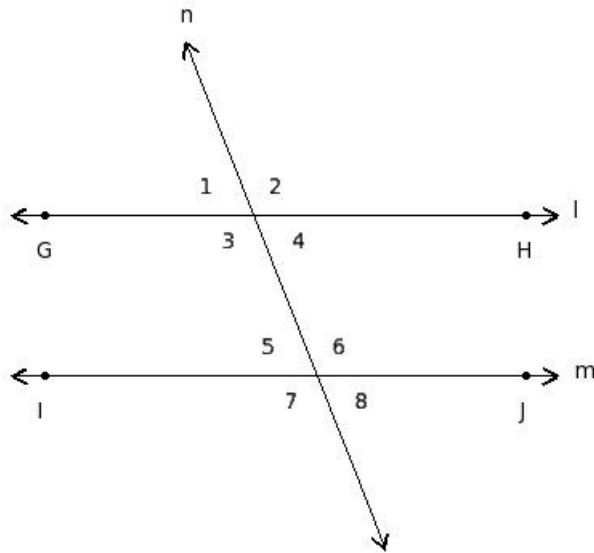


EduSahara™ Learning Center Assignment**Grade : Class VII, CBSE****Chapter : Lines and Angles****Name : Parallel Lines and Transversal****Licensed To : Teachers and Students for non-commercial use**

1. Find the adjacent angles in the given figure



(i) $\angle 3, \angle 4, \angle 5, \angle 6$

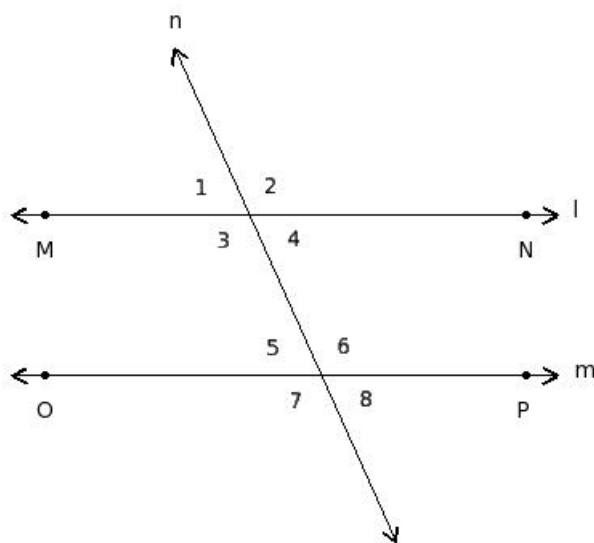
(ii) $\angle 1, \angle 2, \angle 7, \angle 8$

(iii) $\angle 1, \angle 4; \angle 2, \angle 3; \angle 5, \angle 8; \angle 6, \angle 7$

(iv) $\angle 1, \angle 5; \angle 2, \angle 6; \angle 3, \angle 7; \angle 4, \angle 8$

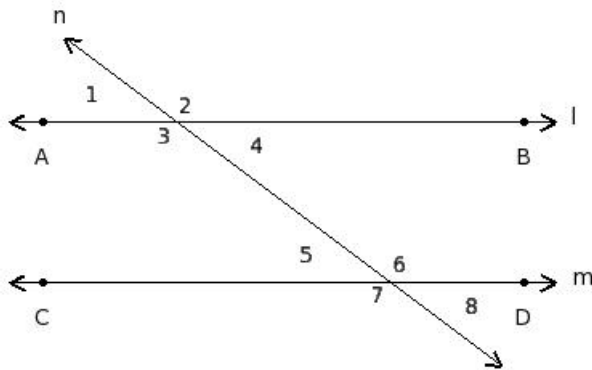
(v) $\angle 1, \angle 2; \angle 2, \angle 4; \angle 4, \angle 3; \angle 3, \angle 1; \angle 5, \angle 6; \angle 6, \angle 8; \angle 8, \angle 7; \angle 7, \angle 5$

2. Find the vertically opposite angles in the given figure



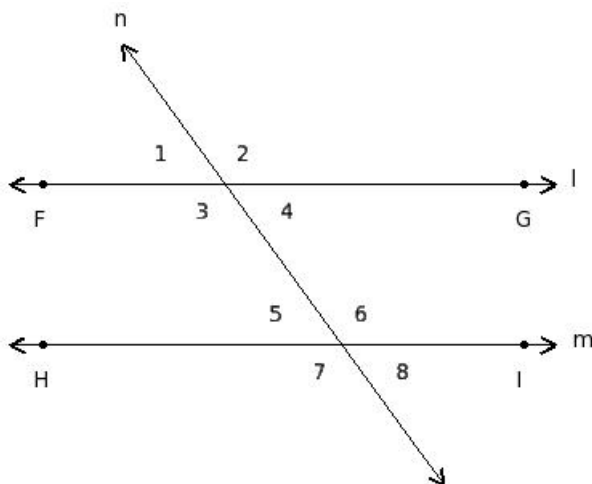
- (i) $\angle 3, \angle 5; \angle 4, \angle 6$
 - (ii) $\angle 3, \angle 6; \angle 4, \angle 5$
 - (iii) $\angle 1, \angle 4; \angle 2, \angle 3; \angle 5, \angle 8; \angle 6, \angle 7$
 - (iv) $\angle 1, \angle 8; \angle 2, \angle 7$
 - (v) $\angle 1, \angle 5; \angle 2, \angle 6; \angle 3, \angle 7; \angle 4, \angle 8$
-

3. Find the interior angles in the given figure



- (i) $\angle 1, \angle 5; \angle 2, \angle 6; \angle 3, \angle 7; \angle 4, \angle 8$
 - (ii) $\angle 3, \angle 5; \angle 4, \angle 6$
 - (iii) $\angle 1, \angle 2, \angle 7, \angle 8$
 - (iv) $\angle 3, \angle 4, \angle 5, \angle 6$
 - (v) $\angle 1, \angle 2; \angle 2, \angle 4; \angle 4, \angle 3; \angle 3, \angle 1; \angle 5, \angle 6; \angle 6, \angle 8; \angle 8, \angle 7; \angle 7, \angle 5$
-

4. Find the exterior angles in the given figure

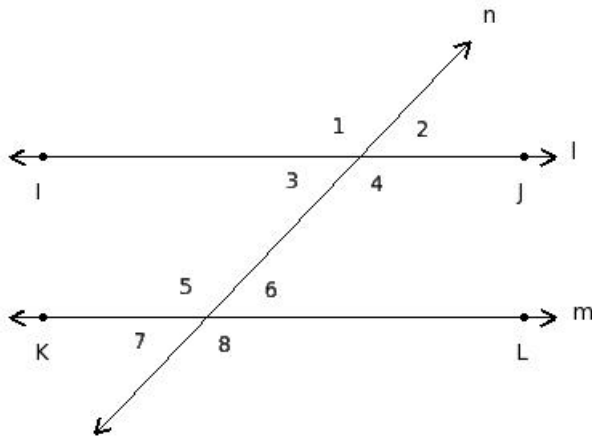


- (i) $\angle 1, \angle 2, \angle 7, \angle 8$
- (ii) $\angle 3, \angle 6; \angle 4, \angle 5$
- (iii) $\angle 1, \angle 2; \angle 2, \angle 4; \angle 4, \angle 3; \angle 3, \angle 1; \angle 5, \angle 6; \angle 6, \angle 8; \angle 8, \angle 7; \angle 7, \angle 5$

(iv) $\angle 1, \angle 4; \angle 2, \angle 3; \angle 5, \angle 8; \angle 6, \angle 7$

(v) $\angle 1, \angle 8; \angle 2, \angle 7$

5. Find the interior alternate angles in the given figure



(i) $\angle 3, \angle 6; \angle 4, \angle 5$

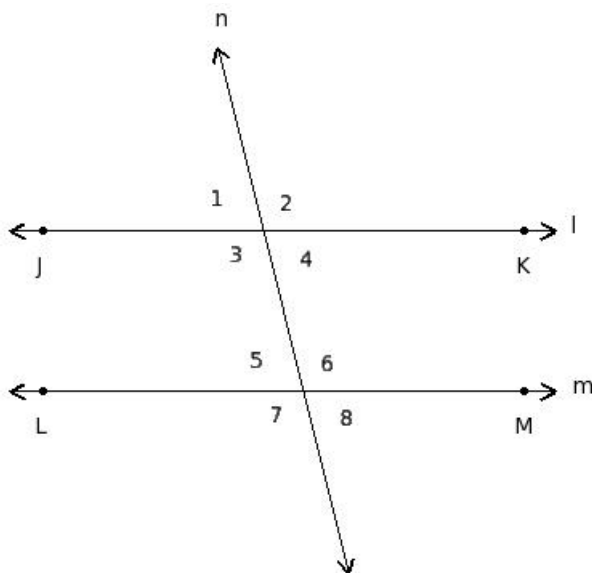
(ii) $\angle 1, \angle 2; \angle 2, \angle 4; \angle 4, \angle 3; \angle 3, \angle 1; \angle 5, \angle 6; \angle 6, \angle 8; \angle 8, \angle 7; \angle 7, \angle 5$

(iii) $\angle 1, \angle 8; \angle 2, \angle 7$

(iv) $\angle 3, \angle 4, \angle 5, \angle 6$

(v) $\angle 3, \angle 5; \angle 4, \angle 6$

6. Find the exterior alternate angles in the given figure



(i) $\angle 3, \angle 6; \angle 4, \angle 5$

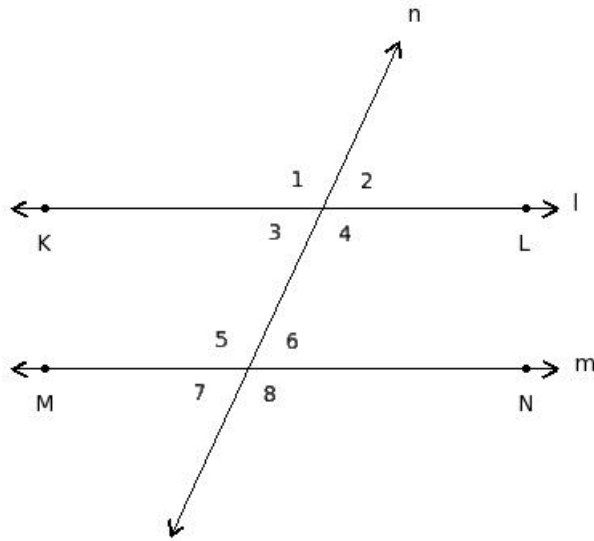
(ii) $\angle 1, \angle 8; \angle 2, \angle 7$

(iii) $\angle 1, \angle 2, \angle 7, \angle 8$

(iv) $\angle 1, \angle 5; \angle 2, \angle 6; \angle 3, \angle 7; \angle 4, \angle 8$

(v) $\angle 3, \angle 5; \angle 4, \angle 6$

7. Find the corresponding angles in the given figure



(i) $\angle 1, \angle 2, \angle 7, \angle 8$

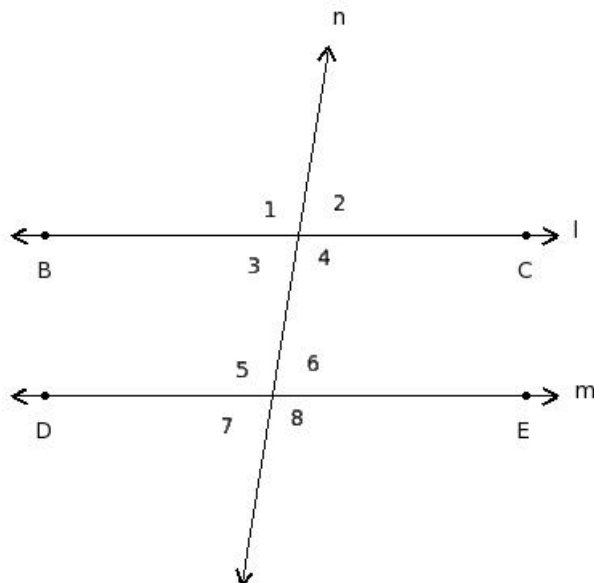
(ii) $\angle 3, \angle 5; \angle 4, \angle 6$

(iii) $\angle 1, \angle 5; \angle 2, \angle 6; \angle 3, \angle 7; \angle 4, \angle 8$

(iv) $\angle 1, \angle 8; \angle 2, \angle 7$

(v) $\angle 1, \angle 2; \angle 2, \angle 4; \angle 4, \angle 3; \angle 3, \angle 1; \angle 5, \angle 6; \angle 6, \angle 8; \angle 8, \angle 7; \angle 7, \angle 5$

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



(i) $\angle 1, \angle 8; \angle 2, \angle 7$

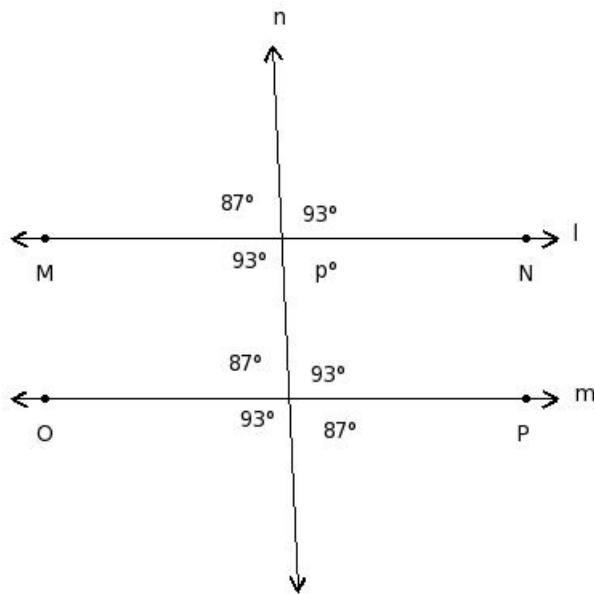
(ii) $\angle 1, \angle 4; \angle 2, \angle 3; \angle 5, \angle 8; \angle 6, \angle 7$

(iii) $\angle 3, \angle 5; \angle 4, \angle 6$

(iv) $\angle 1, \angle 5; \angle 2, \angle 6; \angle 3, \angle 7; \angle 4, \angle 8$

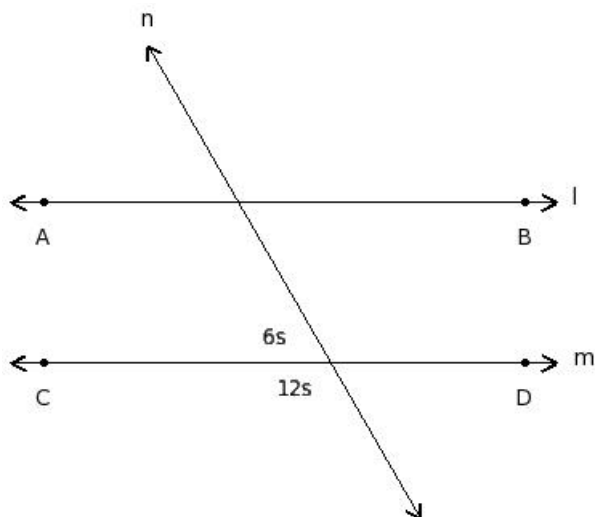
(v) $\angle 3, \angle 6; \angle 4, \angle 5$

9. Find the value of 'p'



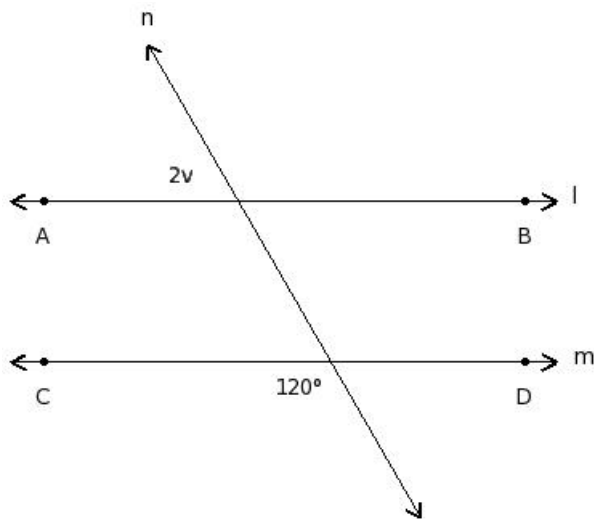
(i) 87° (ii) 102° (iii) 92° (iv) 117° (v) 97°

10. In the given figure $l \parallel m$. Find the value of 's'



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

11. In the given figure $l \parallel m$. Find the value of 'v'



(i) 31 (ii) 29 (iii) 30 (iv) 28 (v) 32

12. Multiple lines drawn on a plane are called

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

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

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

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

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

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

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

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

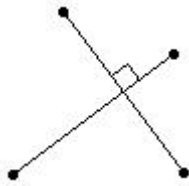
- (i) coplanar lines (ii) intersecting lines (iii) perpendicular lines
(iv) concurrent lines (v) parallel lines

17. The following lines represent



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

18. The following lines represent



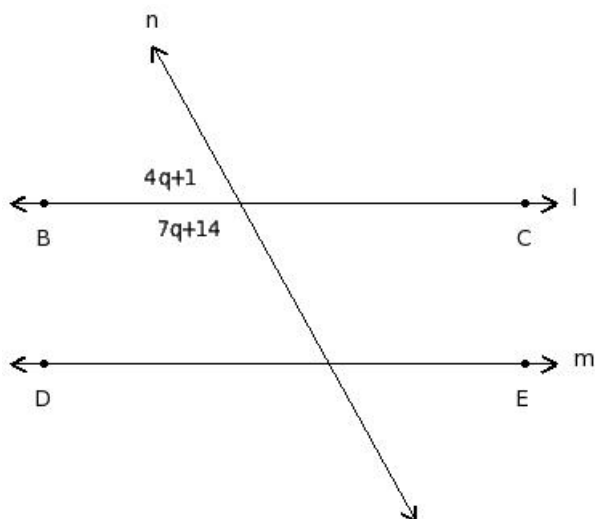
- (i) parallel lines (ii) perpendicular lines (iii) intersecting lines
(iv) coplanar lines (v) concurrent lines
-

19. The following lines represent



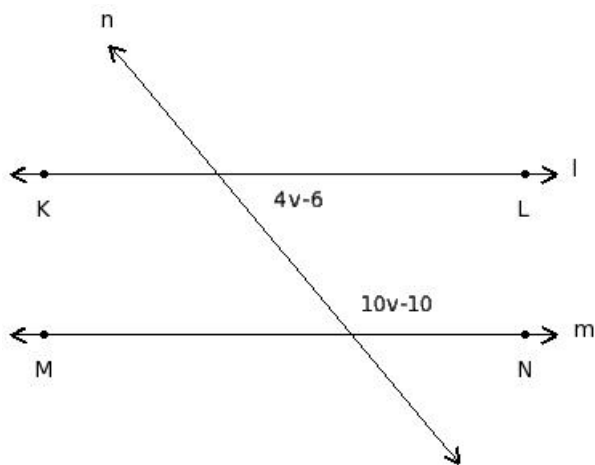
- (i) coplanar lines (ii) perpendicular lines (iii) intersecting lines
(iv) concurrent lines (v) parallel lines
-

20. In the given figure $l \parallel m$. Find the value of 'q'



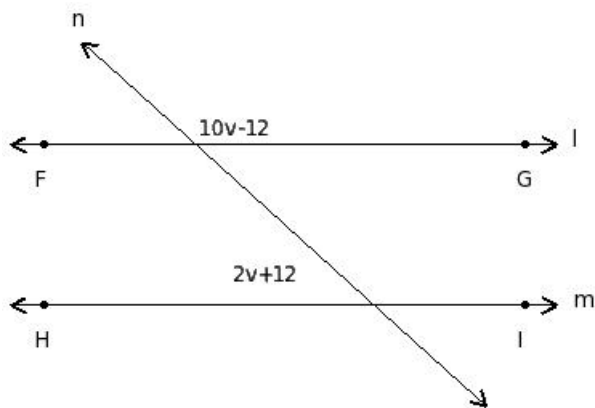
- (i) 14 (ii) 17 (iii) 16 (iv) 12 (v) 15
-

21. In the given figure $l \parallel m$. Find the value of 'v'



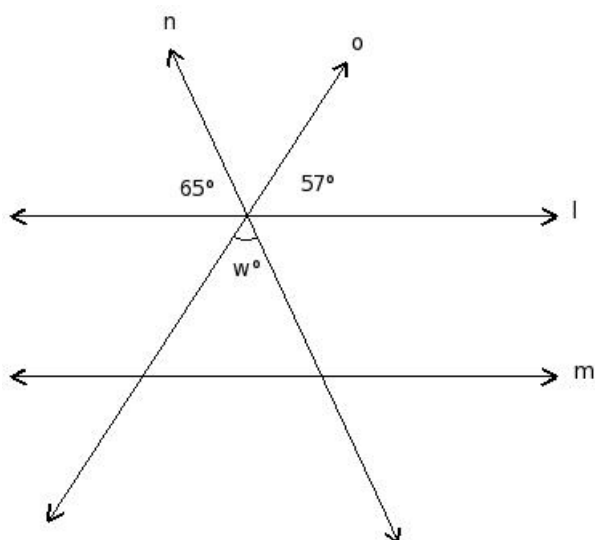
(i) 15 (ii) 13 (iii) 17 (iv) 12 (v) 14

22. In the given figure $l \parallel m$. Find the value of 'v'



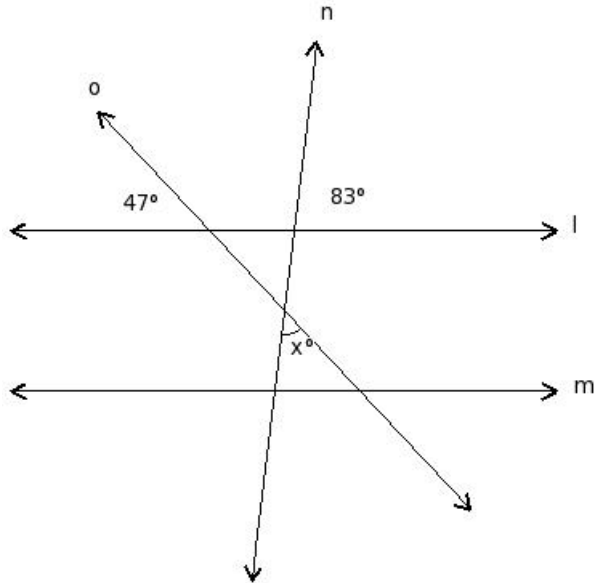
(i) 16 (ii) 13 (iii) 15 (iv) 17 (v) 14

23. In the given figure $l \parallel m$. Find the value of 'w'



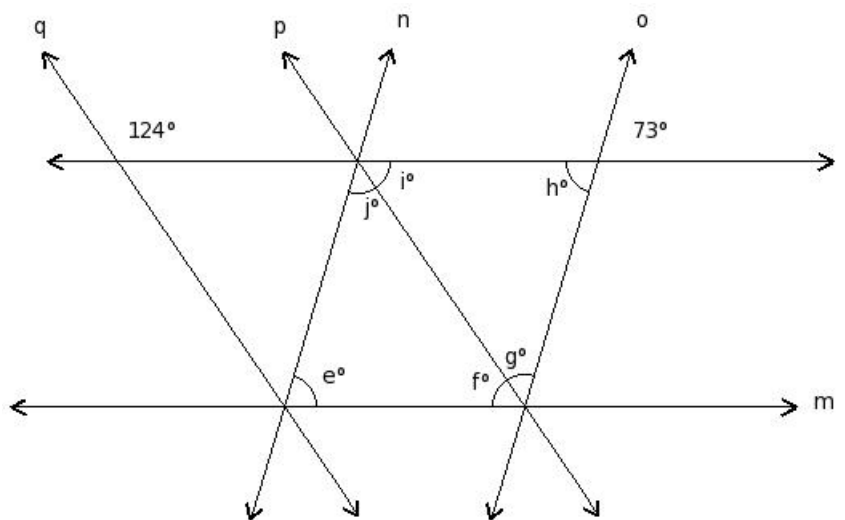
(i) 63° (ii) 58° (iii) 73° (iv) 68° (v) 88°

24. In the given figure $l \parallel m$. Find the value of 'x'



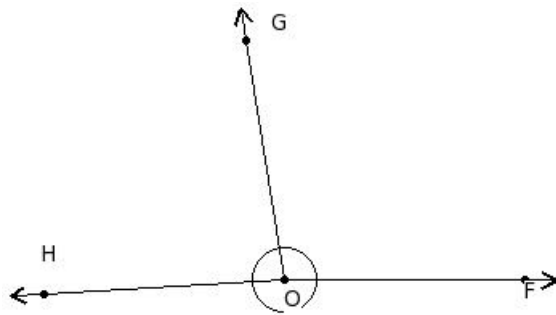
- (i) 65° (ii) 55° (iii) 50° (iv) 80° (v) 60°

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



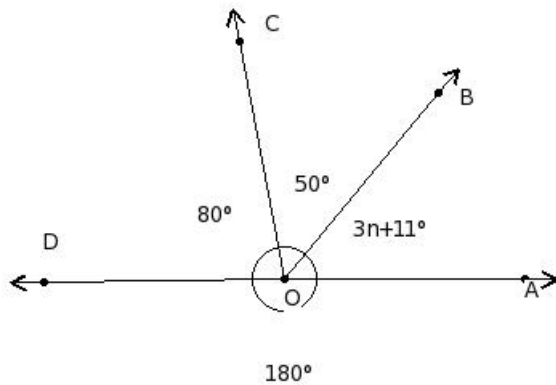
- (i) $51^\circ, 73^\circ, 56^\circ, 73^\circ, 51^\circ, 56^\circ$
 (ii) $73^\circ, 56^\circ, 51^\circ, 73^\circ, 56^\circ, 51^\circ$
 (iii) $73^\circ, 56^\circ, 51^\circ, 56^\circ, 73^\circ, 51^\circ$
 (iv) $73^\circ, 56^\circ, 51^\circ, 73^\circ, 51^\circ, 56^\circ$
 (v) $56^\circ, 73^\circ, 56^\circ, 51^\circ, 51^\circ, 73^\circ$

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



- (i) $\angle HOF$, $\angle JOK$ (ii) $\angle GOH$, $\angle IOJ$ (iii) $\angle JOK$, $\angle GOH$
 (iv) $\angle FOG$, $\angle GOH$ (v) $\angle IOJ$, $\angle GOH$

27. Find the value of n in the figure below



- (i) 14 (ii) 16 (iii) 11 (iv) 13 (v) 12

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

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

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

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

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

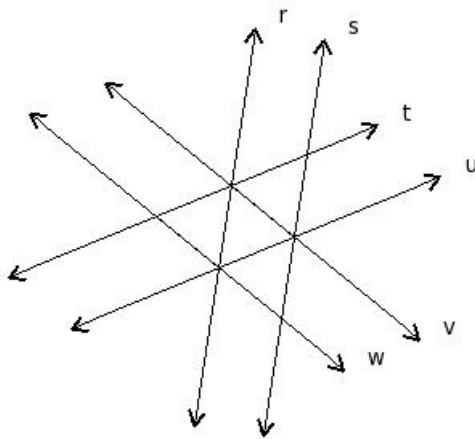
- (i) $\{c, d\}$ (ii) $\{c, a, d\}$ (iii) $\{e, b, f\}$ (iv) $\{a, d, f\}$ (v) $\{b, a\}$

30. Which of the following are true?

- a) If $v \parallel w$ and $w \parallel x$, then $v \parallel x$
- b) If $v \perp w$ and $v \perp x$, then $w \perp x$
- c) If $v \perp w$ and $w \perp x$, then $v \perp x$
- d) If two lines are parallel to the same line, then they are perpendicular to each other
- e) If two lines are parallel to the same line, then they are parallel to each other
- (i) $\{d,b,a\}$ (ii) $\{c,e,a\}$ (iii) $\{b,a\}$ (iv) $\{a,e\}$ (v) $\{c,e\}$

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

- a) u is the transversal of r & s
- b) $r \parallel u$
- c) $r \parallel s$
- d) v is the transversal of t & u
- e) w is the transversal of t & r
- f) r is the transversal of t & v

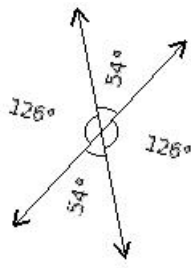


- (i) $\{f,c\}$ (ii) $\{a,c,d,e\}$ (iii) $\{b,a\}$ (iv) $\{b,f,d\}$ (v) $\{b,e,a\}$

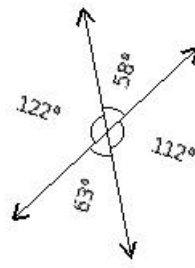
32. Which of the following are true with respect to lines p, q, r, s where $p \parallel q, q \perp r, r \perp s$?

- a) $p \perp s$
- b) $p \parallel r$
- c) $r \parallel s$
- d) $p \parallel s$
- e) $q \parallel s$
- (i) $\{c,a,d\}$ (ii) $\{d,e\}$ (iii) $\{b,e,d\}$ (iv) $\{a,d\}$ (v) $\{b,e\}$

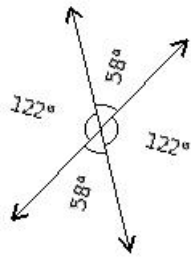
33. Which of the given figures is wrong?



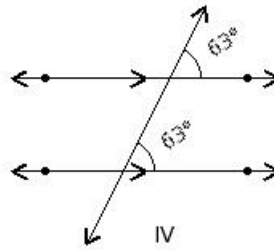
I



II



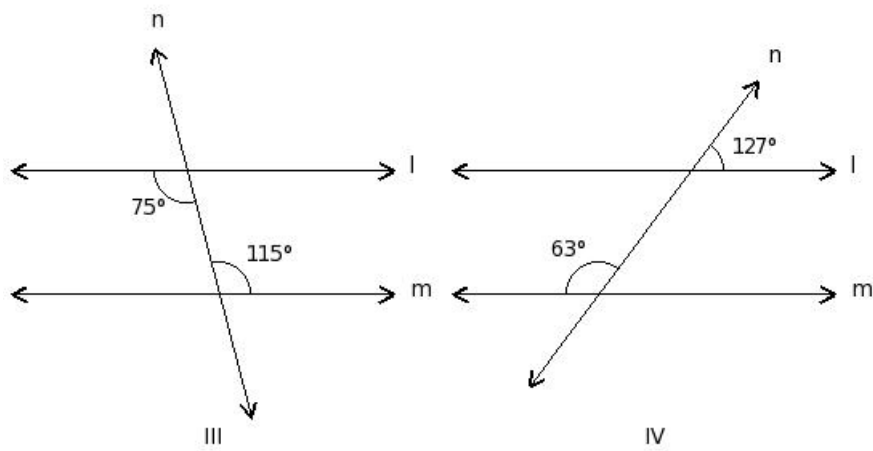
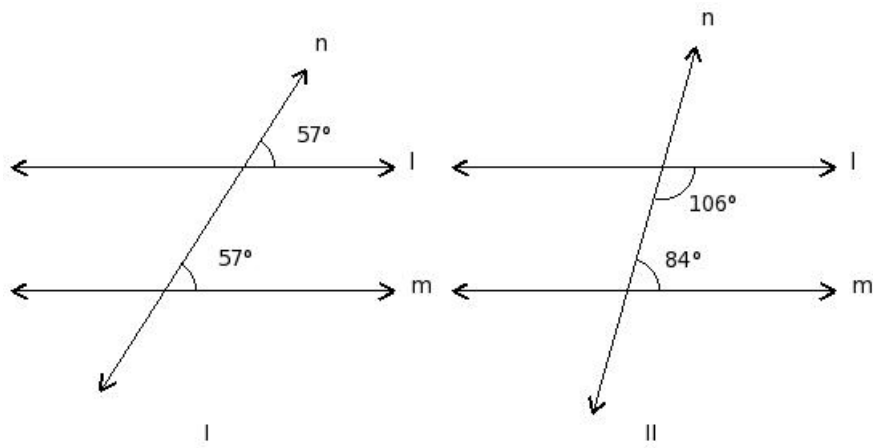
III



IV

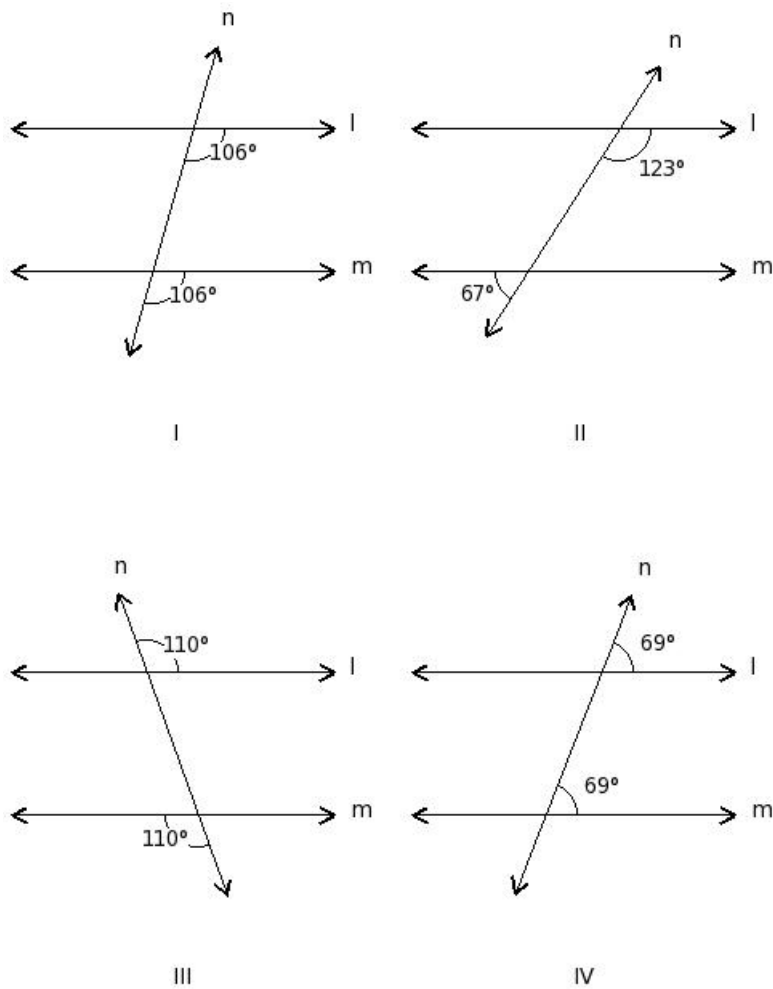
(i) III (ii) IV (iii) II (iv) I

34. In which of the figures given bellow, $l \parallel m$?



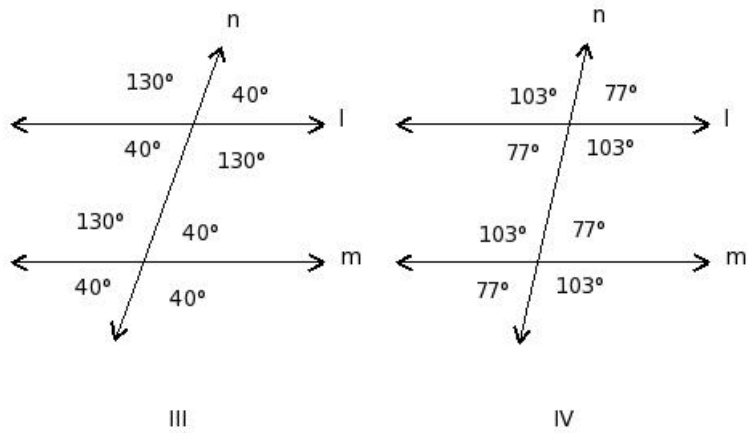
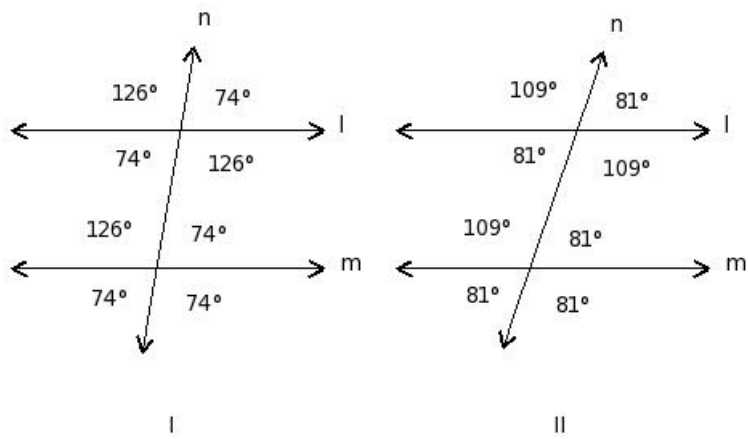
(i) III (ii) IV (iii) II (iv) I

35. In which of the figures given below, $l \nparallel m$ (not parallel)?



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

36. If $l \parallel m$, which of the given figures is correct?



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

Assignment Key

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