EduSahara™ Assignment

Name : Parallel Lines and Transversal

Chapter : Lines and Angles

Grade : ICSE Grade VIII

1. Multiple lines drawn on a plane are called

   (i) intersecting lines (ii) perpendicular lines (iii) parallel lines (iv) concurrent lines (v) coplanar lines

2. Multiple lines which do not meet each other are called

   (i) parallel lines (ii) concurrent lines (iii) perpendicular lines (iv) intersecting lines (v) coplanar lines

3. Multiple lines which pass through the same point are called

   (i) concurrent lines (ii) coplanar lines (iii) perpendicular lines (iv) intersecting lines (v) parallel lines

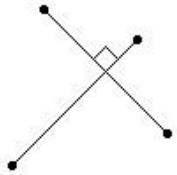
4. A line that intersects two lines at two different points is called

   (i) perpendicular lines (ii) coplanar lines (iii) parallel lines (iv) concurrent lines (v) transversal

5. The following lines represent

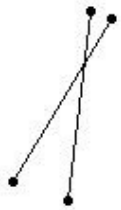
   (i) parallel lines (ii) concurrent lines (iii) intersecting lines (iv) perpendicular lines (v) coplanar lines

6. The following lines represent



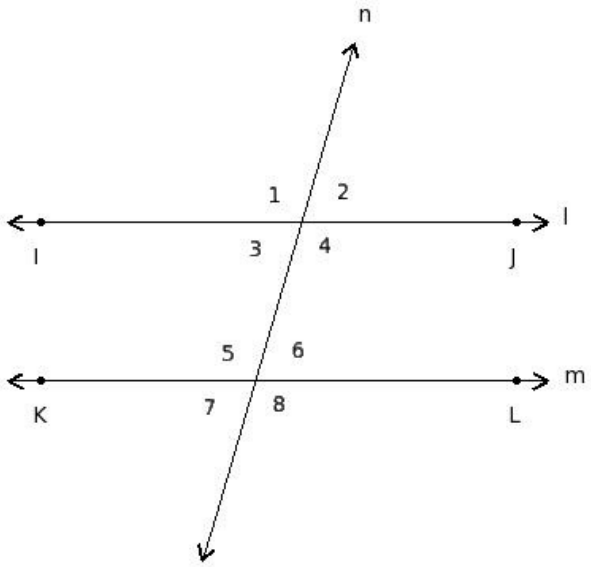
   (i) intersecting lines (ii) parallel lines (iii) perpendicular lines (iv) coplanar lines (v) concurrent lines

7. The following lines represent



   (i) intersecting lines (ii) perpendicular lines (iii) coplanar lines (iv) parallel lines (v) concurrent lines

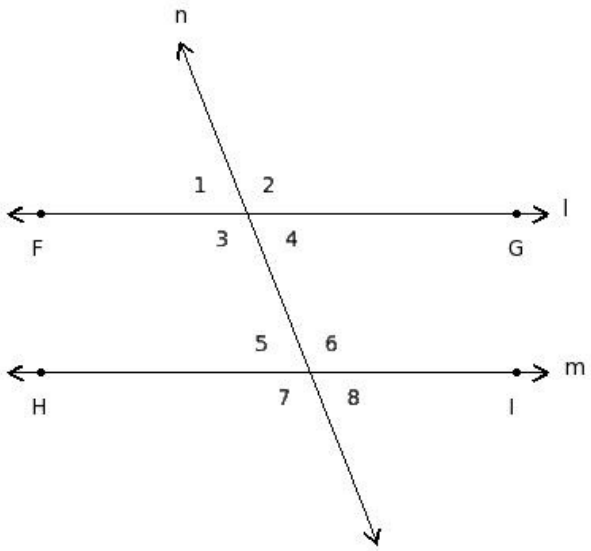
8. Find the adjacent angles in the given figure



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

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

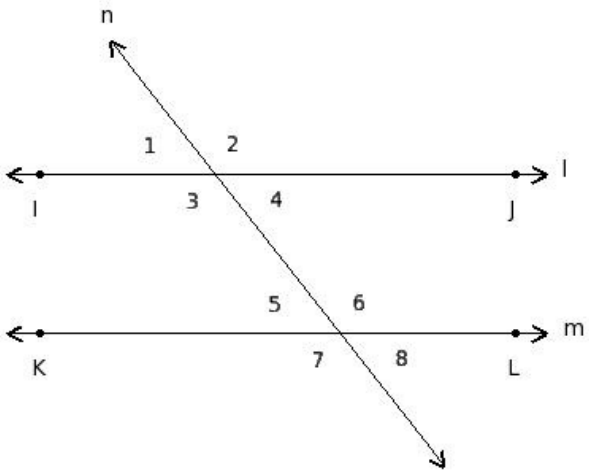
9. Find the vertically opposite angles in the given figure



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

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

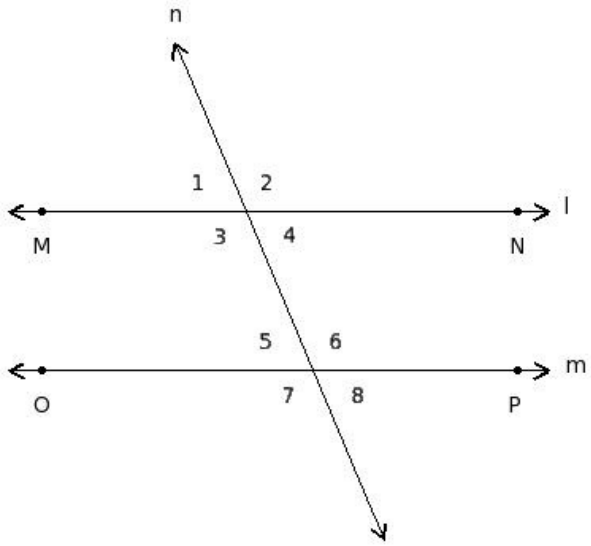
10. Find the interior angles in the given figure



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

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

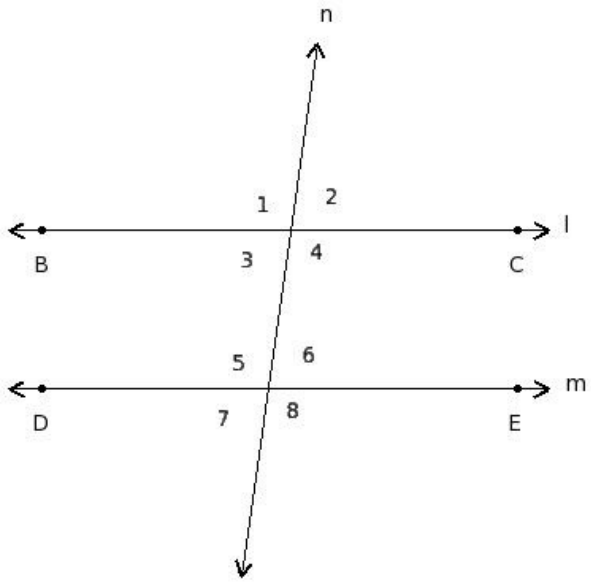
11. Find the exterior angles in the given figure



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

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

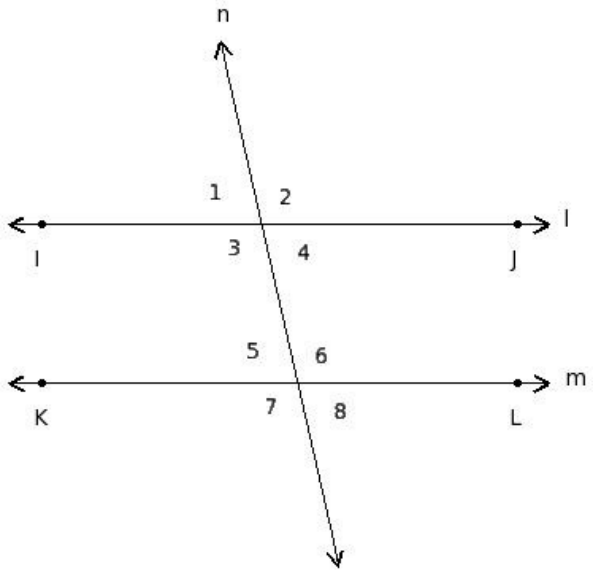
12. Find the interior alternate angles in the given figure



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

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

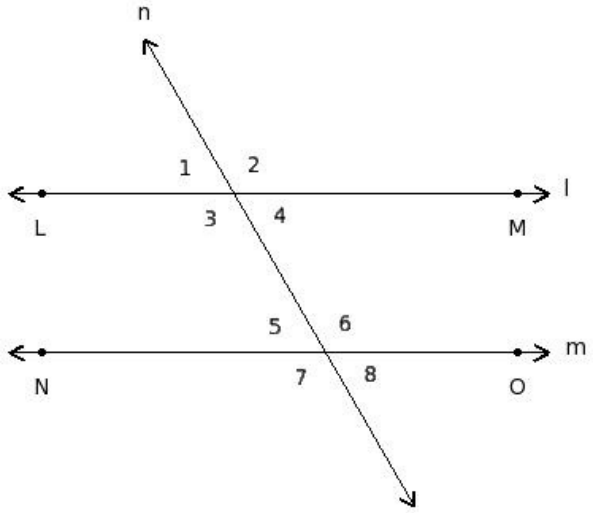
13. Find the exterior alternate angles in the given figure



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

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

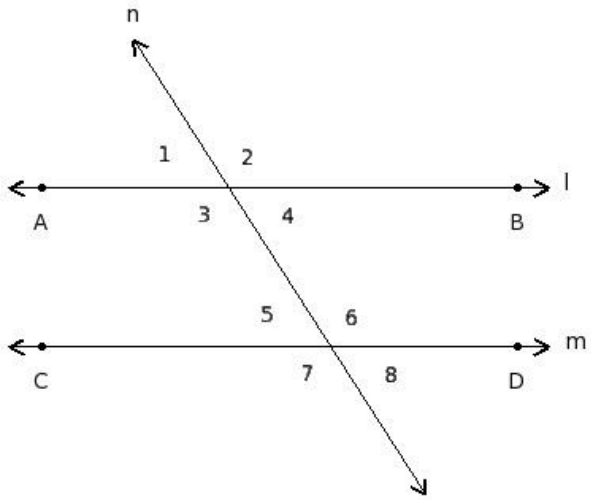
14. Find the corresponding angles in the given figure



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

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

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

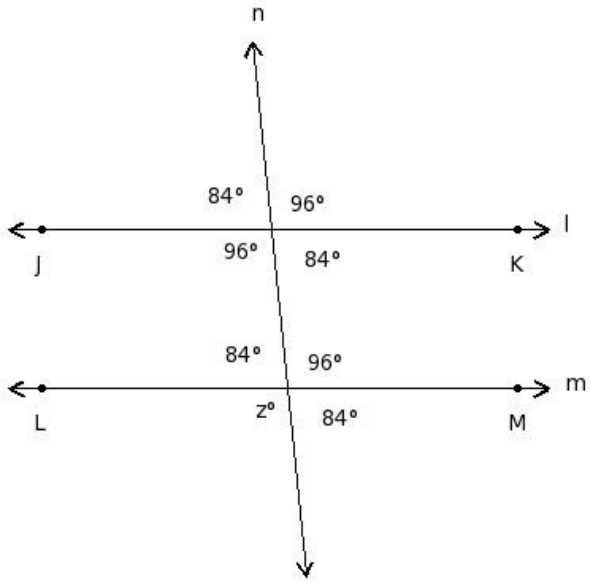


(i) ∠3 , ∠5 ; ∠4 , ∠6 (ii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8

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

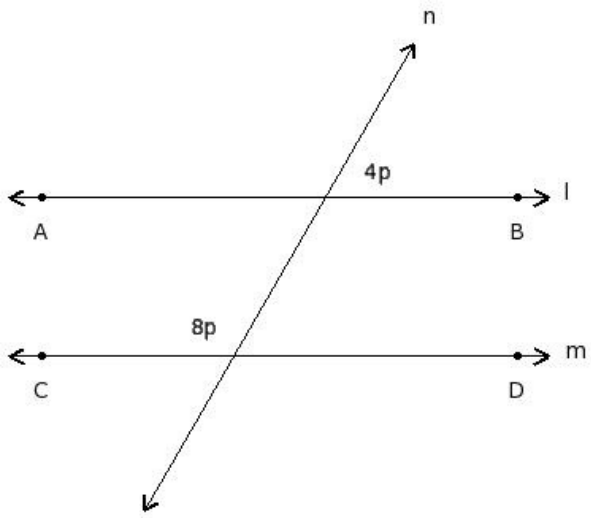
(v) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7

16. Find the value of 'z'



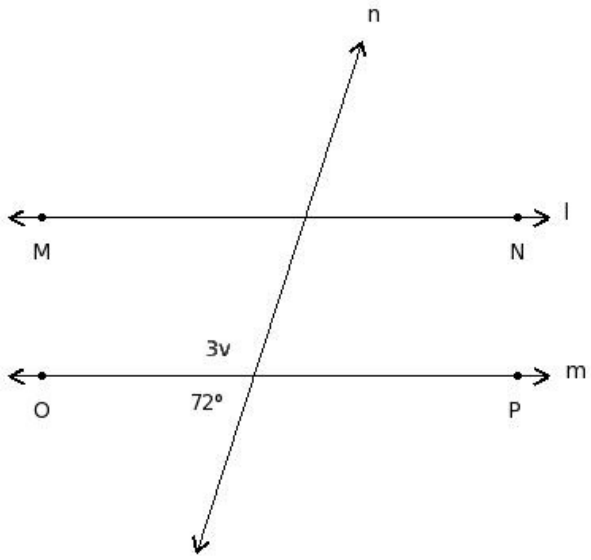
(i) 101° (ii) 96° (iii) 126° (iv) 106° (v) 111°

17. In the given figure l ‖ m. Find the value of 'p'



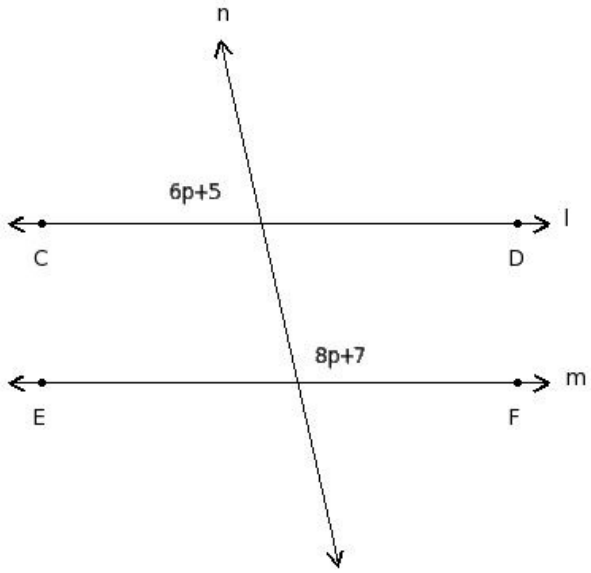
(i) 16 (ii) 14 (iii) 18 (iv) 15 (v) 13

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



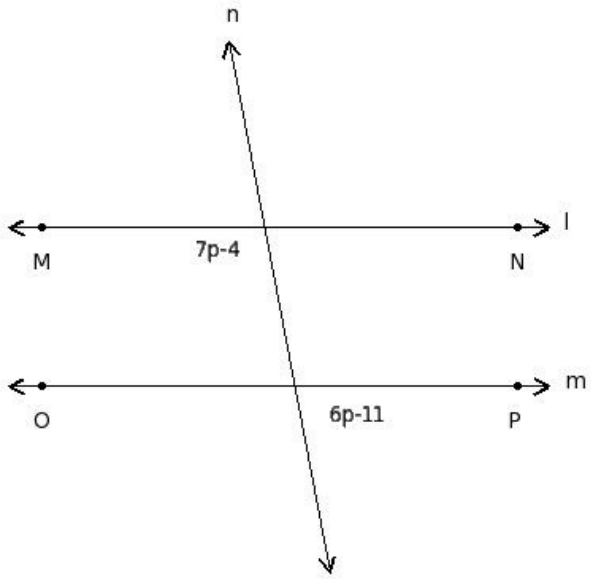
(i) 35 (ii) 36 (iii) 37 (iv) 38 (v) 33

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



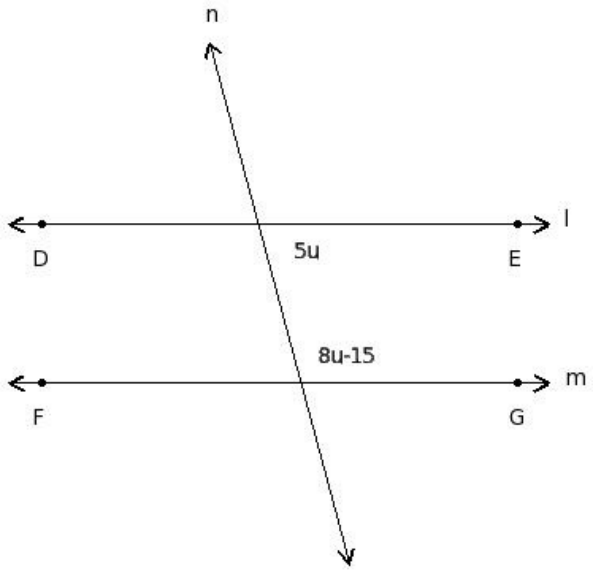
(i) 14 (ii) 11 (iii) 9 (iv) 12 (v) 13

20. In the given figure l ∥ m. Find the value of 'p'



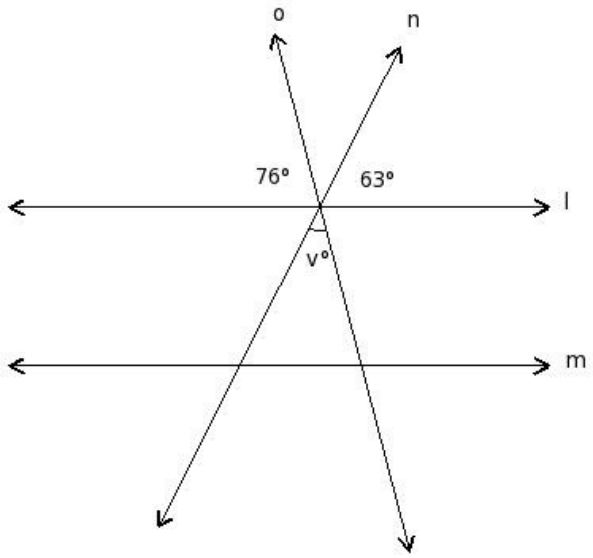
(i) 17 (ii) 16 (iii) 12 (iv) 15 (v) 14

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



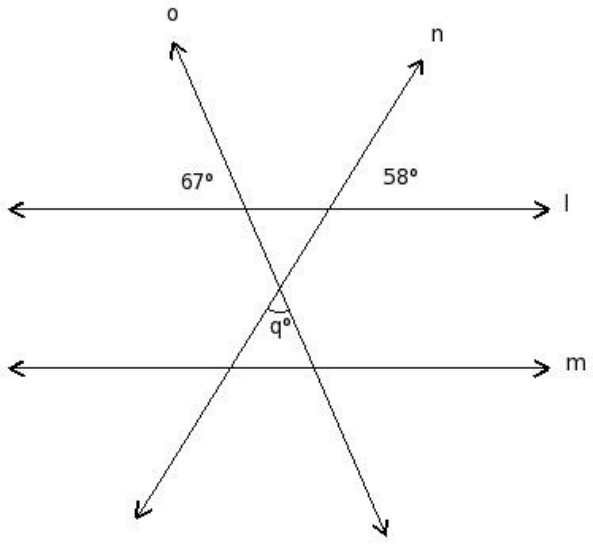
(i) 18 (ii) 14 (iii) 15 (iv) 12 (v) 16

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



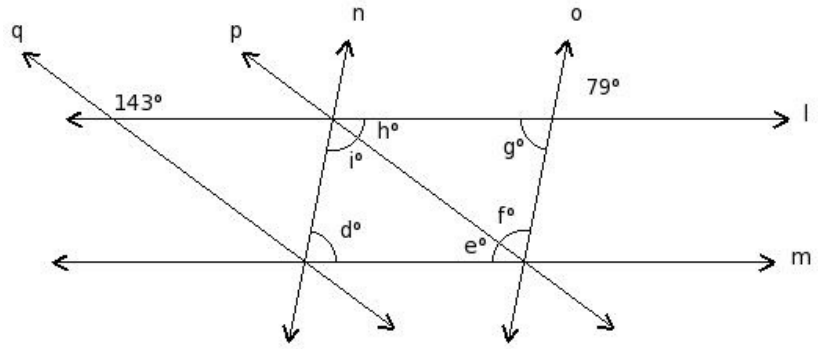
(i) 56° (ii) 41° (iii) 71° (iv) 51° (v) 46°

23. In the given figurel ∥ m. Find the value of 'q'



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

24. In the given figure, $l \parallel m$ and $n \parallel o$ and $p \parallel q$. Find the values of {d,e,f,g,h,i}



(i) 79°,79°,37°,37°,64°,64° (ii) 37°,79°,79°,64°,37°,64° (iii) 79°,37°,64°,79°,37°,64°

(iv) 64°,79°,79°,64°,37°,37° (v) 37°,79°,79°,37°,64°,64°

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

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

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

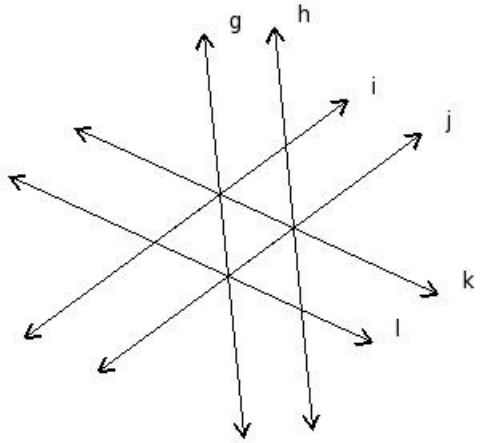
26. Which of the following are true for corresponding angles?

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

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

27. In the given figure, g , h , i , j , k , l are lines in a plane. By looking at the figure, which of the following are true?

a) g ∥ h
b) g is the transversal of i & k
c) k is the transversal of i & j
d) j is the transversal of g & h
e) l is the transversal of i & g
f) g ∥ j



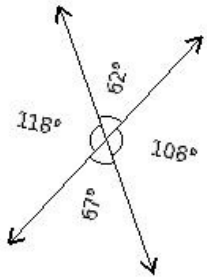
(i) {f,c} (ii) {b,f,d} (iii) {a,c,d,e} (iv) {b,e,a} (v) {b,a}

28. Which of the following are true with respect to lines h , i , j , k where h ∥ i , i ⊥ j , j ⊥ k?

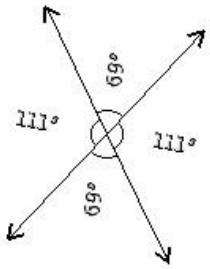
a) h ∥ k
b) j ∥ k
c) i ∥ k
d) h ∥ j
e) h ⊥ k

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

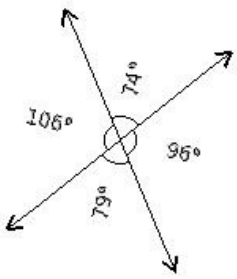
29. Which of the given figures is correct?



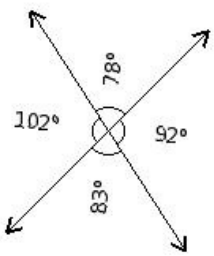
I



II



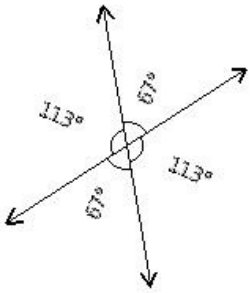
III



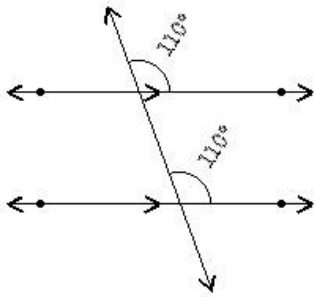
IV

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

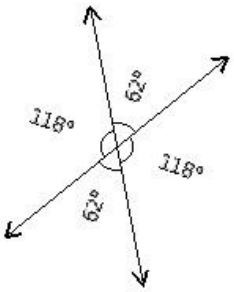
30. Which of the given figures is wrong?



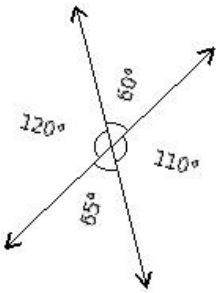
I



II



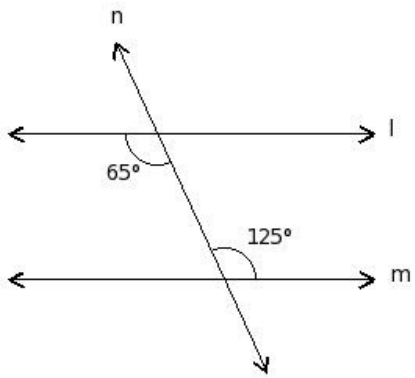
III



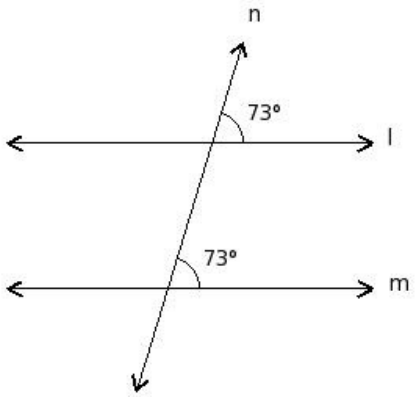
IV

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

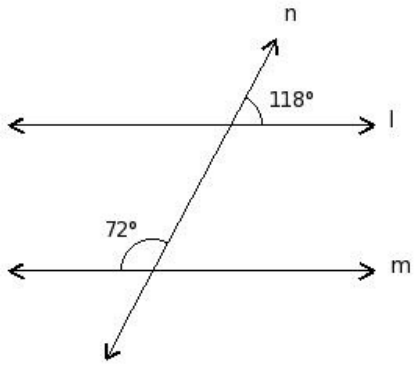
31. In which of the figures given bellow, l ‖ m?



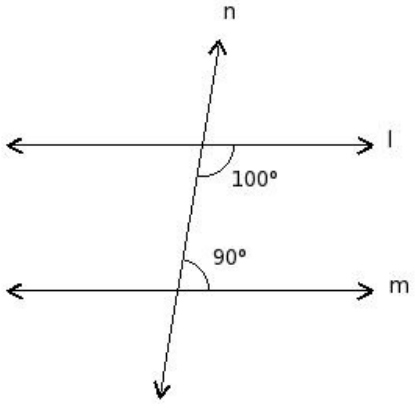
I



II



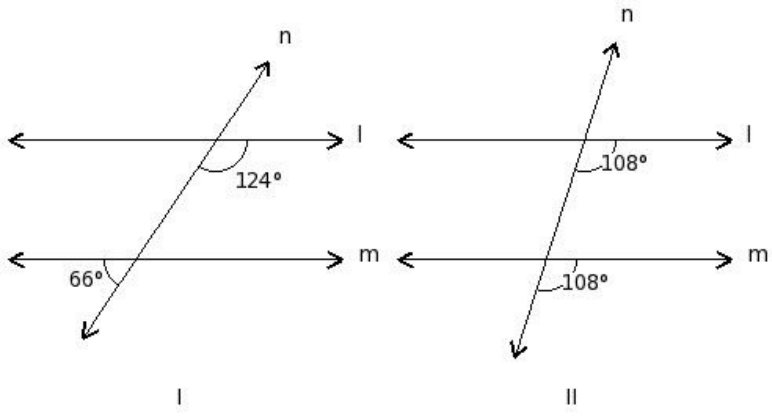
III

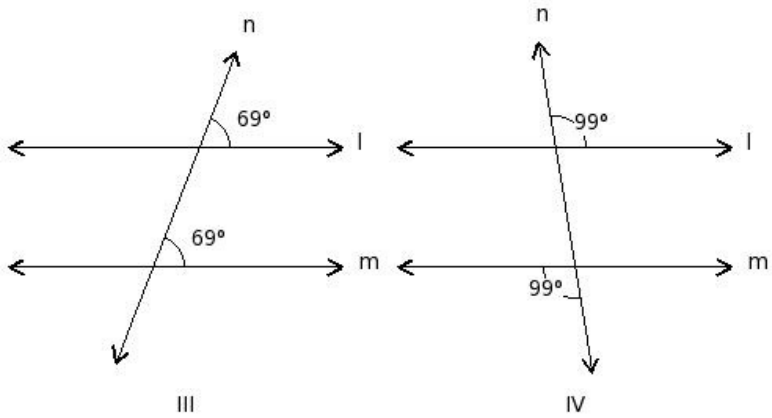


IV

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

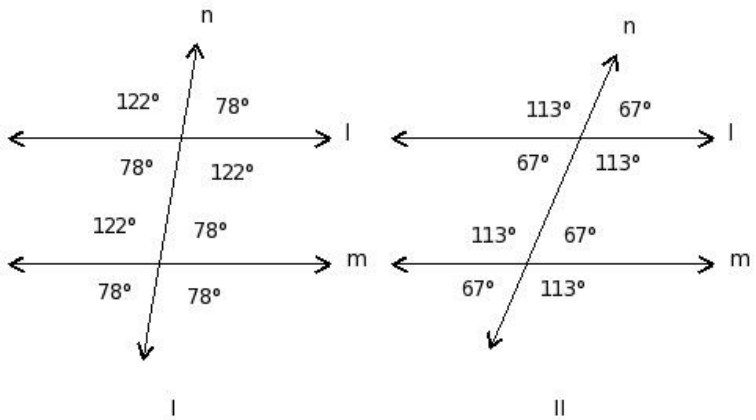
32. In which of the figures given bellow, l ∦ m(not parallel)?

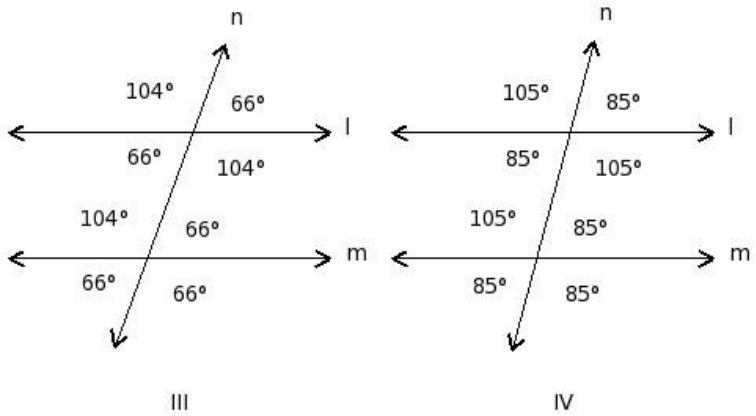




(i) IV (ii) I (iii) III (iv) II

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





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

Assignment Key

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