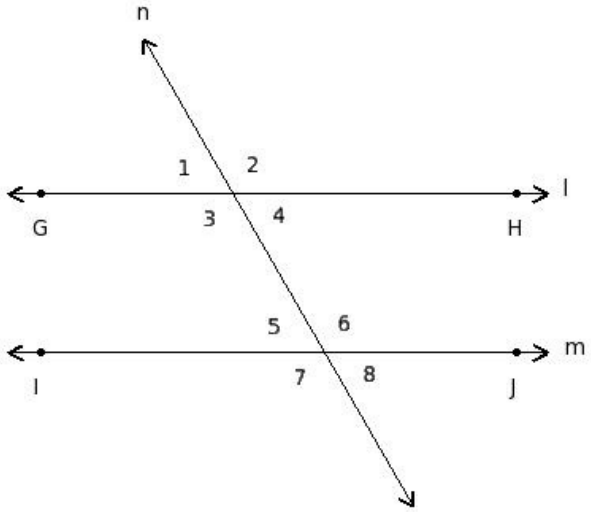
EduSahara™ Assignment

Name : Parallel Lines and Transversal

Chapter : Lines and Angles

Grade : CBSE Grade VII

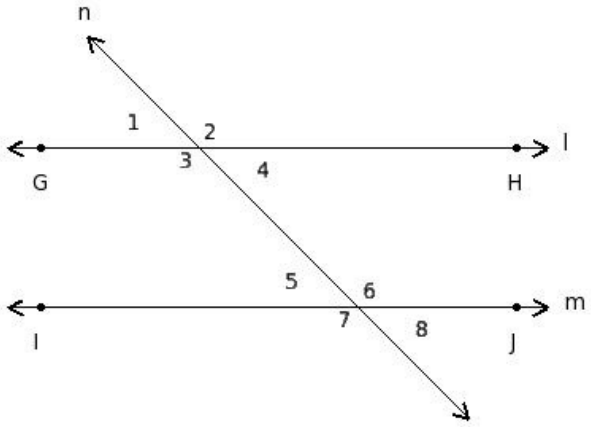
1. Find the adjacent angles in the given figure



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

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

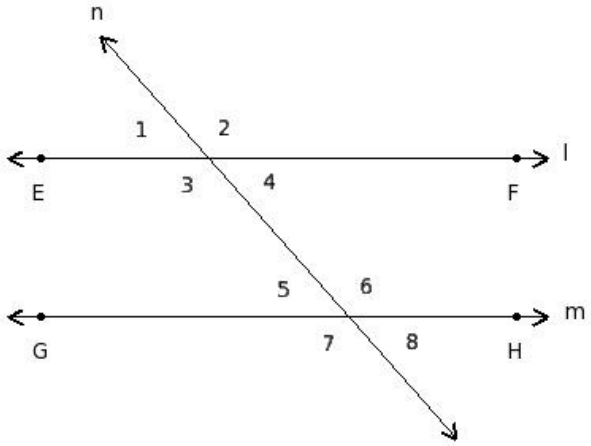
2. Find the vertically opposite angles in the given figure



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

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

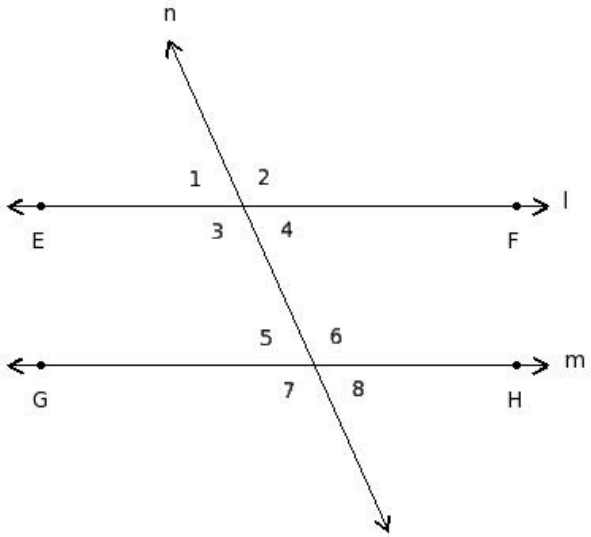
3. Find the interior angles in the given figure



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

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

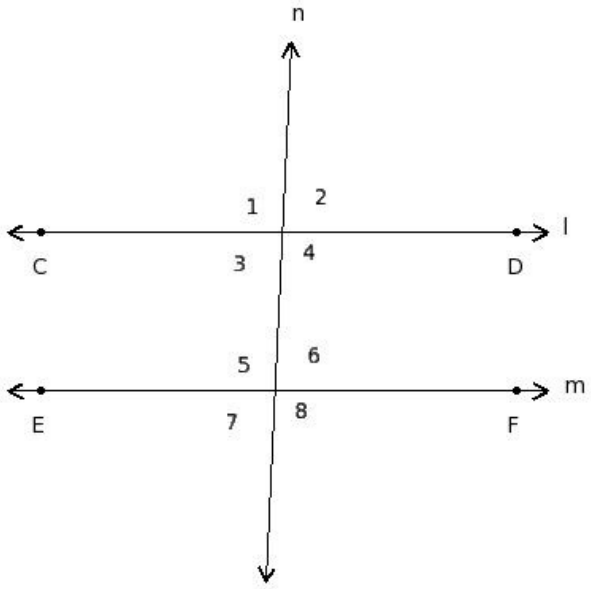
4. Find the exterior angles in the given figure



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

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

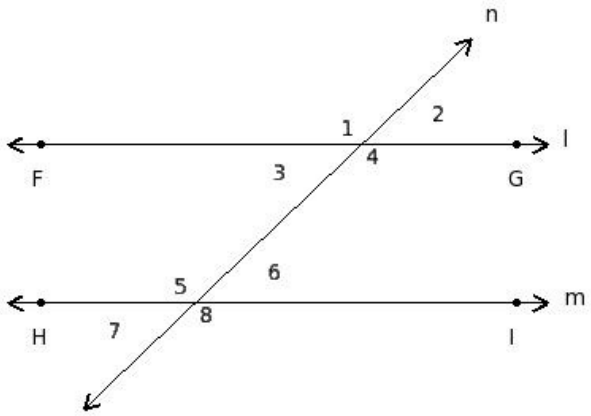
5. Find the interior alternate angles in the given figure



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

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

6. Find the exterior alternate angles in the given figure

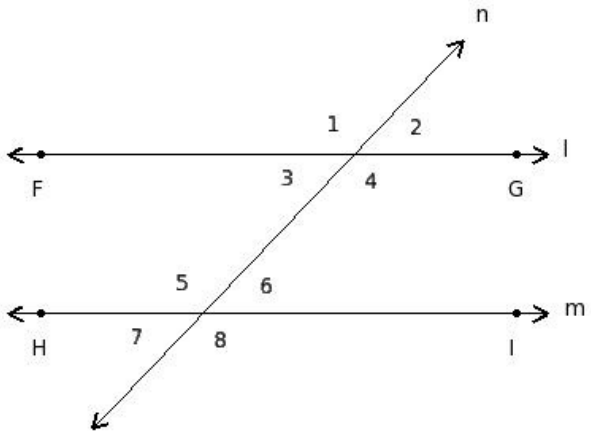


(i) ∠3 , ∠5 ; ∠4 , ∠6 (ii) ∠1 , ∠2 , ∠7 , ∠8 (iii) ∠1 , ∠8 ; ∠2 , ∠7

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

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

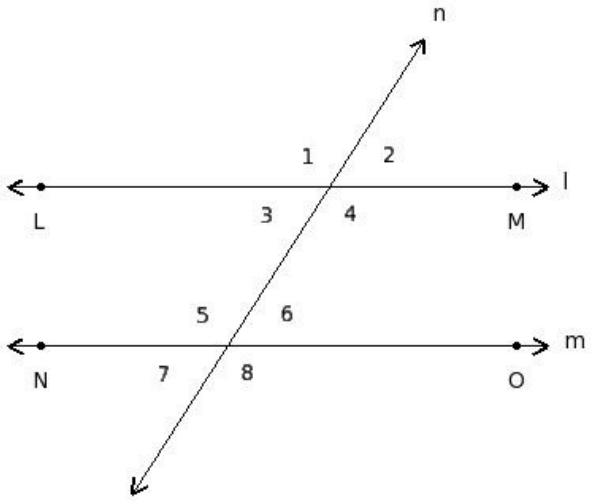
7. Find the corresponding angles in the given figure



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

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

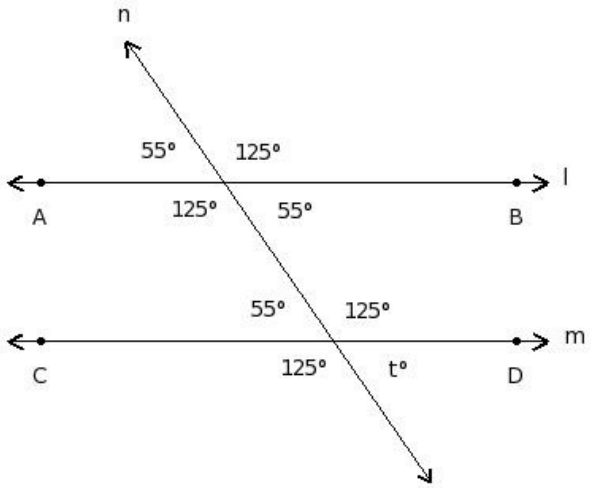
8. Find the co-interior angles in the given figure



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

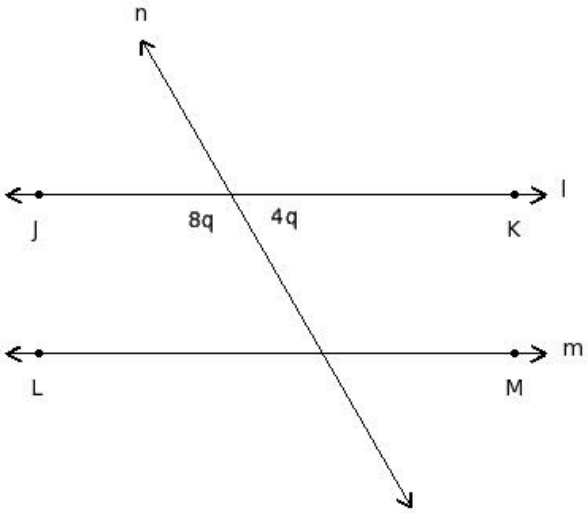
(iv) ∠3 , ∠5 ; ∠4 , ∠6 (v) ∠1 , ∠2 , ∠7 , ∠8

9. Find the value of 't'



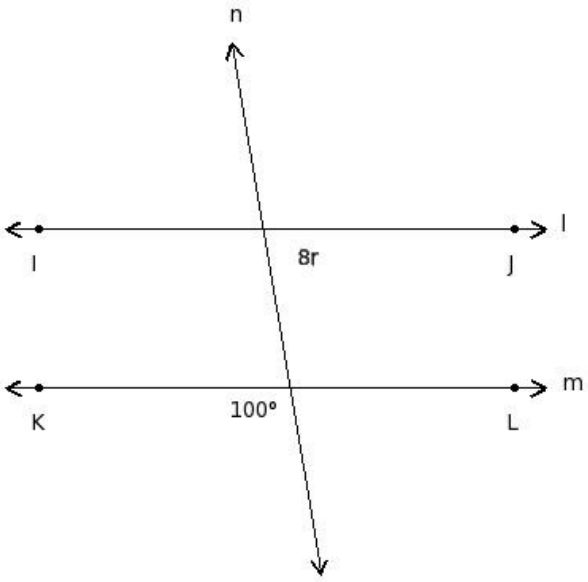
(i) 85° (ii) 65° (iii) 60° (iv) 55° (v) 70°

10. In the given figure l ∥ m. Find the value of 'q'



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

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



(i) 12 (ii) 7 (iii) 9 (iv) 10 (v) 11

12. Multiple lines drawn on a plane are called

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

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

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

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

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

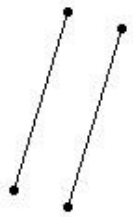
15. A line that intersects two lines at two different points is called

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

16. Two lines meeting at a point and making an angle of 90° at the meeting point are called

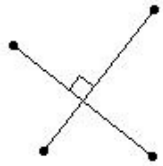
(i) coplanar lines (ii) parallel lines (iii) concurrent lines (iv) perpendicular lines (v) intersecting lines

17. The following lines represent



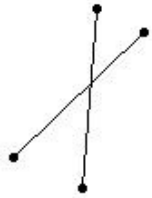
(i) concurrent lines (ii) parallel lines (iii) perpendicular lines (iv) coplanar lines (v) intersecting lines

18. The following lines represent



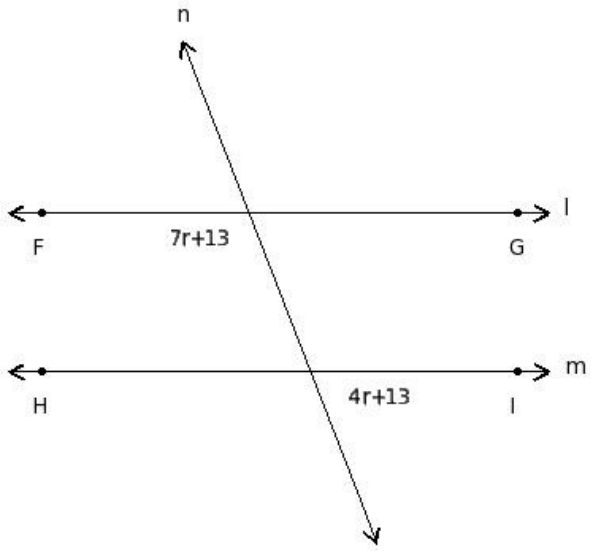
(i) concurrent lines (ii) perpendicular lines (iii) coplanar lines (iv) parallel lines (v) intersecting lines

19. The following lines represent



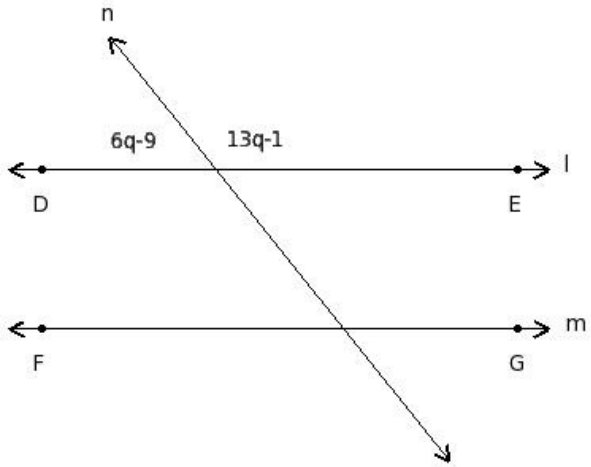
(i) perpendicular lines (ii) coplanar lines (iii) intersecting lines (iv) concurrent lines (v) parallel lines

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



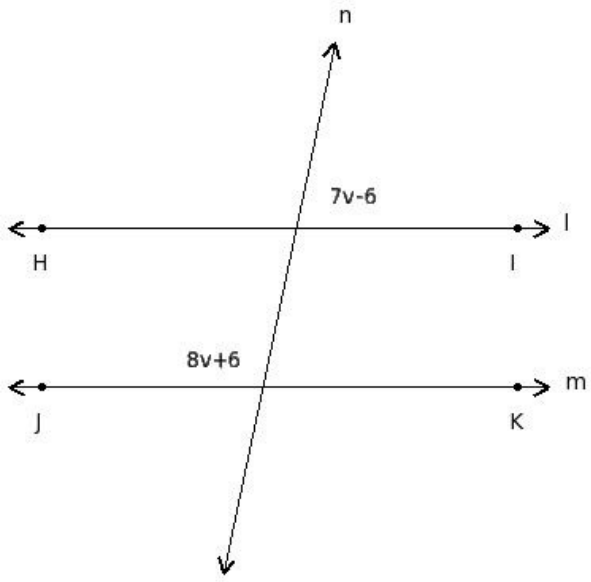
(i) 13 (ii) 15 (iii) 11 (iv) 14 (v) 16

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



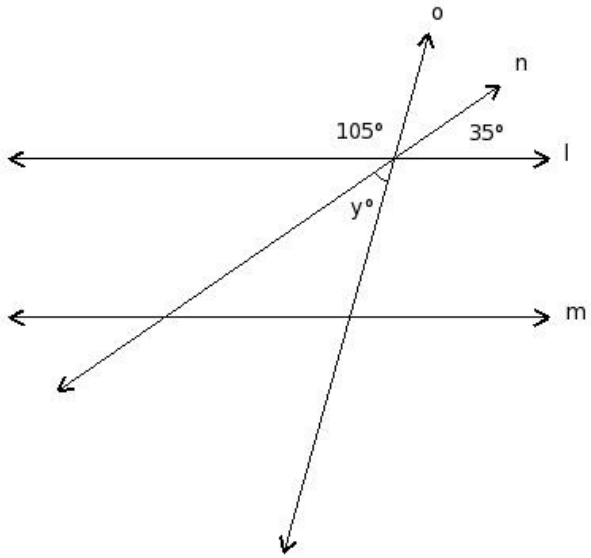
(i) 9 (ii) 7 (iii) 10 (iv) 12 (v) 11

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



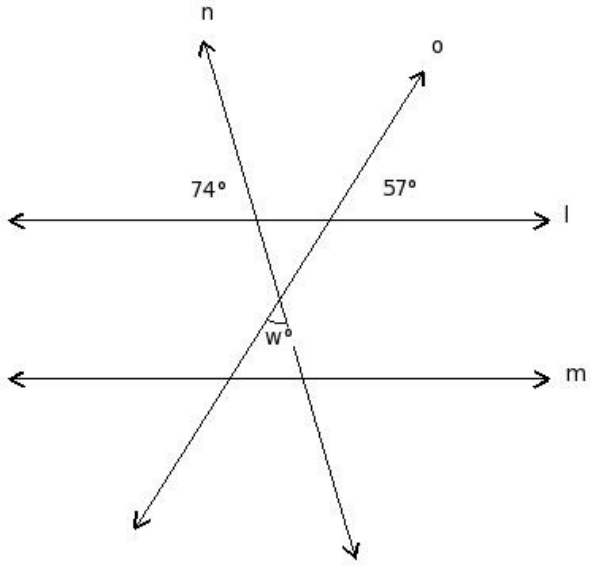
(i) 13 (ii) 14 (iii) 12 (iv) 11 (v) 10

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



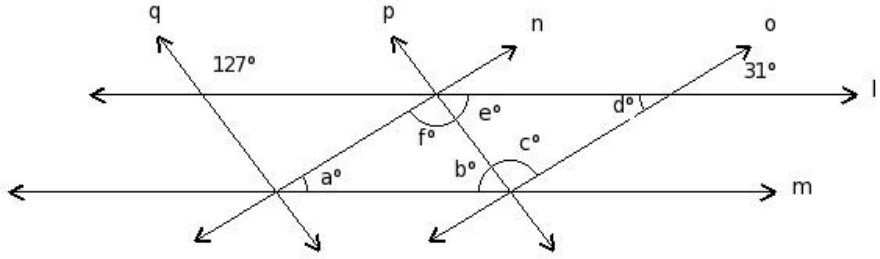
(i) 55° (ii) 45° (iii) 70° (iv) 50° (v) 40°

24. In the given figurel ∥ m. Find the value of 'w'



(i) 59° (ii) 54° (iii) 79° (iv) 49° (v) 64°

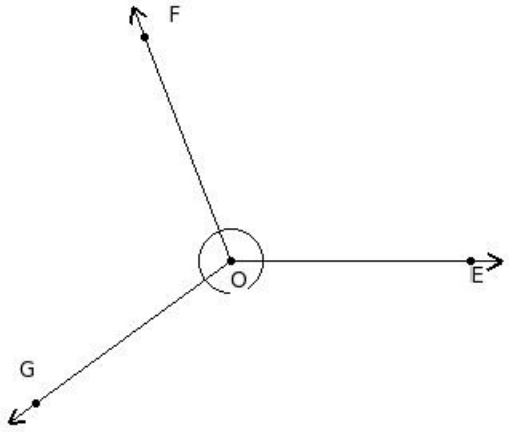
25. In the given figure, l ∥ m and n ∥ o and p ∥ q. Find the values of {a,b,c,d,e,f}



(i) 53°,53°,96°,31°,96°,31° (ii) 31°,53°,96°,31°,53°,96° (iii) 31°,96°,31°,53°,96°,53°

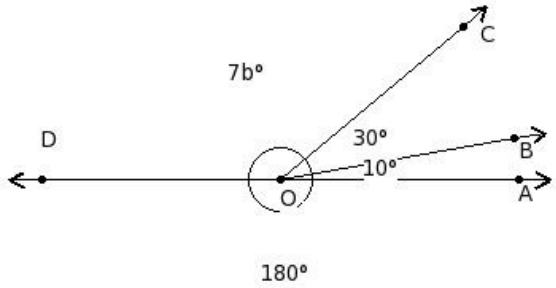
(iv) 31°,31°,53°,53°,96°,96° (v) 31°,31°,53°,96°,96°,53°

26. Which of the following are adjacent angles in the below figure?



(i) ∠IOJ , ∠FOG (ii) ∠GOE , ∠IOJ (iii) ∠FOG , ∠HOI (iv) ∠EOF , ∠FOG (v) ∠HOI , ∠FOG

27. Find the value of b in the figure below



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

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

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

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

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

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

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

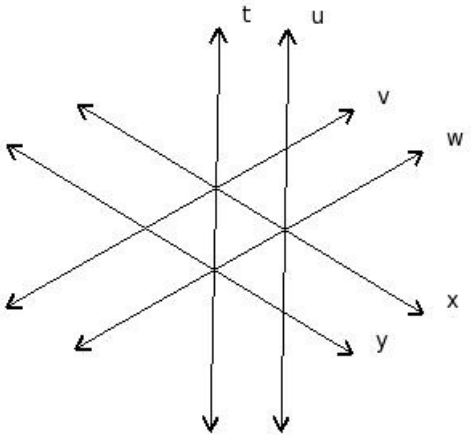
30. Which of the following are true?

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

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

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

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



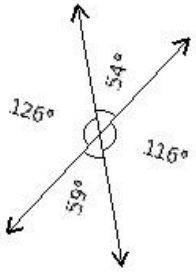
(i) {c,d} (ii) {b,c,e} (iii) {b,f,a} (iv) {b,a} (v) {a,d,e,f}

32. Which of the following are true with respect to lines t , u , v , w where t ∥ u , u ⊥ v , v ⊥ w?

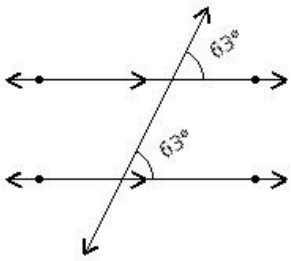
a) t ⊥ w
b) v ∥ w
c) u ∥ w
d) t ∥ w
e) t ∥ v

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

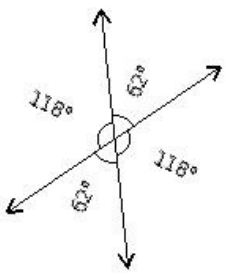
33. Which of the given figures is wrong?



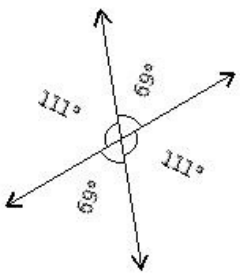
I



II



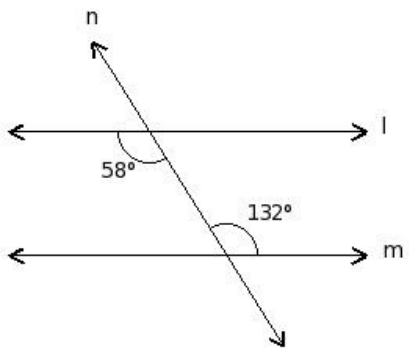
III



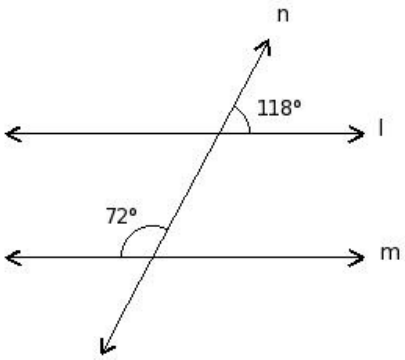
IV

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

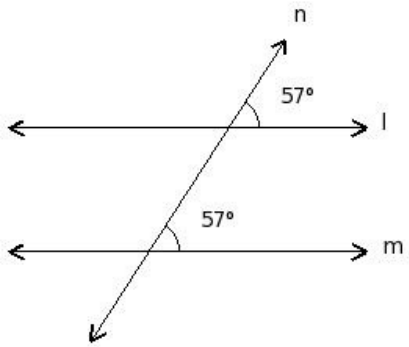
34. In which of the figures given bellow, l ∥ m?



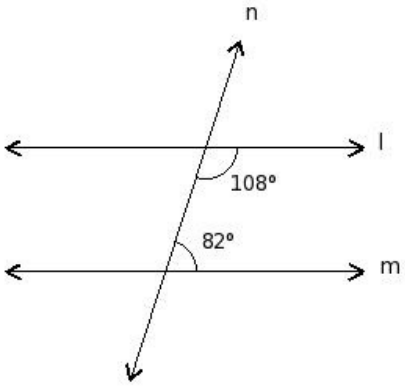
I



II



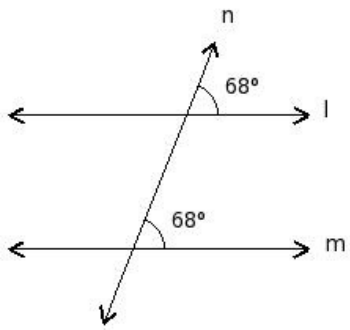
III



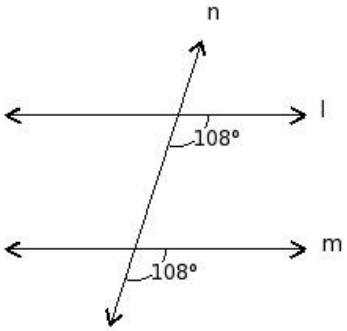
IV

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

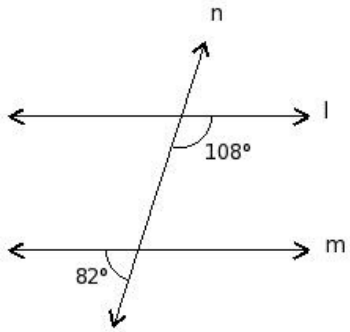
35. In which of the figures given bellow, l ∦ m(not parallel)?



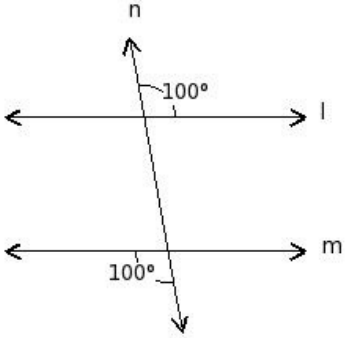
I



II



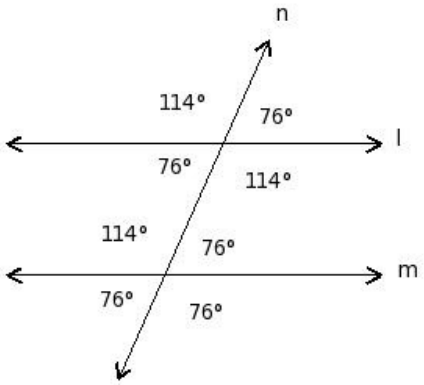
III



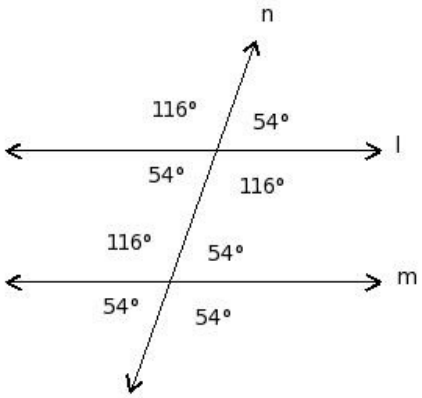
IV

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

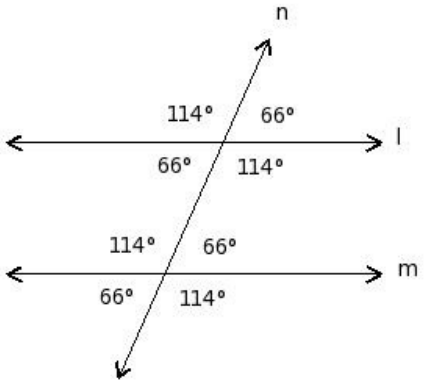
36. If l ∥ m, which of the given figures is correct?



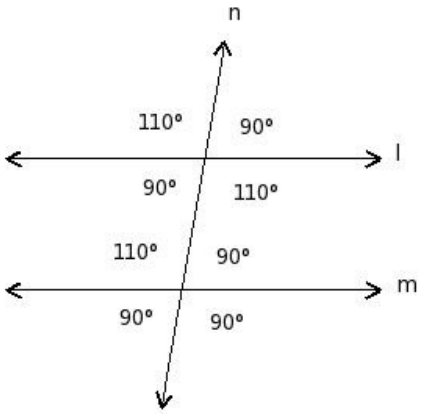
I



II



III



IV

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

Assignment Key

1) (i)	2) (iii)	3) (iii)	4) (v)	5) (iii)	6) (iii)
7) (v)	8) (iv)	9) (iv)	10) (iii)	11) (iv)	12) (iv)
13) (i)	14) (i)	15) (ii)	16) (iv)	17) (ii)	18) (ii)
19) (iii)	20) (iv)	21) (iii)	22) (iii)	23) (v)	24) (iv)
25) (ii)	26) (iv)	27) (iii)	28) (iii)	29) (iv)	30) (i)
31) (v)	32) (i)	33) (i)	34) (iii)	35) (iii)	36) (iv)