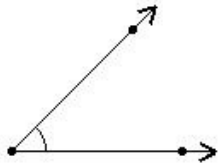
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Lines and Angles

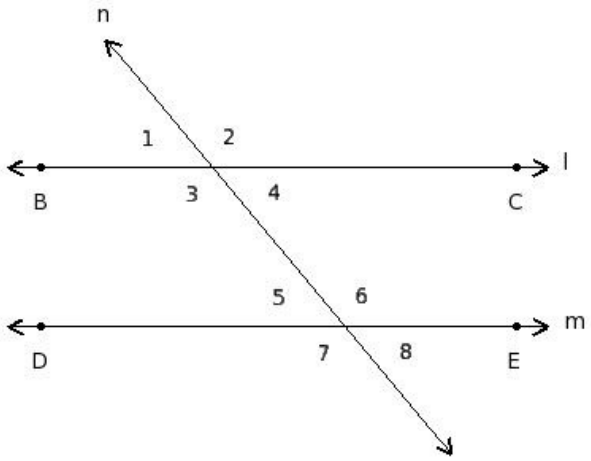
Grade : ICSE Grade VII

1. Identify the figure below



(i) octagon (ii) quadrilateral (iii) pentagon (iv) angle (v) circle

2. Find the adjacent angles in the given figure



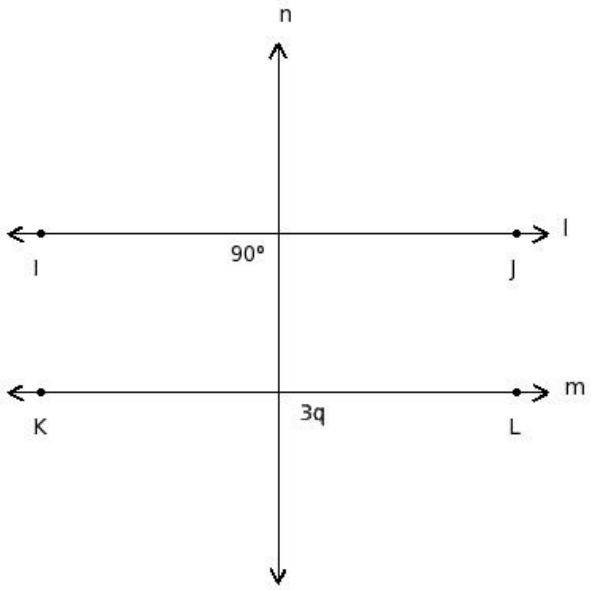
(i) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (ii) ∠1 , ∠8 ; ∠2 , ∠7 (iii) ∠1 , ∠2 , ∠7 , ∠8

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

3. The following angle represents

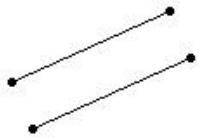
(i) complete angle (ii) right angle (iii) acute angle (iv) reflex angle (v) zero angle

4. In the given figure l ‖ m. Find the value of 'q'



(i) 31 (ii) 33 (iii) 29 (iv) 30 (v) 27

5. The following lines represent



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

6. Multiple lines drawn on a plane are called

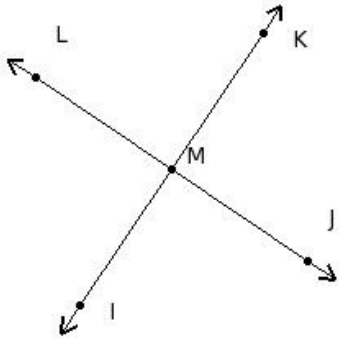
(i) concurrent lines (ii) parallel lines (iii) perpendicular lines (iv) intersecting lines (v) coplanar lines

7. 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

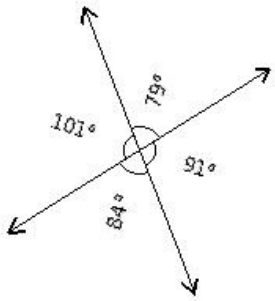
8. Which of the following points are collinear?

a) L, M, J
b) J, M, K
c) I, M, K
d) K, M, L
e) M, L, K

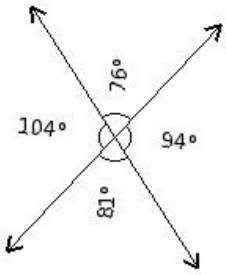


(i) {b,a} (ii) {e,b,a} (iii) {d,c,a} (iv) {a,c} (v) {d,c}

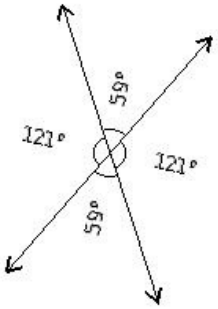
9. Which of the given figures is correct?



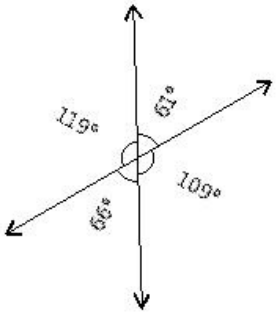
I



II



III



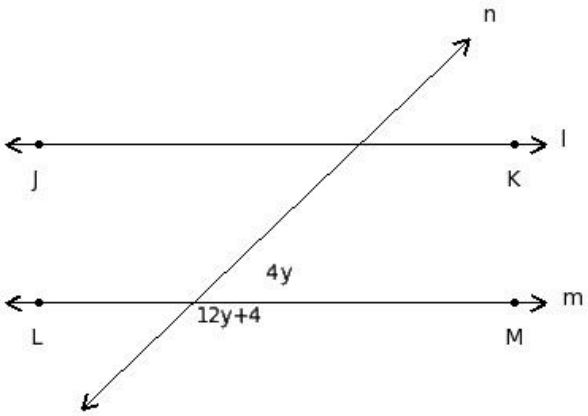
IV

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

10. Find the supplementary angle of 14° 28' 56"

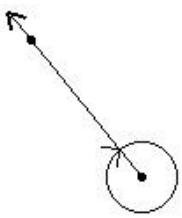
(i) 150° 21' 4" (ii) 165° 31' 4" (iii) 165° 31' 14" (iv) 165° 41' 4" (v) 175° 31' 4"

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



(i) 12 (ii) 13 (iii) 11 (iv) 10 (v) 9

12. The following angle represents



(i) reflex angle (ii) acute angle (iii) complete angle (iv) obtuse angle (v) zero angle

13. The following lines represent

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

14. Which of the following are true with respect to lines e , f , g , h where e ∥ f , f ⊥ g , g ⊥ h?

a) g ∥ h
b) e ∥ h
c) e ∥ g
d) e ⊥ h
e) f ∥ h

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

15. Which of the following are true?

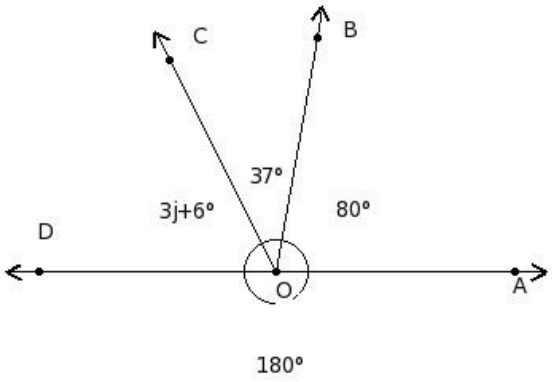
a) If two lines are parallel to the same line, then they are perpendicular to each other
b) If d ∥ e and e ∥ f , then d ∥ f
c) If two lines are parallel to the same line, then they are parallel to each other
d) If d ⊥ e and d ⊥ f , then e ⊥ f
e) If d ⊥ e and e ⊥ f , then d ⊥ f

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

16. Subtract 29° 14' 57" from 30° 43' 28"

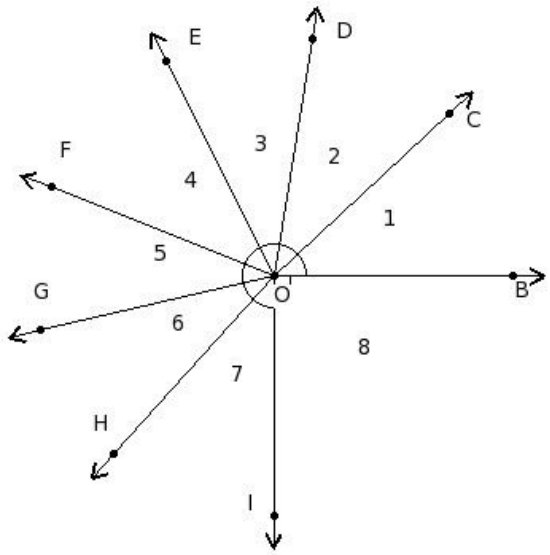
(i) 1° 28' 31" (ii) 1° 38' 31" (iii) 13° 41' 29" (iv) 1° 28' 41" (v) 11° 28' 31"

17. Find the value of j in the figure below



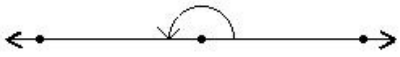
(i) 20 (ii) 19 (iii) 16 (iv) 18 (v) 21

18. The name of angle 1 in the given figure is



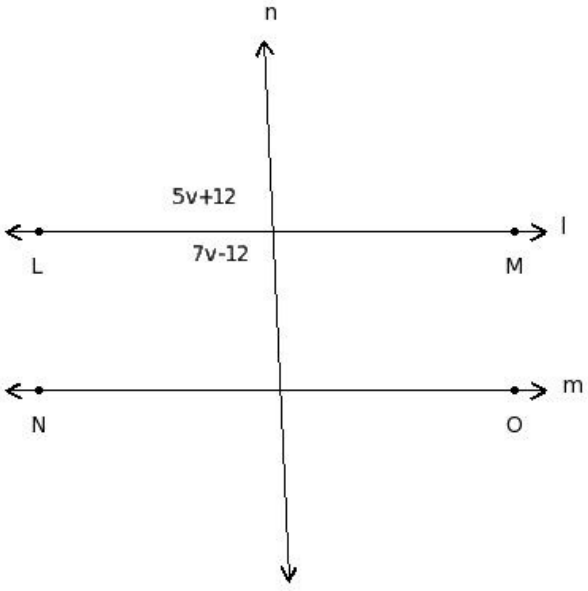
(i) ∠FOG (ii) ∠GOH (iii) ∠HOI (iv) ∠BOC (v) ∠COD

19. The following angle represents



(i) obtuse angle (ii) straight angle (iii) acute angle (iv) zero angle (v) reflex angle

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



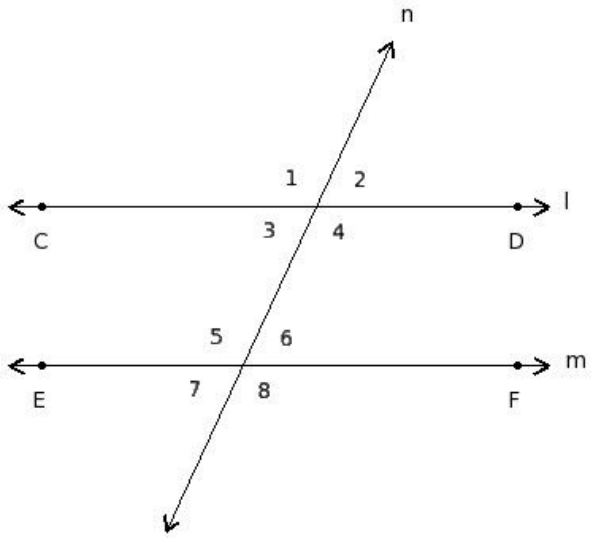
(i) 13 (ii) 18 (iii) 15 (iv) 16 (v) 14

21. Which of the following pairs of angles are complementary?

(i) 12° 3' 53",77° 46' 7" (ii) 11° 53' 53",78° 16' 7" (iii) 11° 43' 53",78° 6' 7" (iv) 11° 53' 53",78° 6' 7"

(v) 11° 53' 53",77° 56' 7"

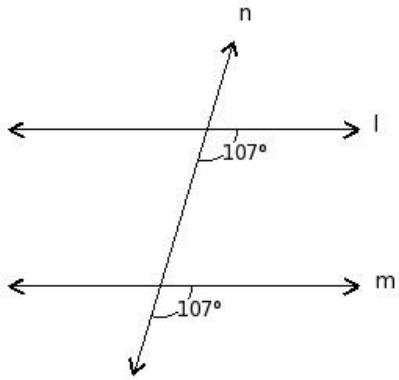
22. Find the exterior alternate angles in the given figure



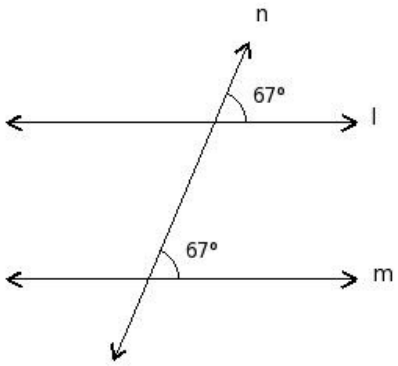
(i) ∠1 , ∠8 ; ∠2 , ∠7 (ii) ∠3 , ∠6 ; ∠4 , ∠5 (iii) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7

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

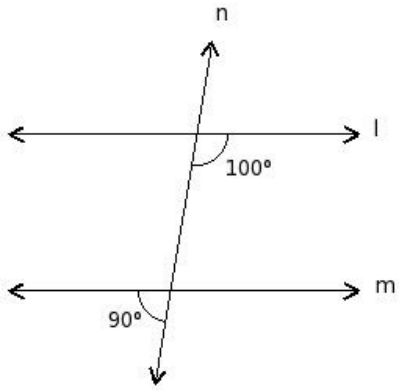
23. In which of the figures given bellow, l ∦ m(not parallel)?



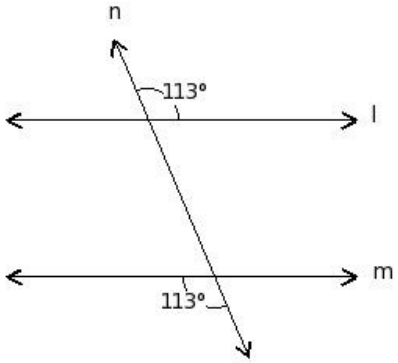
I



II



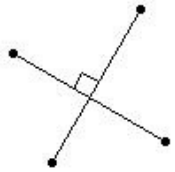
III



IV

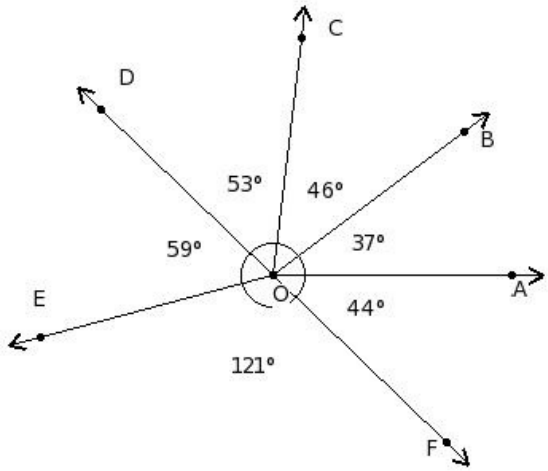
(i) II (ii) IV (iii) III (iv) I

24. The following lines represent



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

25. Which of the following angles form a linear pair?



(i) (∠DOE,∠EOF) (ii) (∠BOC,∠COD) (iii) (∠COD,∠DOE) (iv) (∠EOF,∠FOA) (v) (∠AOB,∠BOC)

Assignment Key

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