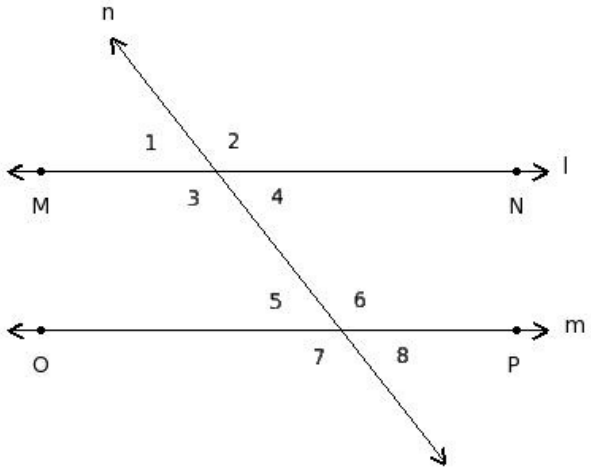
EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Lines and Angles

Grade : SSC Grade IX

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



(i) ∠1 , ∠2 , ∠7 , ∠8 (ii) ∠1 , ∠8 ; ∠2 , ∠7

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

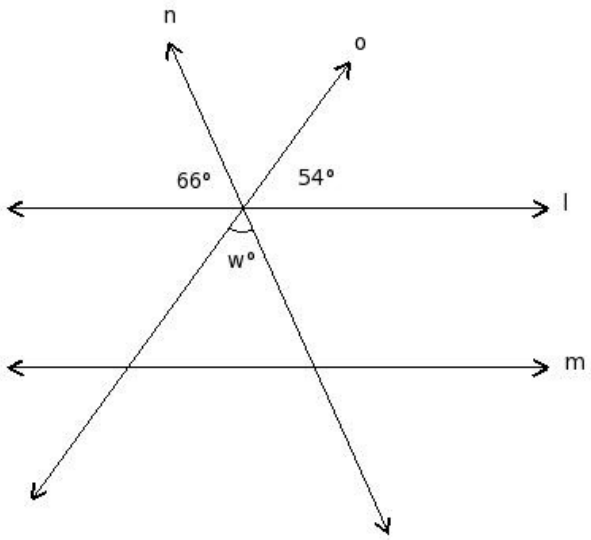
(v) ∠3 , ∠5 ; ∠4 , ∠6

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

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

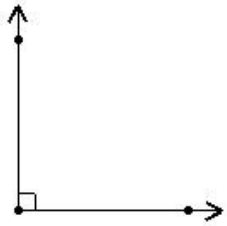
(i) {d,c} (ii) {a,b} (iii) {b,c,f} (iv) {d,b,c} (v) {e,a,f}

3. In the given figure l ∥ m. Find the value of 'w'



(i) 90° (ii) 65° (iii) 75° (iv) 70° (v) 60°

4. The following angle represents

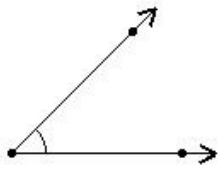


(i) acute angle (ii) reflex angle (iii) right angle (iv) obtuse angle (v) zero angle

5. In a right-angled triangle if one of the acute angles is 28°, find the measure of the other acute angle.

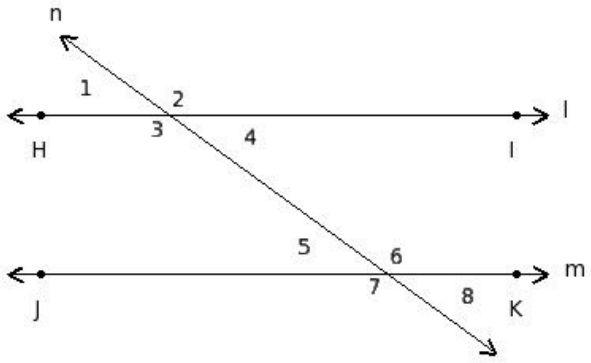
(i) 62° (ii) 64° (iii) 60° (iv) 61° (v) 63°

6. Identify the figure below



(i) triangle (ii) hexagon (iii) pentagon (iv) quadrilateral (v) angle

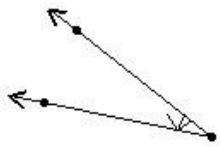
7. Find the vertically opposite angles in the given figure



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

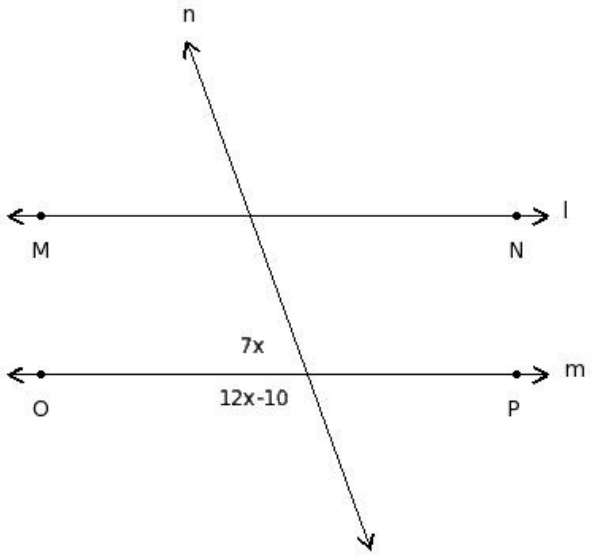
(iv) ∠3 , ∠5 ; ∠4 , ∠6 (v) ∠1 , ∠2 , ∠7 , ∠8

8. The following angle represents



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

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



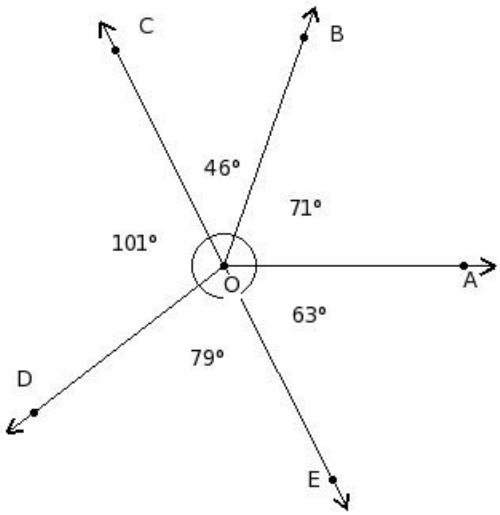
(i) 10 (ii) 12 (iii) 9 (iv) 8 (v) 11

10. Which of the following are true?

a) Only one straight line can be drawn between any two points
b) If two lines have no common point, then the lines are parallel
c) If two lines have infinite common points, then the two lines are concurrent
d) If a line cuts another line at more than one point, then one of the line is curved
e) A straight line meets another straight line at atmost one point

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

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

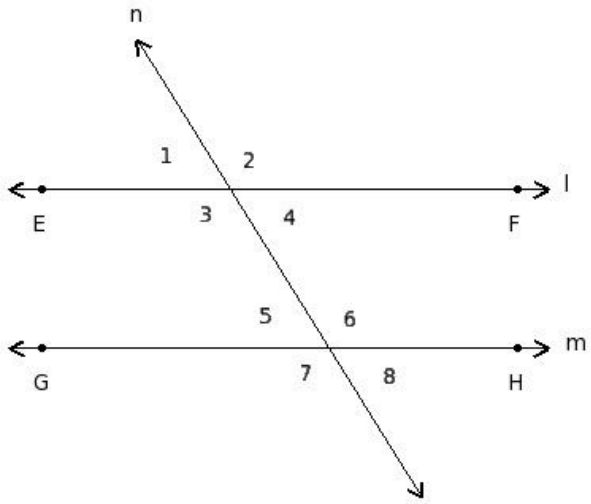


(i) (∠BOC,∠COD) (ii) (∠DOE,∠EOA) (iii) (∠AOB,∠BOC) (iv) (∠COD,∠DOE)

12. The representation $\overrightarrow{KL}$ indicates

(i) line segment (ii) arc (iii) angle (iv) line (v) ray

13. Find the exterior alternate angles in the given figure

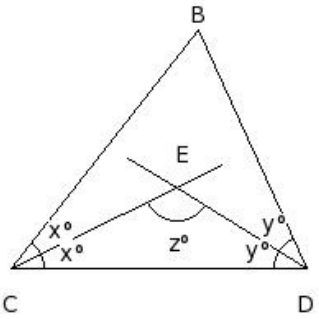


(i) ∠3 , ∠5 ; ∠4 , ∠6 (ii) ∠1 , ∠8 ; ∠2 , ∠7 (iii) ∠3 , ∠6 ; ∠4 , ∠5

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

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

14. In the given figure, △BCD is a triangle in which ∠C = 51.82° and ∠D = 65.53°.
If 'z' is the angle between the bisector of ∠C and ∠D, then find z.



(i) 121.33° (ii) 122.33° (iii) 123.33° (iv) 119.33° (v) 120.33°

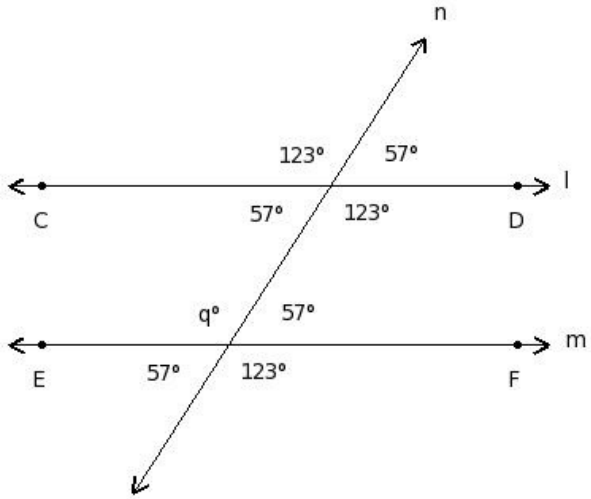
15. Multiple lines which pass through the same point are called

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

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

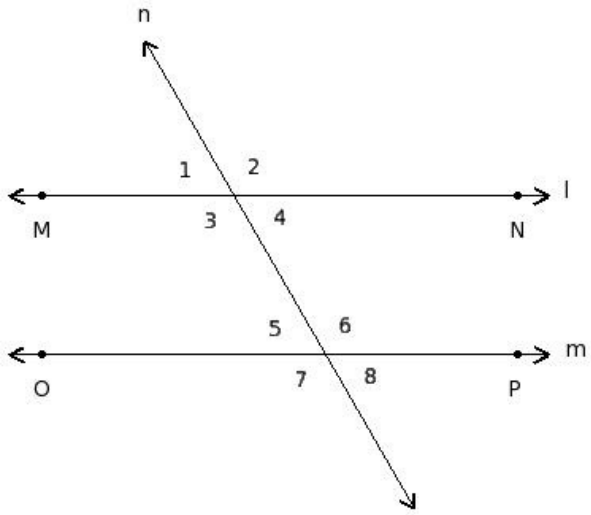
(i) concurrent lines (ii) perpendicular lines (iii) coplanar lines (iv) transversal (v) parallel lines

17. Find the value of 'q'



(i) 153° (ii) 133° (iii) 128° (iv) 138° (v) 123°

18. Find the adjacent angles in the given figure

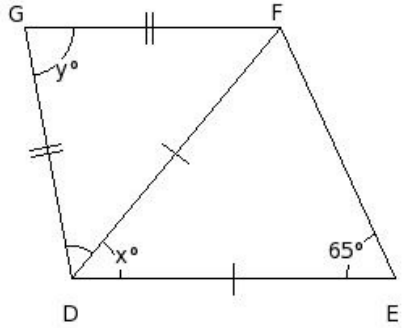


(i) ∠1 , ∠2 , ∠7 , ∠8 (ii) ∠3 , ∠4 , ∠5 , ∠6 (iii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8

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

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

19. In the following figure DE ∥ GF, find the values of x and y.

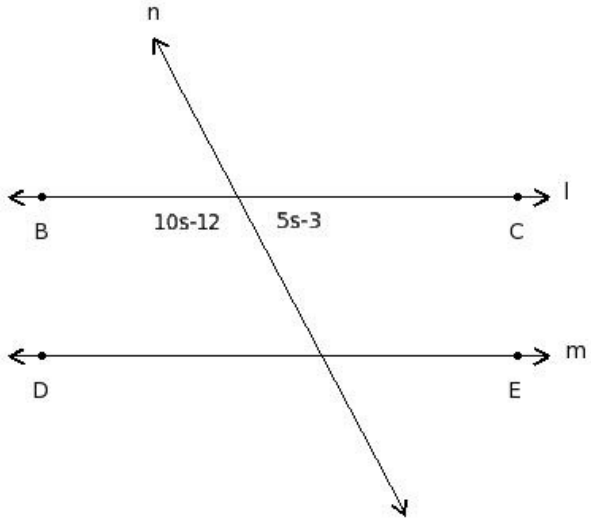


(i) x=52°,y=82° (ii) x=50°,y=80° (iii) x=49°,y=79° (iv) x=48°,y=78° (v) x=51°,y=81°

20. Which of the following is a complete angle?

(i) 360° (ii) 147° (iii) 236° (iv) 90° (v) 51°

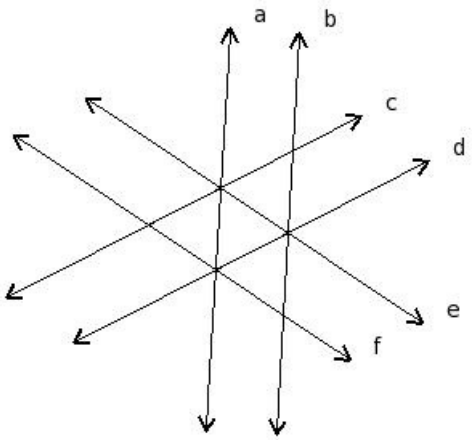
21. In the given figure l ∥ m. Find the value of 's'



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

22. In the given figure, a , b , c , d , e , f are lines in a plane. By looking at the figure, which of the following are true?

a) a is the transversal of c & e
b) d is the transversal of a & b
c) f is the transversal of c & a
d) a ∥ d
e) e is the transversal of c & d
f) a ∥ b



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

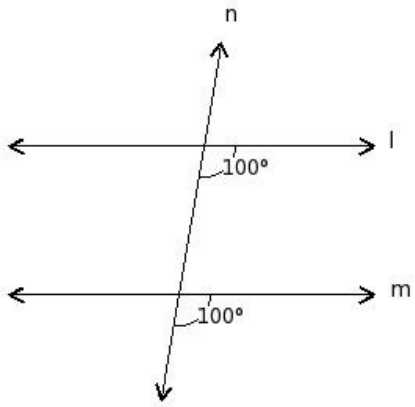
23. In a right-angled triangle, the two acute angles are in the ratio 13 : 5. Find these angles.

(i) A=67°,C=27° (ii) A=63°,C=23° (iii) A=65°,C=25° (iv) A=66°,C=26° (v) A=64°,C=24°

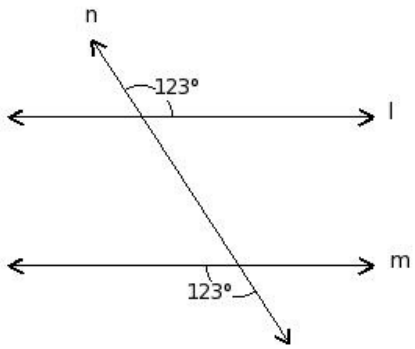
24. The following angle represents

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

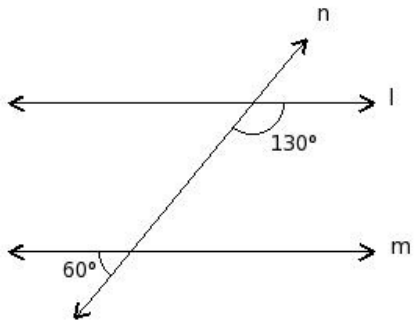
25. In which of the figures given bellow, l ∦ m(not parallel)?



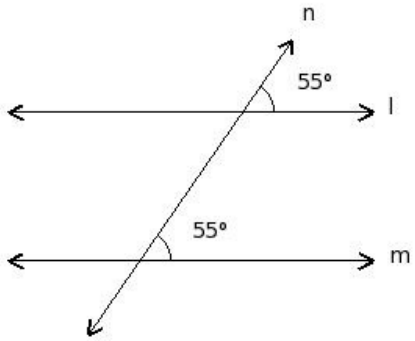
I



II



III



IV

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

Assignment Key

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