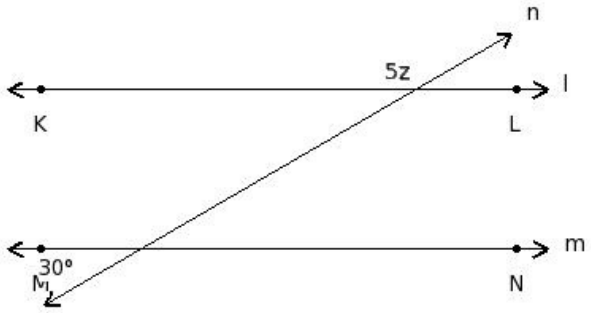
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Parallel Lines

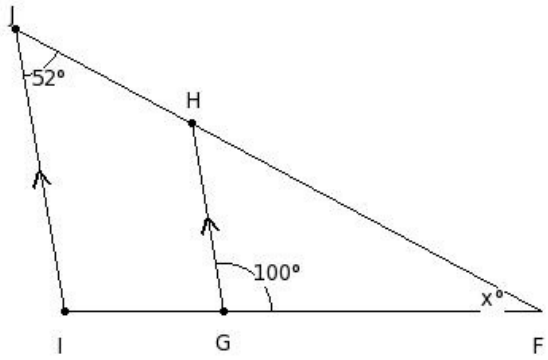
Grade : ICSE Grade VI

1. In the given figure l ∥ m. Find the value of 'z'



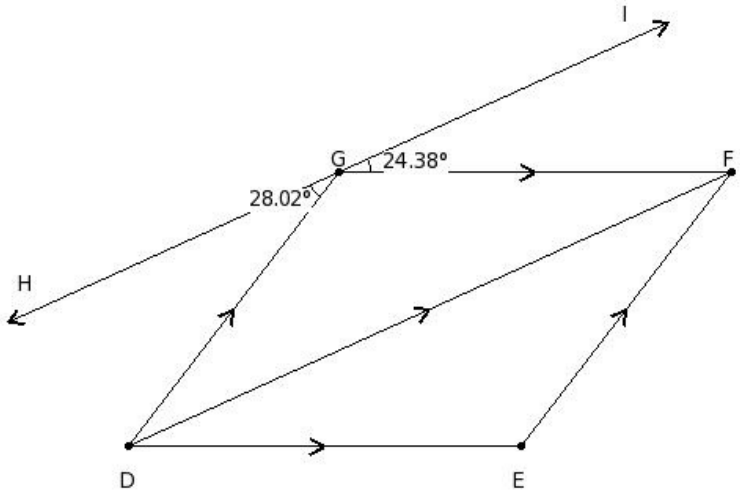
(i) 31 (ii) 29 (iii) 32 (iv) 27 (v) 30

2. In the given figure, it is given that HG ∥ JI , ∠HJI = 52° and ∠HGF = 100°. Find the value of x.



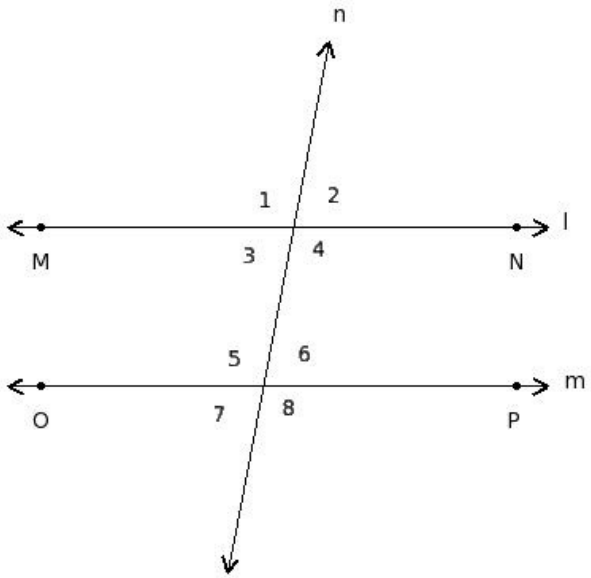
(i) x=29° (ii) x=30° (iii) x=28° (iv) x=26° (v) x=27°

3. In the adjoining figure, DEFG is a parallelogram and HI is such that $\overline{HI} \parallel \overline{DF}$
If ∠DGH = 28.02° and ∠FGI = 24.38°, find the measure of ∠FGD.



(i) 129.60° (ii) 126.60° (iii) 128.60° (iv) 127.60° (v) 125.60°

4. Find the exterior alternate angles in the given figure

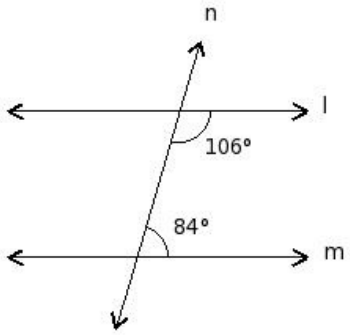


(i) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (ii) ∠1 , ∠8 ; ∠2 , ∠7

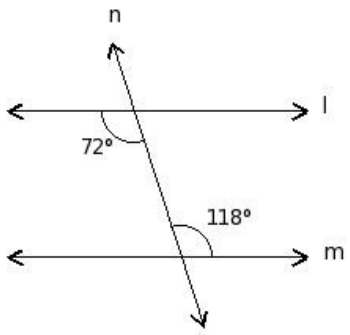
(iii) ∠1 , ∠2 ; ∠2 , ∠4 ; ∠4 , ∠3 ; ∠3 , ∠1 ; ∠5 , ∠6 ; ∠6 , ∠8 ; ∠8 , ∠7 ; ∠7 , ∠5 (iv) ∠1 , ∠2 , ∠7 , ∠8

(v) ∠3 , ∠6 ; ∠4 , ∠5

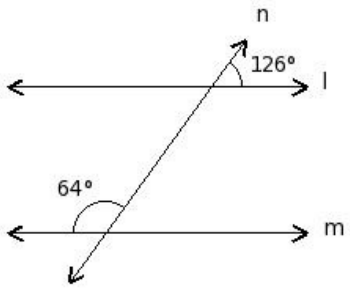
5. In which of the figures given bellow, l ‖ m?



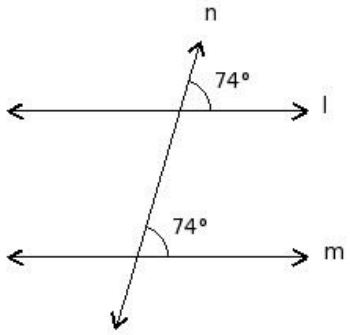
I



II



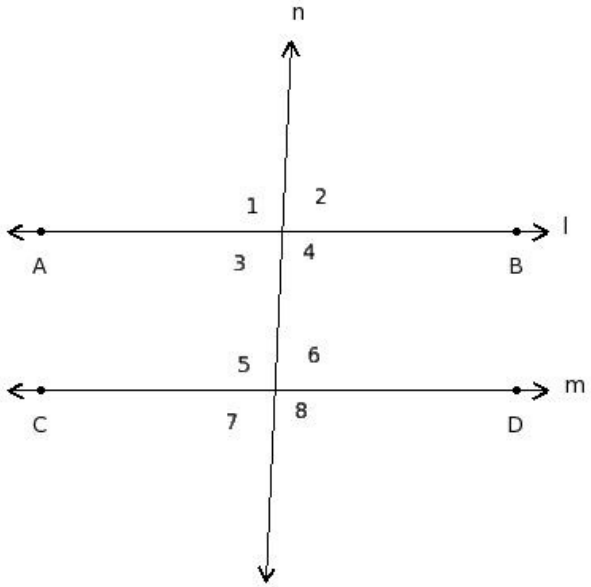
III



IV

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

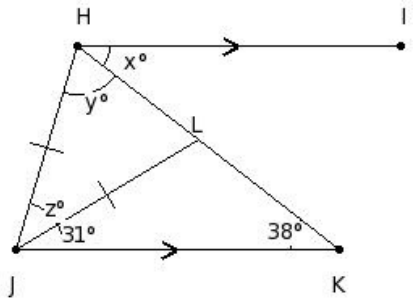
6. Find the corresponding angles in the given figure



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

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

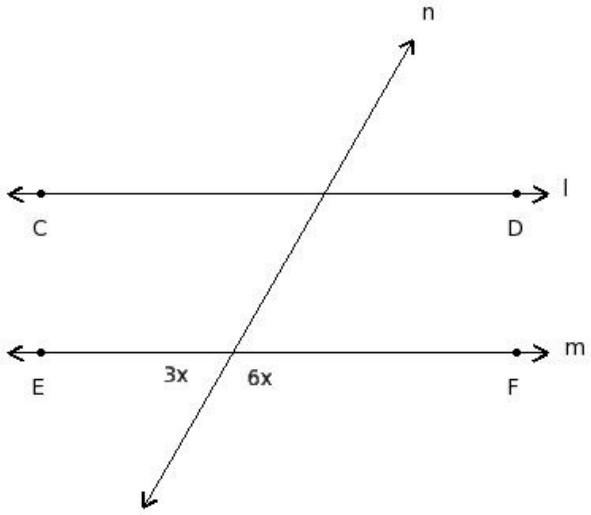
7. In the given figure, HI ∥ JK and HJ = JL. Find the values of x,y and z.



(i) x=36°,y=71°,z=42° (ii) x=38°,y=67°,z=44° (iii) x=38°,y=69°,z=42° (iv) x=40°,y=69°,z=40°

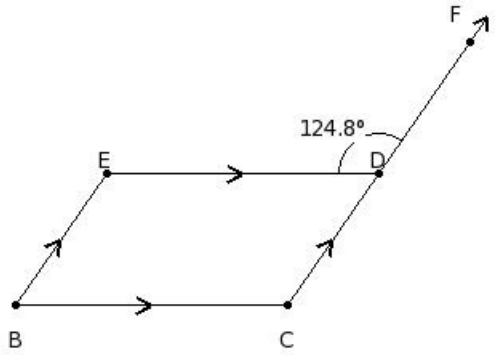
(v) x=36°,y=69°,z=44°

8. In the given figure l ∥ m. Find the value of 'x'



(i) 23 (ii) 21 (iii) 20 (iv) 17 (v) 19

9. In the adjoining figure, side CD of parallelogram BCDE has been produced to F. If ∠EDF = 124.8° , find the measure of each angle of the parallelogram.

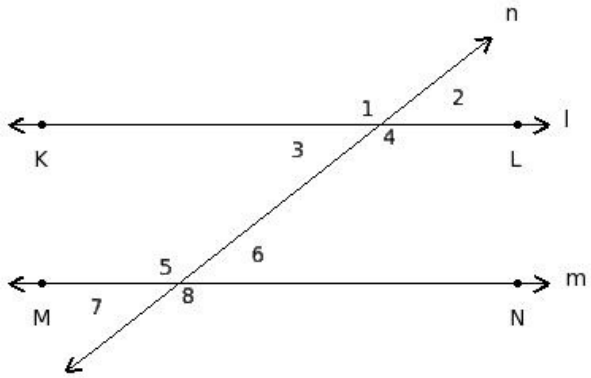


(i) B=57.2°,C=123.8°,D=53.2°,E=125.8° (ii) B=53.2°,C=126.8°,D=54.2°,E=125.8°

(iii) B=56.2°,C=123.8°,D=57.2°,E=122.8° (iv) B=54.2°,C=122.8°,D=56.2°,E=126.8°

(v) B=55.2°,C=124.8°,D=55.2°,E=124.8°

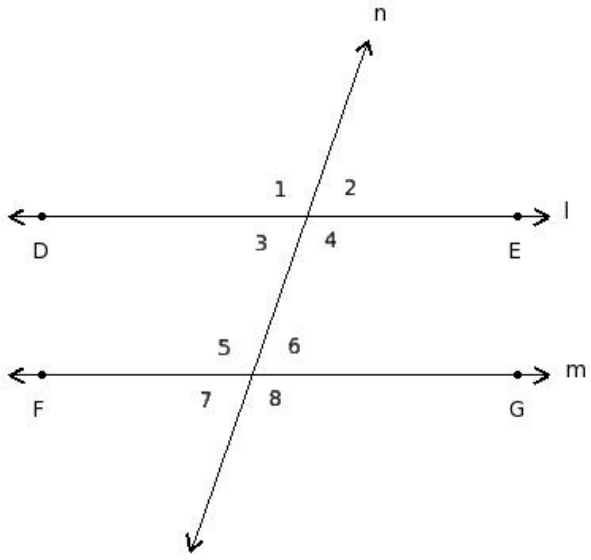
10. Find the vertically opposite angles in the given figure



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

(iv) ∠3 , ∠6 ; ∠4 , ∠5 (v) ∠3 , ∠4 , ∠5 , ∠6

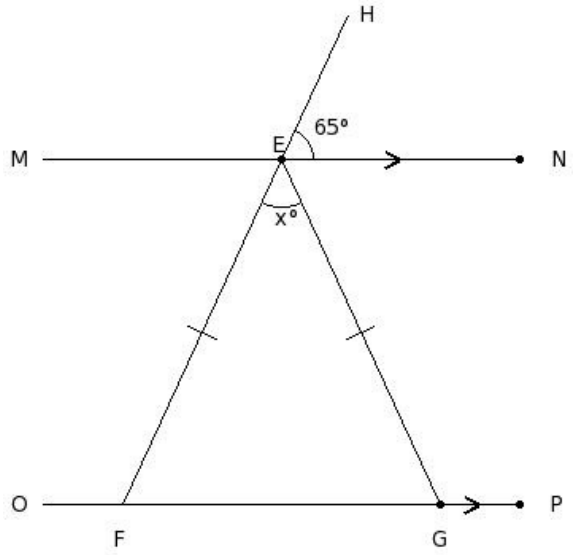
11. Find the co-interior angles in the given figure



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

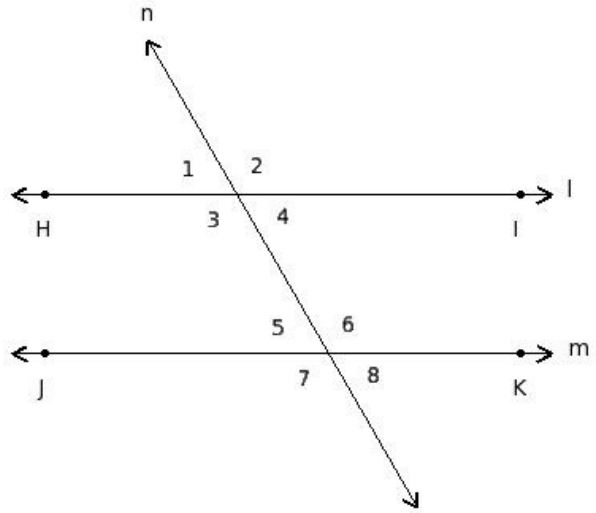
(iv) ∠3 , ∠5 ; ∠4 , ∠6 (v) ∠1 , ∠8 ; ∠2 , ∠7

12. In the given figure, MN ∥ OP, ∠HEN = 65° and EF = GE. Find the measure of x.



(i) x=50° (ii) x=52° (iii) x=49° (iv) x=48° (v) x=51°

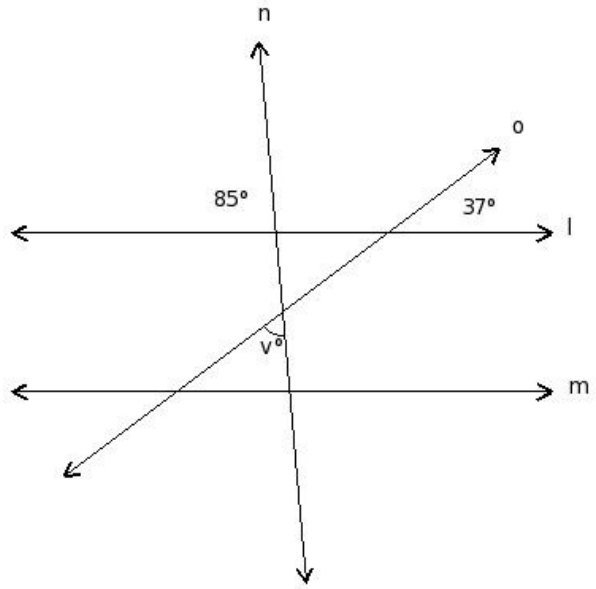
13. Find the exterior angles in the given figure



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

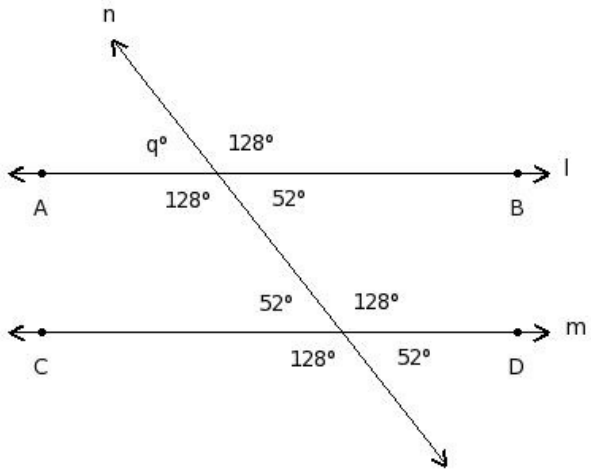
(v) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8

14. In the given figurel ∥ m. Find the value of 'v'



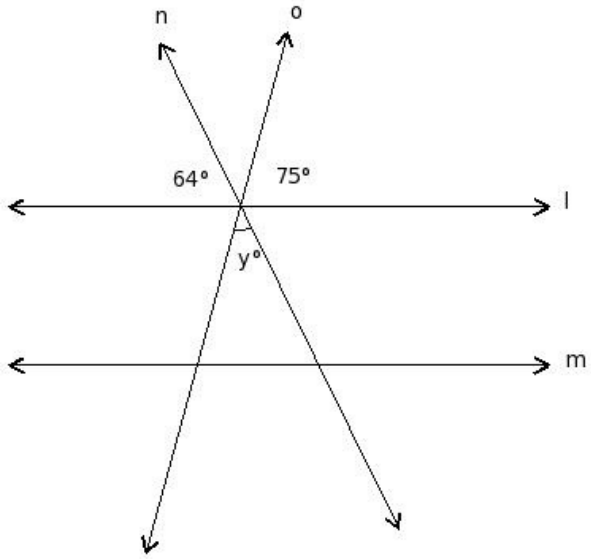
(i) 63° (ii) 58° (iii) 68° (iv) 88° (v) 73°

15. Find the value of 'q'



(i) 57° (ii) 52° (iii) 67° (iv) 82° (v) 62°

16. In the given figure l ‖ m. Find the value of 'y'



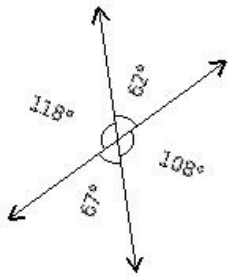
(i) 46° (ii) 71° (iii) 56° (iv) 41° (v) 51°

17. Which of the following are true with respect to lines m , n , o , p where m ‖ n , n ⊥ o , o ⊥ p?

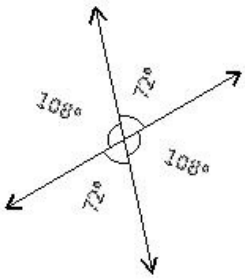
a) n ‖ p
b) m ‖ o
c) m ⊥ p
d) o ‖ p
e) m ‖ p

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

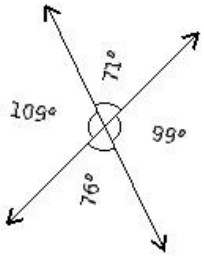
18. Which of the given figures is correct?



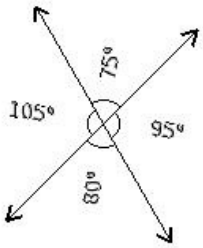
I



II



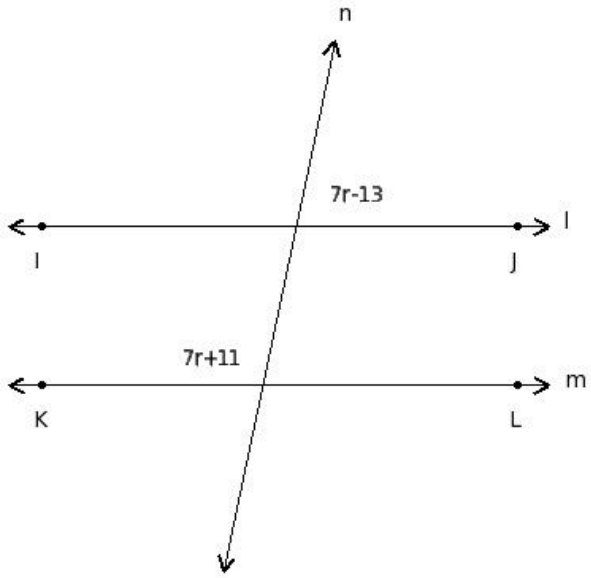
III



IV

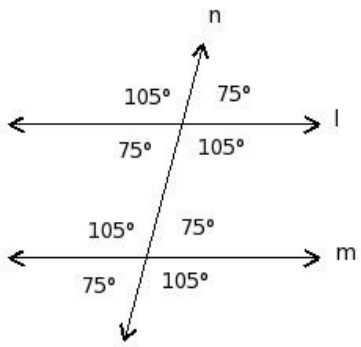
(i) IV (ii) III (iii) I (iv) II

19. In the given figure l ∥ m. Find the value of 'r'

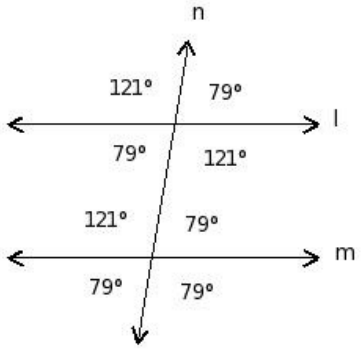


(i) 11 (ii) 12 (iii) 13 (iv) 15 (v) 14

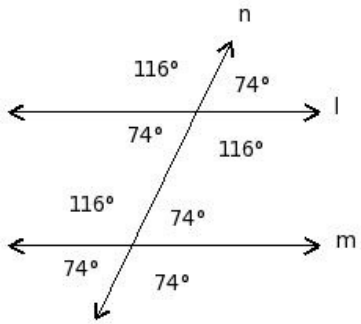
20. If l ∥ m, which of the given figures is correct?



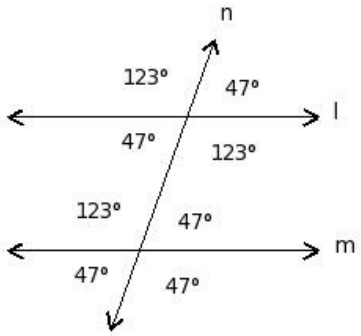
I



II



III

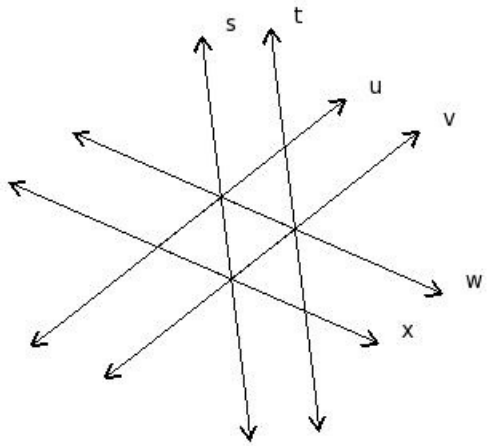


IV

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

21. In the given figure, s , t , u , v , w , x are lines in a plane. By looking at the figure, which of the following are true?

a) w is the transversal of u & v
b) s is the transversal of u & w
c) s ∥ t
d) s ∥ v
e) v is the transversal of s & t
f) x is the transversal of u & s



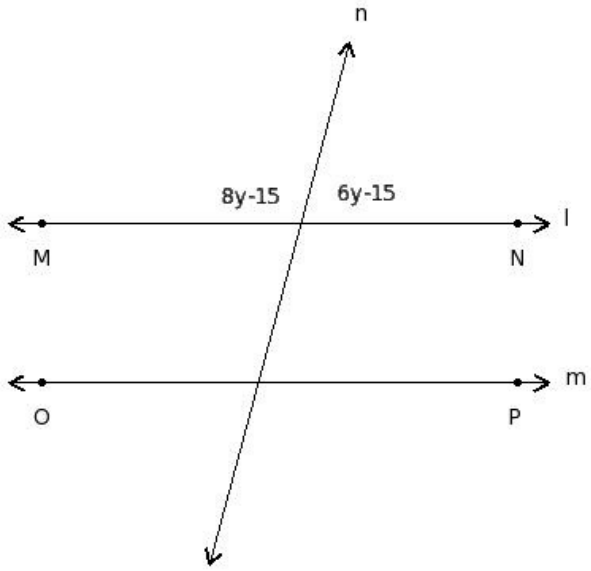
(i) {b,d,e} (ii) {b,a} (iii) {b,f,a} (iv) {a,c,e,f} (v) {d,c}

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

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

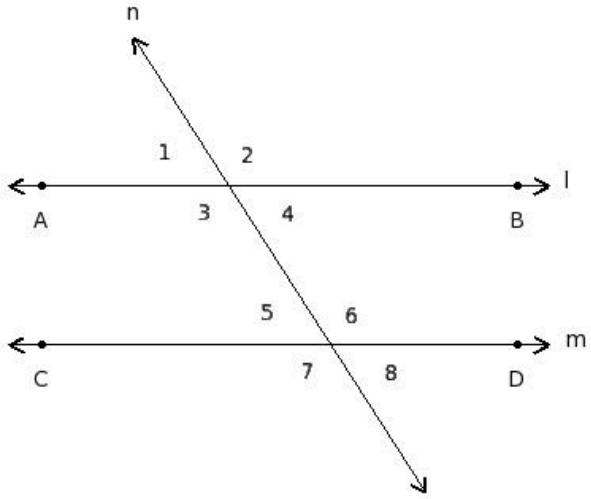
(i) {a,c,e} (ii) {b,a} (iii) {f,b,e} (iv) {d,c} (v) {d,a,c}

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



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

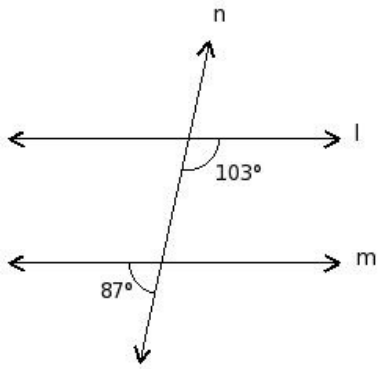
24. Find the adjacent angles in the given figure



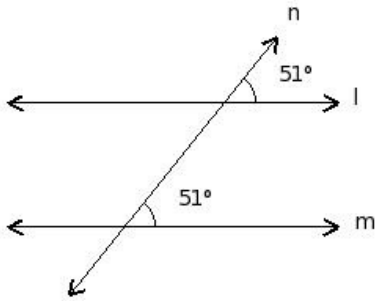
(i) ∠3 , ∠6 ; ∠4 , ∠5 (ii) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7 (iii) ∠1 , ∠8 ; ∠2 , ∠7

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

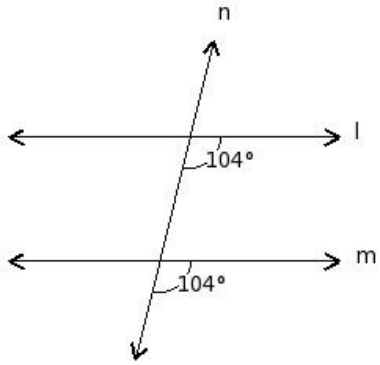
25. In which of the figures given bellow, l ∦ m(not parallel)?



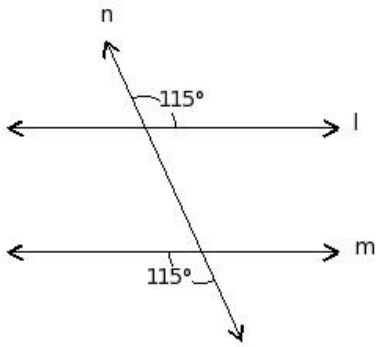
I



II



III



IV

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

Assignment Key

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