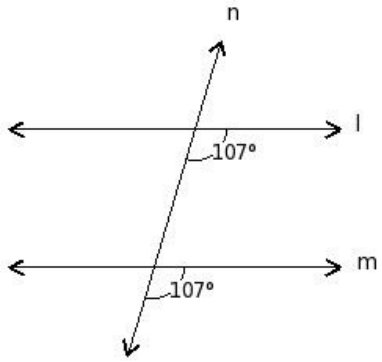
32. In which of the figures given bellow, l ∦ m(not parallel)?



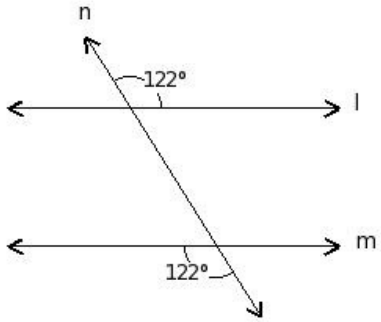
I



II



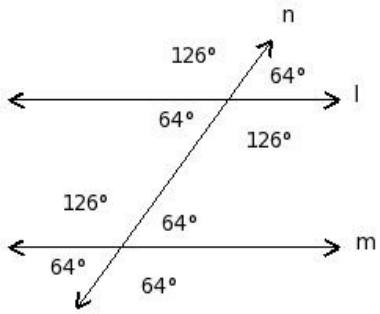
III



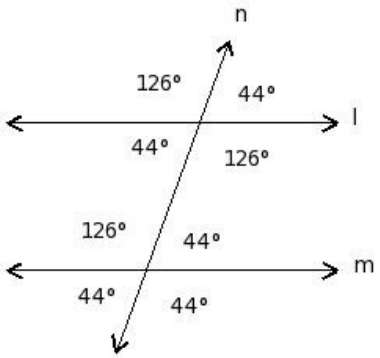
IV

(i) II (ii) III (iii) IV (iv) I

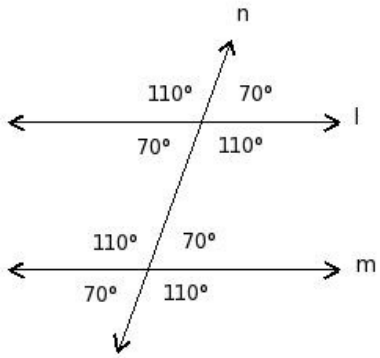
33. If l ∥ m, which of the given figures is correct?



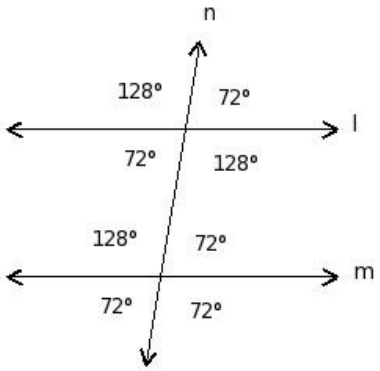
I



II



III



IV

(i) III (ii) II (iii) IV (iv) I

Assignment Key

1) (iv)	2) (iii)	3) (v)	4) (v)	5) (v)	6) (i)
7) (ii)	8) (v)	9) (iii)	10) (i)	11) (iii)	12) (ii)
13) (v)	14) (iv)	15) (iv)	16) (iv)	17) (iii)	18) (iv)
19) (iii)	20) (iii)	21) (ii)	22) (v)	23) (iv)	24) (i)
25) (v)	26) (iv)	27) (iii)	28) (v)	29) (ii)	30) (iv)
31) (iii)	32) (iv)	33) (i)			