EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Lines and Angles

Grade : SSC Grade IX

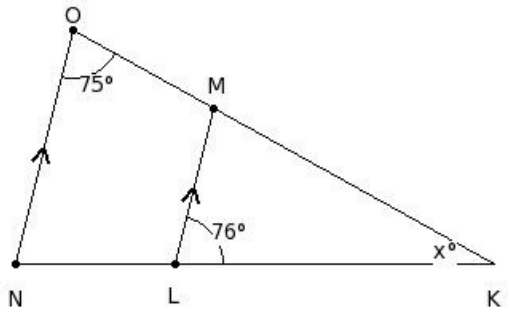
1. Which of the following is a straight angle?

   (i) 90° (ii) 62° (iii) 336° (iv) 180° (v) 0°

2. In △ABC, if ∠A = 70° and ∠B = 58°, find the measure of ∠C

   (i) C=51° (ii) C=50° (iii) C=54° (iv) C=53° (v) C=52°

3. In the given figure, it is given that ML ∥ ON , ∠MON = 75° and ∠MLK = 76°. Find the value of x.



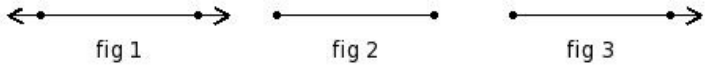
   (i) x=29° (ii) x=27° (iii) x=30° (iv) x=31° (v) x=28°

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

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

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

5. Which of the following figures represent a line?



   (i) fig 1 (ii) fig 3 (iii) fig 2

6. The following angle represents

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

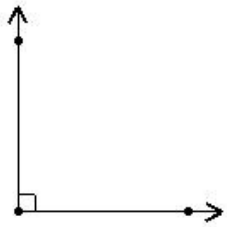
7. Multiple lines which do not meet each other are called

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

8. What fraction of clockwise revolution does the hour hand of a clock covers, when it goes from 4 to 9?

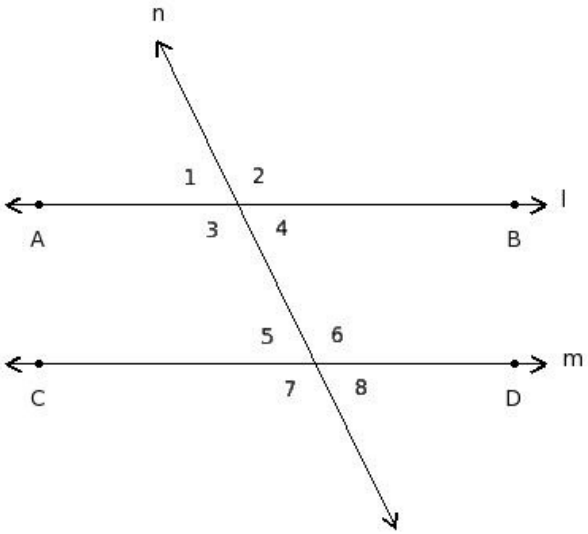
(i) $\frac{5}{12}$ (ii) $\frac{5}{14}$ (iii) $\frac{7}{12}$ (iv) $\frac{1}{2}$ (v) $\frac{1}{4}$

9. The following angle represents



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

10. Find the exterior alternate angles in the given figure

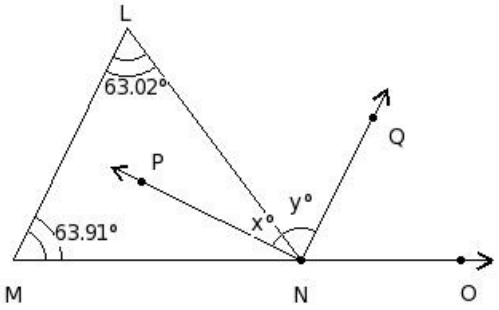


(i) ∠3 , ∠5 ; ∠4 , ∠6 (ii) ∠3 , ∠4 , ∠5 , ∠6 (iii) ∠1 , ∠2 , ∠7 , ∠8 (iv) ∠1 , ∠8 ; ∠2 , ∠7

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

In the given figure, ∠L = 63.02° and ∠M = 63.91°.

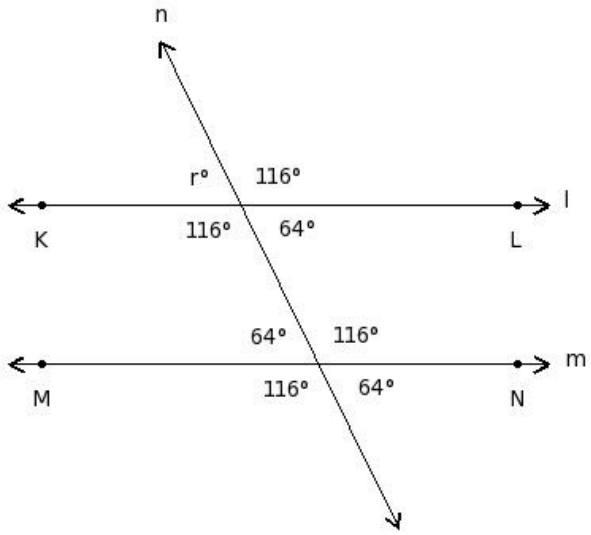
11. Side MN is produced to O, so that ∠MNL and ∠LNO form a linear pair.
If $\overrightarrow{NP}$ and $\overrightarrow{NQ}$ are the bisectors of ∠MNL and ∠LNO, find x and y.



(i) x=25.54°,y=62.47° (ii) x=28.54°,y=65.47° (iii) x=26.54°,y=63.47° (iv) x=24.54°,y=61.47°

(v) x=27.54°,y=64.47°

12. Find the value of 'r'



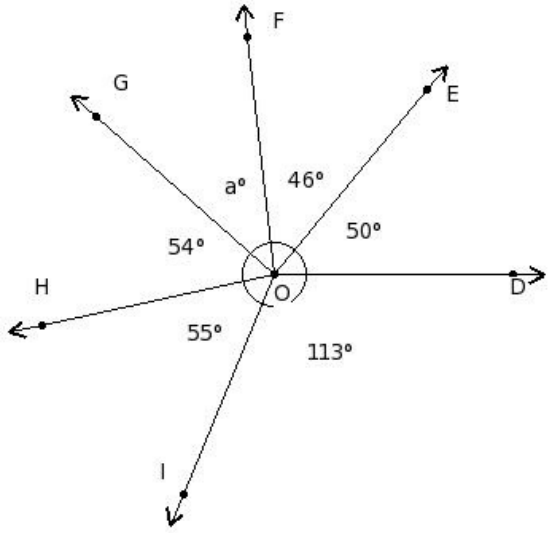
(i) 74° (ii) 69° (iii) 79° (iv) 64° (v) 94°

13. Which of the following are true?

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

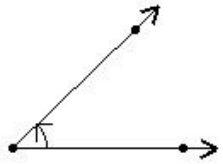
(i) {a,d} (ii) {c,a,d} (iii) {d,e} (iv) {b,e} (v) {b,e,d}

14. Find the value of 'a' in the following figure



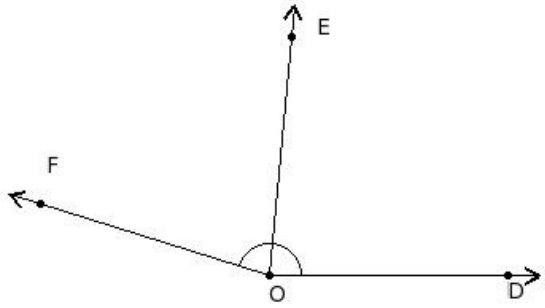
(i) 57° (ii) 42° (iii) 47° (iv) 52° (v) 72°

15. The following angle represents



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

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



(i) ∠FOD , ∠HOI (ii) ∠EOF , ∠GOH (iii) ∠HOI , ∠EOF (iv) ∠GOH , ∠EOF (v) ∠DOE , ∠EOF

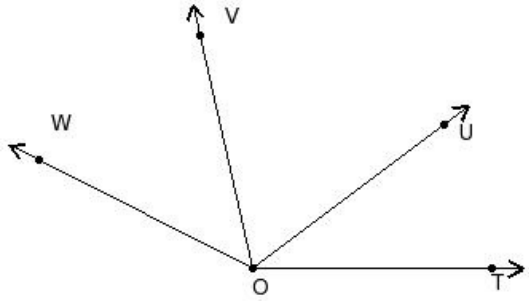
17. Find the measure of each of the two equal angles of an isosceles right-angled triangle.

(i) 45° (ii) 44° (iii) 47° (iv) 46° (v) 43°

18. If all the three angles of a triangle are of the same measure, find the measure of each of the angles.

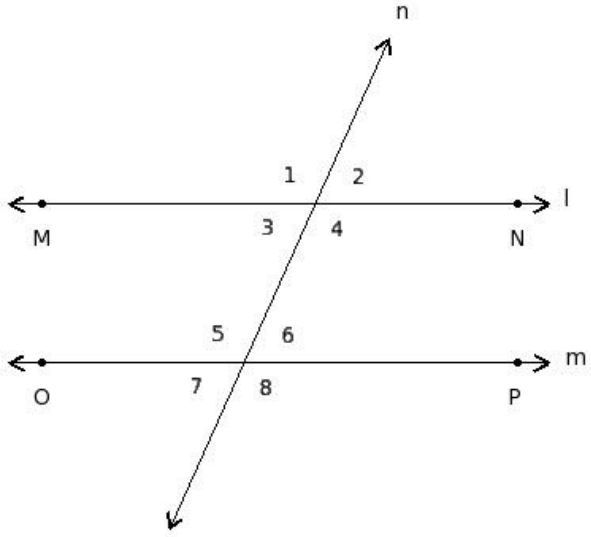
(i) 60° (ii) 59° (iii) 61° (iv) 62° (v) 58°

19. Which of the following is the largest angle in the given figure?



(i) ∠TOU (ii) ∠UOW (iii) ∠TOW (iv) ∠UOV (v) ∠TOV

20. Find the interior angles in the given figure



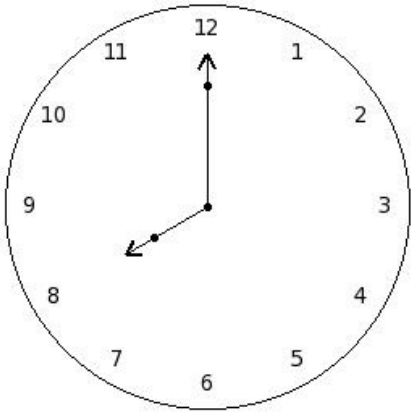
(i) ∠1 , ∠2 , ∠7 , ∠8 (ii) ∠1 , ∠4 ; ∠2 , ∠3 ; ∠5 , ∠8 ; ∠6 , ∠7 (iii) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8

(iv) ∠3 , ∠4 , ∠5 , ∠6 (v) ∠3 , ∠5 ; ∠4 , ∠6

21. The following angle represents

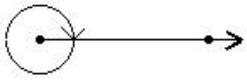
(i) zero angle (ii) straight angle (iii) obtuse angle (iv) acute angle (v) right angle

22. State the angle between the two hands of the clock when the time is 8 A.M.



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

23. The following angle represents



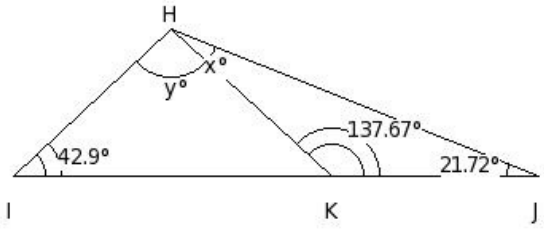
(i) complete angle (ii) zero angle (iii) right angle (iv) obtuse angle (v) reflex angle

24. Each of the two equal angles of an isosceles triangle is half the third angle. Find the angles of the triangle

(i) X=47°,Y=90°,Z=43° (ii) X=45°,Y=90°,Z=45° (iii) X=45°,Y=88°,Z=47° (iv) X=43°,Y=90°,Z=47°

(v) X=43°,Y=92°,Z=45°

25. In the given figure, find the values of x and y.



(i) x=21.61°,y=95.77° (ii) x=18.61°,y=92.77° (iii) x=22.61°,y=96.77° (iv) x=19.61°,y=93.77°

(v) x=20.61°,y=94.77°

Assignment Key

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