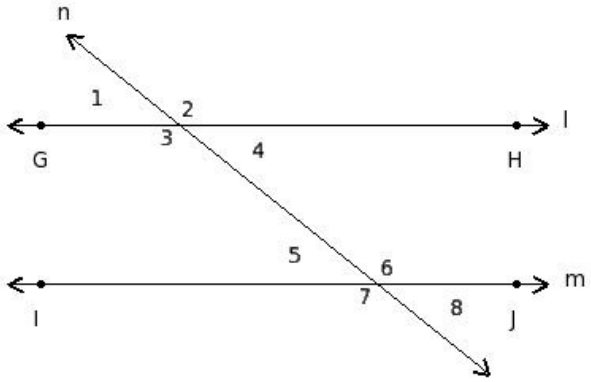
EduSahara™ Assignment

Name : Parallel Lines and Transversal

Chapter : Lines and Angles

Grade : SSC Grade IX

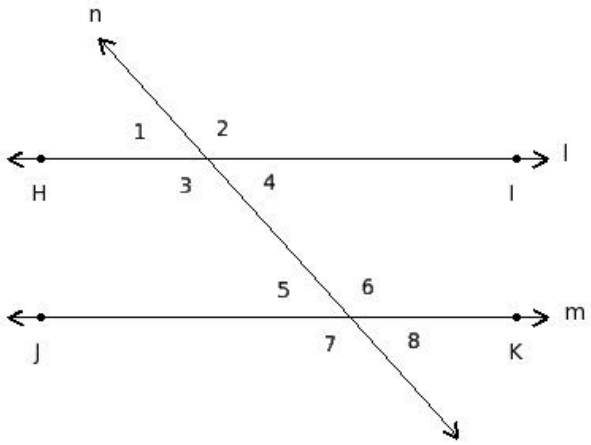
1. Find the adjacent angles in the given figure



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

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

2. Find the vertically opposite angles in the given figure

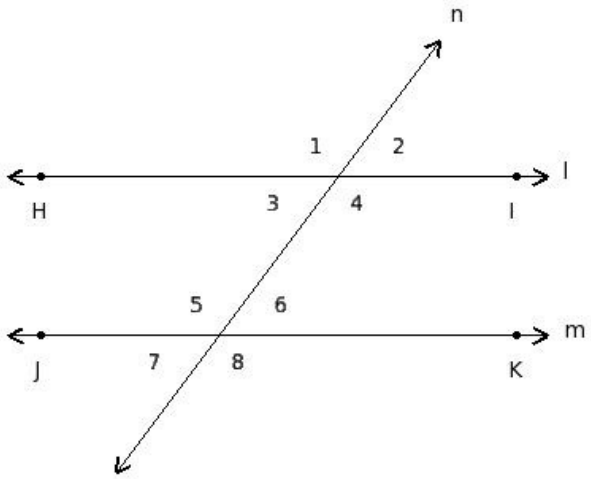


(i) ∠3 , ∠5 ; ∠4 , ∠6 (ii) ∠3 , ∠4 , ∠5 , ∠6

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

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

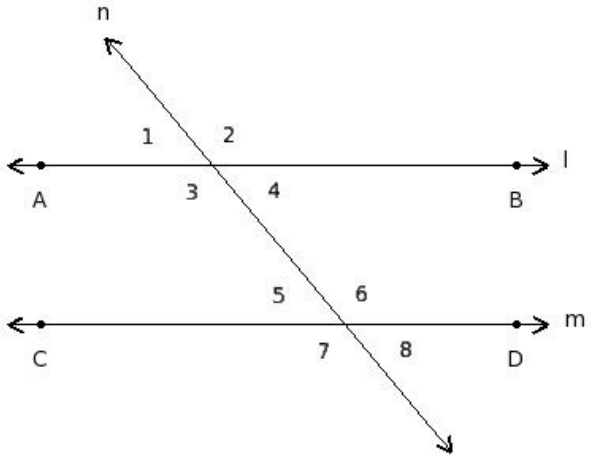
3. Find the interior angles in the given figure



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

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

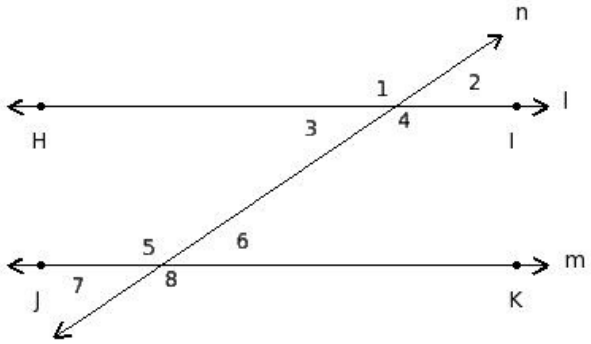
4. Find the exterior angles in the given figure



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

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

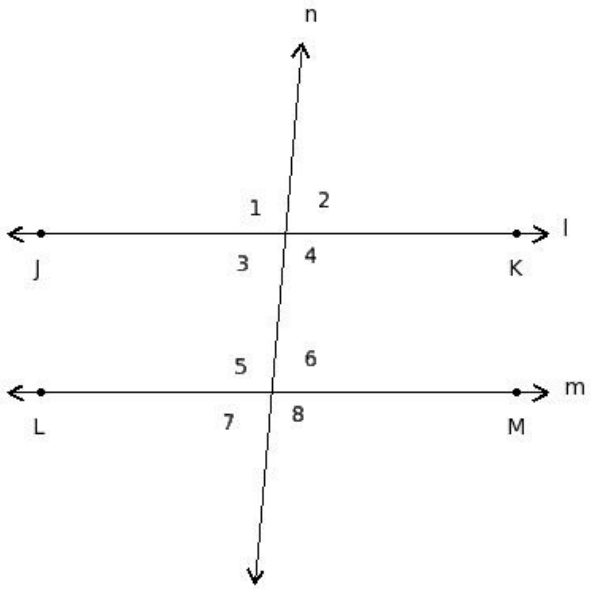
5. Find the interior alternate angles in the given figure



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

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

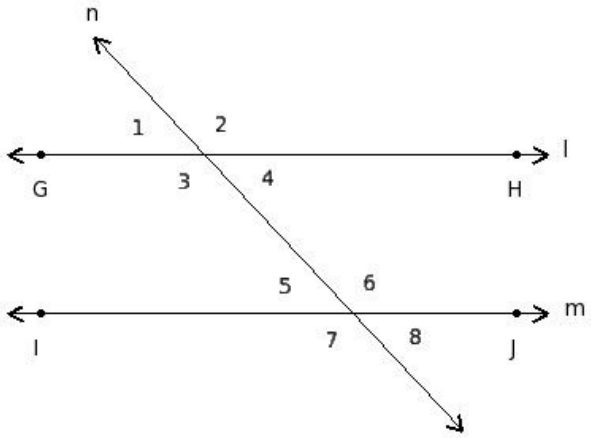
6. Find the exterior alternate angles in the given figure



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

(v) ∠3 , ∠5 ; ∠4 , ∠6

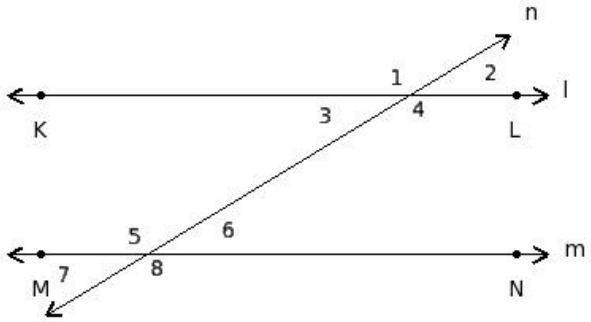
7. Find the corresponding angles in the given figure



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

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

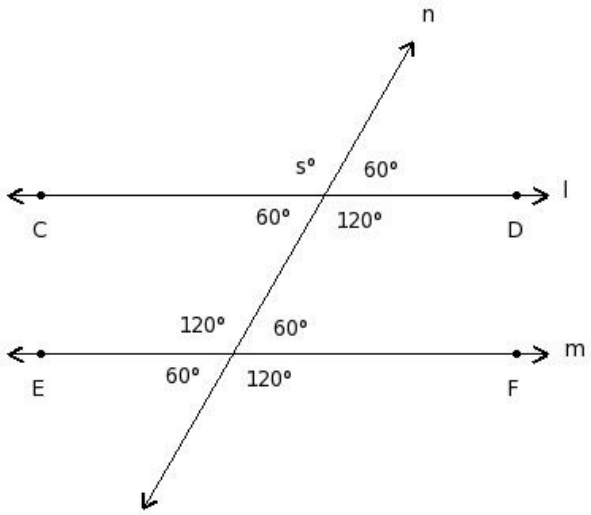
8. Find the co-interior angles in the given figure



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

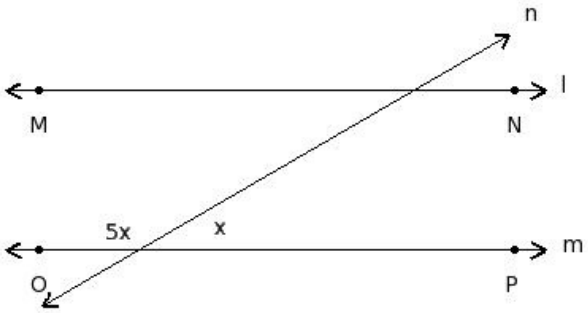
(iv) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7 (v) ∠3 , ∠5 ; ∠4 , ∠6

9. Find the value of 's'



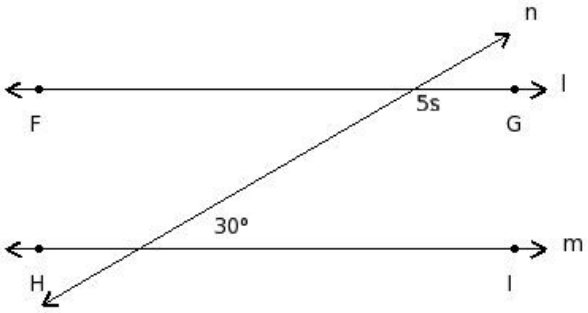
(i) 120° (ii) 125° (iii) 135° (iv) 150° (v) 130°

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



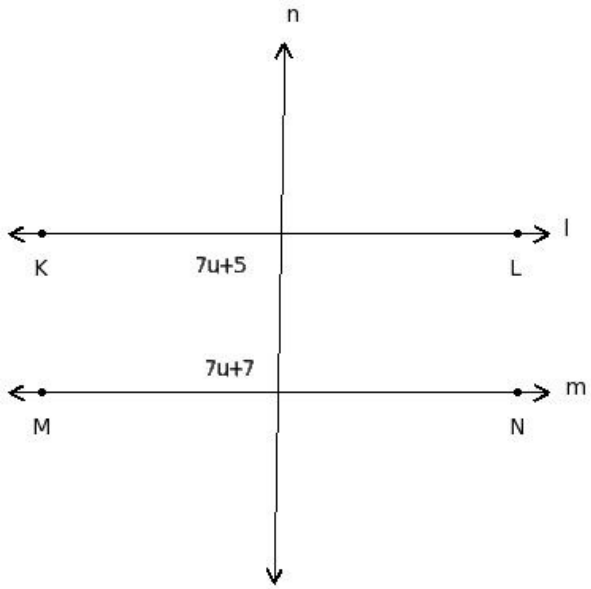
(i) 27 (ii) 30 (iii) 32 (iv) 31 (v) 29

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



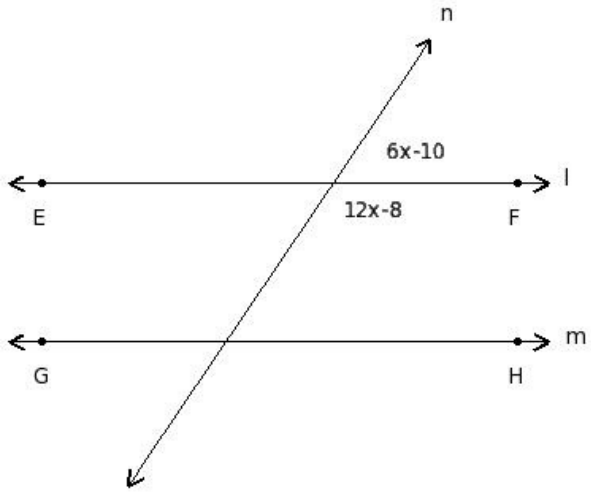
(i) 31 (ii) 30 (iii) 33 (iv) 29 (v) 28

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



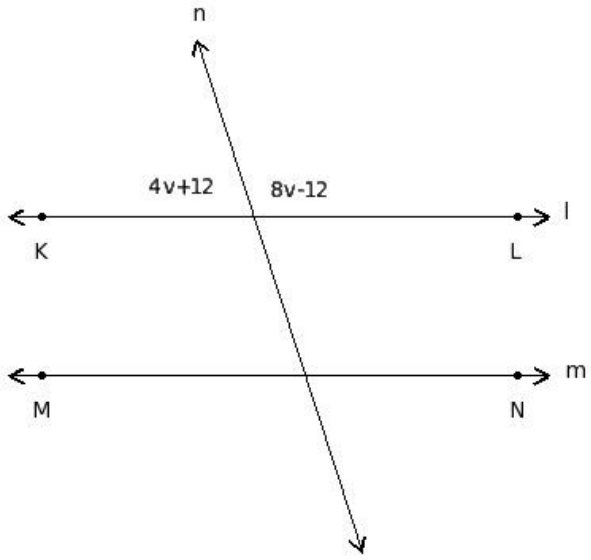
(i) 11 (ii) 12 (iii) 10 (iv) 13 (v) 15

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



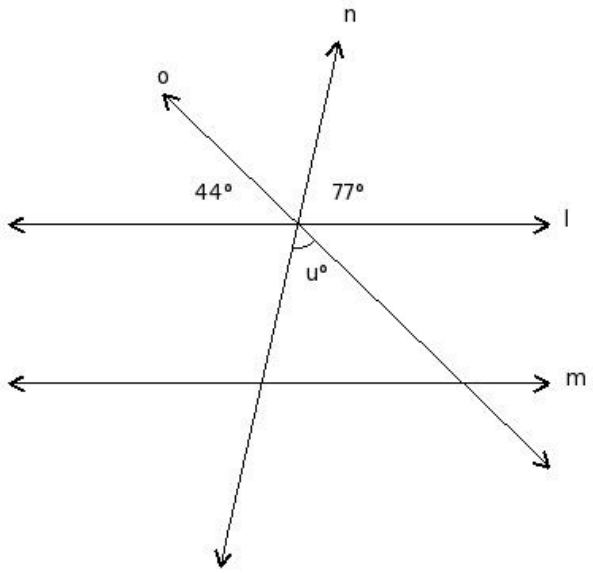
(i) 8 (ii) 11 (iii) 12 (iv) 13 (v) 10

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



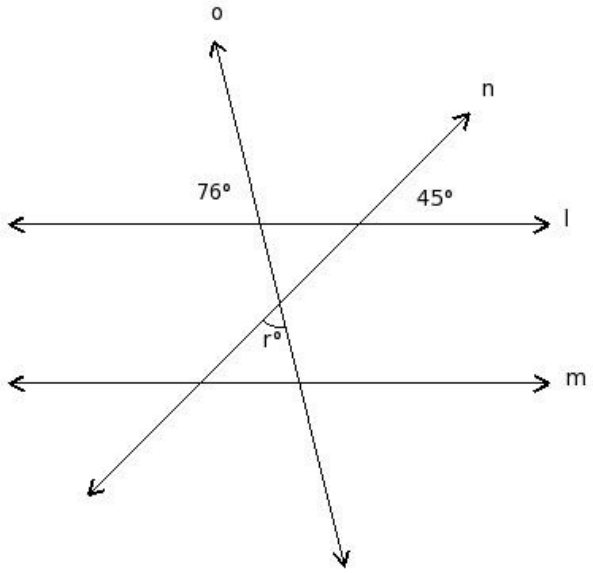
(i) 16 (ii) 12 (iii) 14 (iv) 17 (v) 15

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



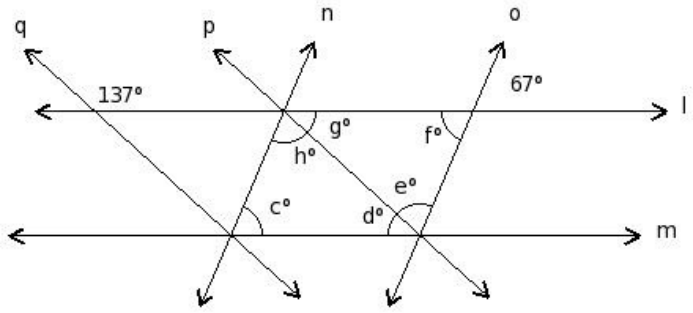
(i) 64° (ii) 89° (iii) 59° (iv) 74° (v) 69°

16. In the given figurel ∥ m. Find the value of 'r'



(i) 69° (ii) 64° (iii) 74° (iv) 59° (v) 89°

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



(i) 43°,43°,67°,70°,70°,67° (ii) 67°,43°,70°,67°,43°,70° (iii) 43°,70°,70°,67°,43°,67°

(iv) 70°,43°,67°,67°,43°,70° (v) 43°,43°,70°,67°,67°,70°

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

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

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

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

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

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

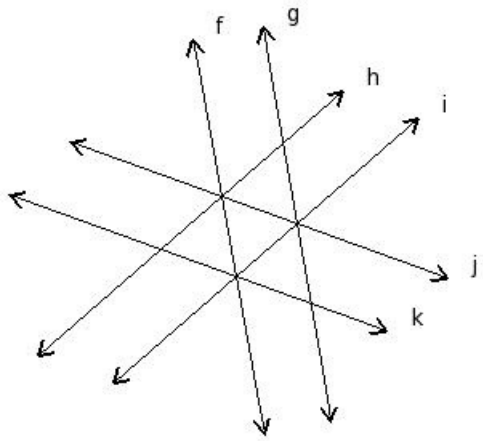
20. Which of the following are true?

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

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

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

a) i is the transversal of f & g
b) j is the transversal of h & i
c) $f \parallel g$
d) k is the transversal of h & f
e) $f \parallel i$
f) f is the transversal of h & j



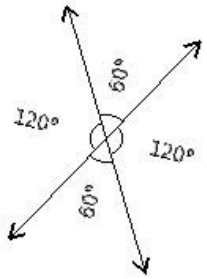
(i) {e,a} (ii) {e,f,c} (iii) {f,b} (iv) {a,b,c,d} (v) {e,d,a}

22. Which of the following are true with respect to lines n , o , p , q where n ∥ o , o ⊥ p , p ⊥ q?

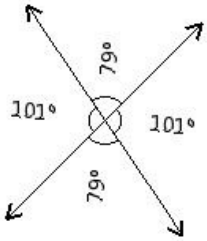
a) p ∥ q
b) n ⊥ q
c) n ∥ q
d) n ∥ p
e) o ∥ q

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

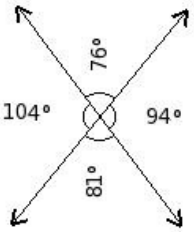
23. Which of the given figures is wrong?



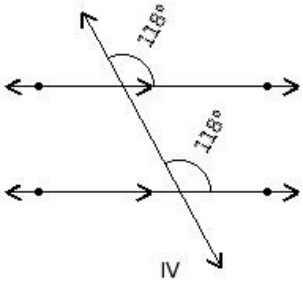
I



II



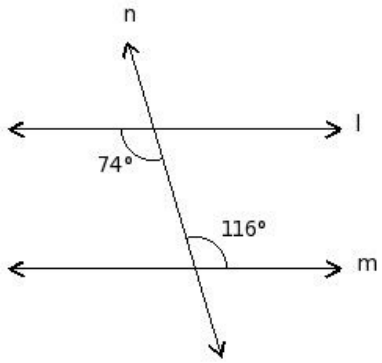
III



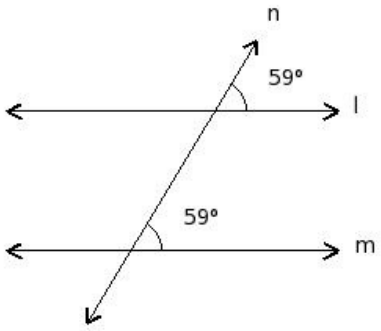
IV

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

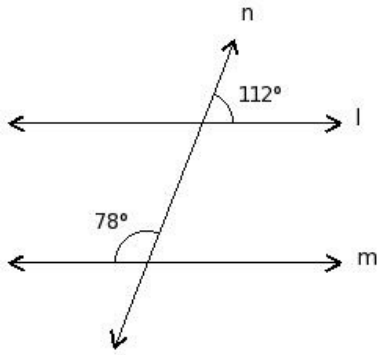
24. In which of the figures given bellow, l ∥ m?



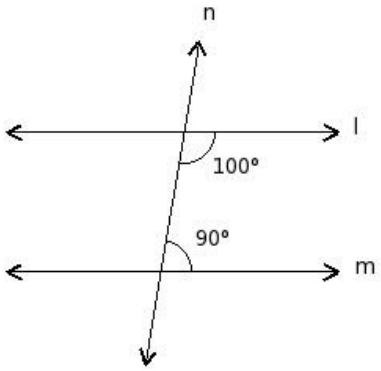
I



II



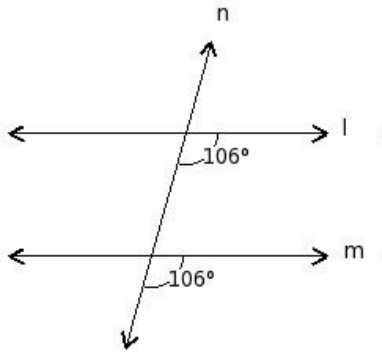
III



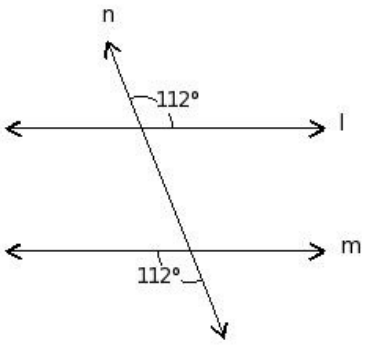
IV

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

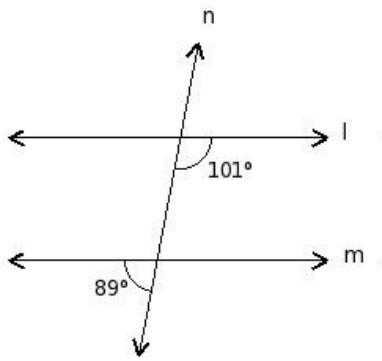
25. In which of the figures given bellow, l ∦ m(not parallel)?



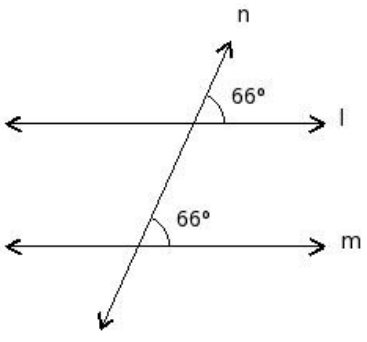
I



II



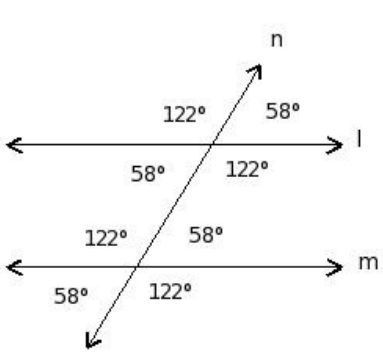
III



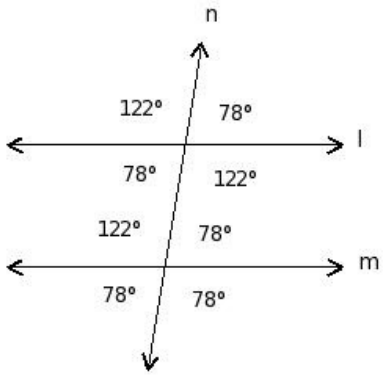
IV

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

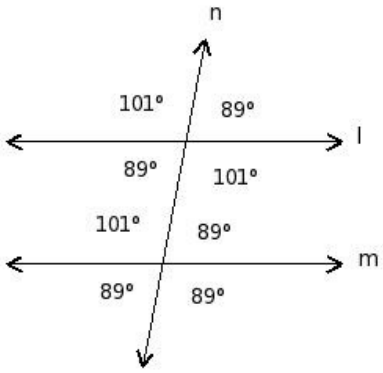
26. If l ∥ m, which of the given figures is correct?



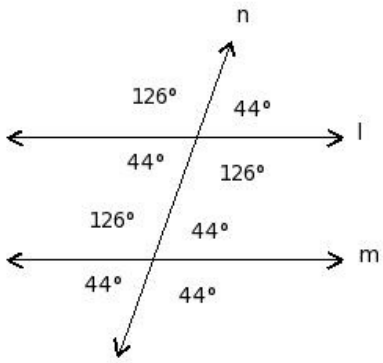
I



II



III



IV

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

Assignment Key

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