EduSahara™ Worksheet

Name : Chapter Based Worksheet

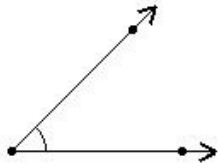
Chapter : Lines and Angles

Grade : SSC Grade IX

1. Where will the hour hand of a clock stop, if it starts from 2 and turns through 4 right angles?

   (i) 4 (ii) 3 (iii) 1 (iv) 0 (v) 2

2. Identify the figure below



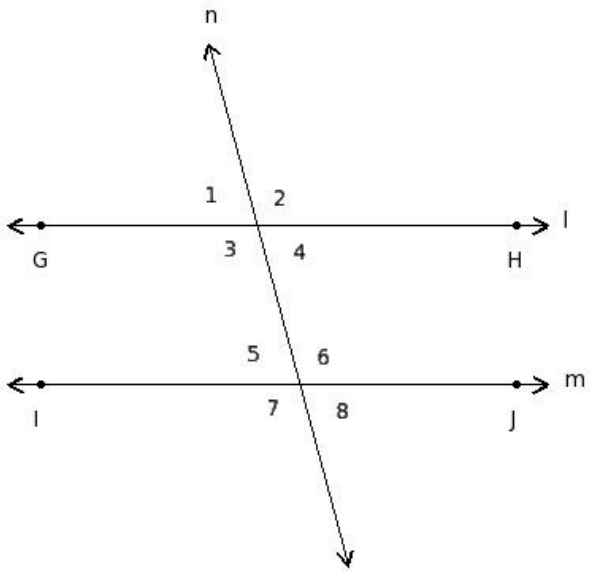
   (i) angle (ii) decagon (iii) quadrilateral (iv) octagon (v) heptagon

3. The vertical angle of an isosceles triangle is twice the sum of its base angles. Find each angle of the triangle.

   (i) A=122°,B=30°,C=28° (ii) A=118°,B=32°,C=30° (iii) A=120°,B=30°,C=30°

   (iv) A=120°,B=28°,C=32° (v) A=118°,B=30°,C=32°

4. Find the exterior angles in the given figure



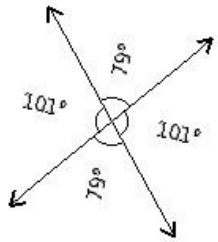
   (i) ∠1 , ∠2 , ∠7 , ∠8 (ii) ∠3 , ∠4 , ∠5 , ∠6 (iii) ∠3 , ∠6 ; ∠4 , ∠5 (iv) ∠3 , ∠5 ; ∠4 , ∠6

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

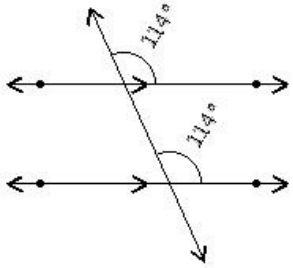
5. The representation $\overleftrightarrow{CD}$ indicates

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

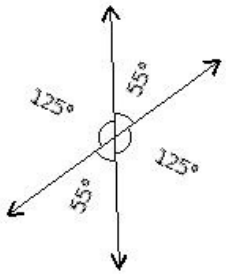
6. Which of the given figures is wrong?



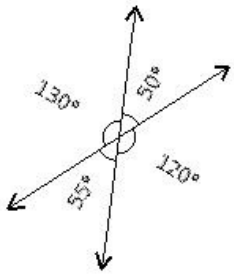
I



II



III



IV

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

7. In a right-angled triangle if one of the acute angles is 58°, find the measure of the other acute angle.

(i) 33° (ii) 31° (iii) 34° (iv) 32° (v) 30°

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

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

9. The complementary angle of 35° is

(i) 65° (ii) 60° (iii) 85° (iv) 70° (v) 55°

10. Points lying on the same line are called

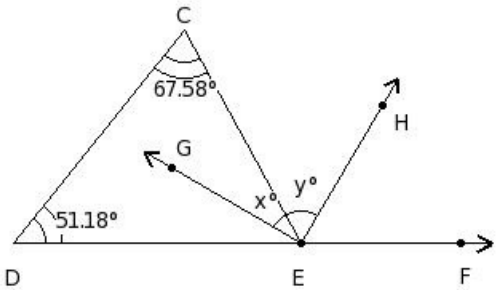
(i) linear points (ii) semi-linear points (iii) non-linear points (iv) collinear points (v) concurrent points

11. Which of the following is an obtuse angle?

(i) 122° (ii) 45° (iii) 360° (iv) 223° (v) 90°

In the given figure, ∠C = 67.58° and ∠D = 51.18°.

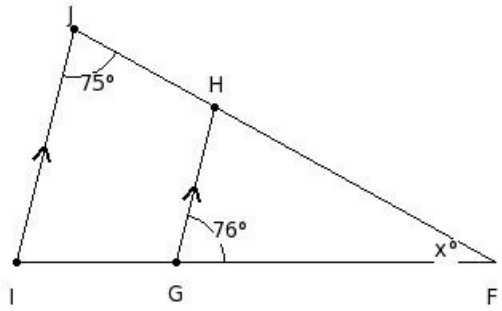
12. Side DE is produced to F, so that ∠DEC and ∠CEF form a linear pair.
If $\overrightarrow{EG}$ and $\overrightarrow{EH}$ are the bisectors of ∠DEC and ∠CEF, find x and y.



(i) x=28.62°,y=57.38° (ii) x=31.62°,y=60.38° (iii) x=29.62°,y=58.38° (iv) x=30.62°,y=59.38°

(v) x=32.62°,y=61.38°

13. In the given figure, it is given that HG ∥ JI , ∠HJI = 75° and ∠HGF = 76°. Find the value of x.



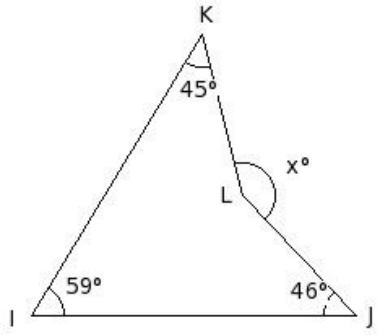
(i) x=31° (ii) x=27° (iii) x=28° (iv) x=29° (v) x=30°

14. One of the two equal angles of an isosceles triangle measures 44°. Find the measure of each angle of the triangle.

(i) A=46°,B=44°,C=90° (ii) A=42°,B=44°,C=94° (iii) A=44°,B=44°,C=92° (iv) A=42°,B=46°,C=92°

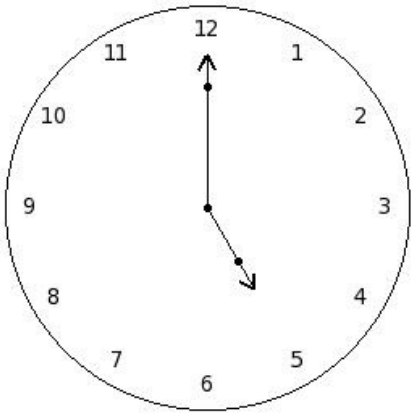
(v) A=44°,B=42°,C=94°

15. In the given figure, calculate the value of x.



(i) x=149° (ii) x=152° (iii) x=150° (iv) x=148° (v) x=151°

16. State the angle between the two hands of the clock when the time is 5 A.M.



(i) 150° (ii) 160° (iii) 180° (iv) 155° (v) 165°

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

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

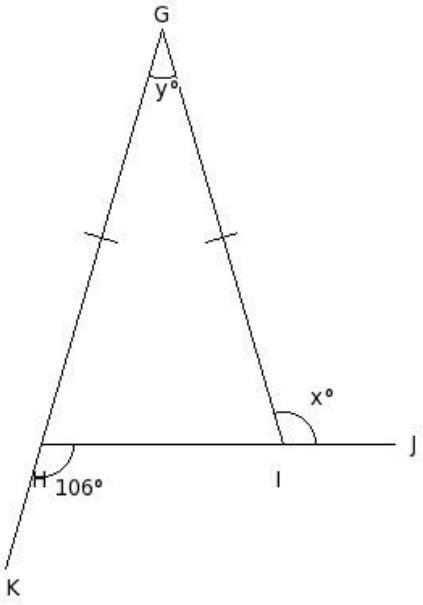
18. One angle of a triangle measures 36° and the other two angles are in the ratio 3 : 5. Find these angles.

(i) B=52°,C=88° (ii) B=56°,C=92° (iii) B=53°,C=89° (iv) B=54°,C=90° (v) B=55°,C=91°

19. The following angle represents

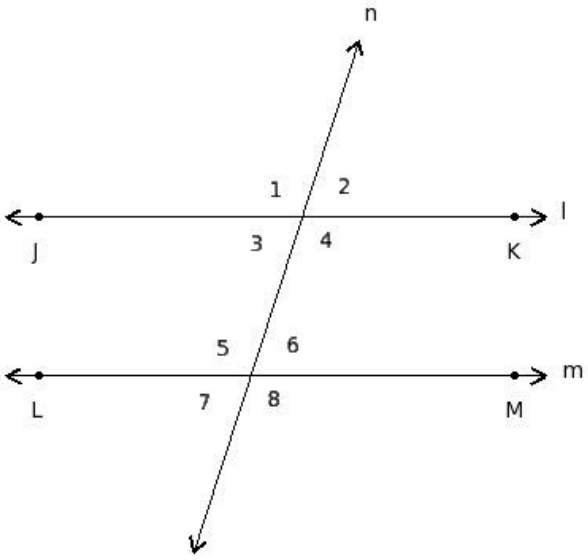
(i) right angle (ii) reflex angle (iii) zero angle (iv) straight angle (v) complete angle

20. Find the unknown marked angles in the following figure



(i) x=108°,y=34° (ii) x=105°,y=31° (iii) x=107°,y=33° (iv) x=106°,y=32° (v) x=104°,y=30°

21. Find the adjacent angles in the given figure



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

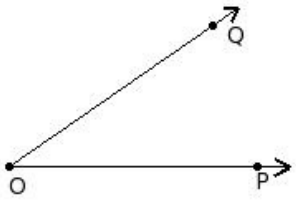
(iv) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8

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

22. In a right angled triangle, if one of the angles is 42.51°, find the third angle

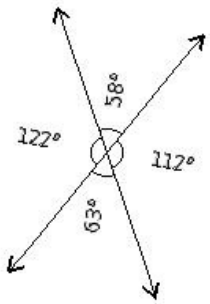
(i) 52.49° (ii) 62.49° (iii) 47.49° (iv) 57.49° (v) 77.49°

23. The name of the given angle is

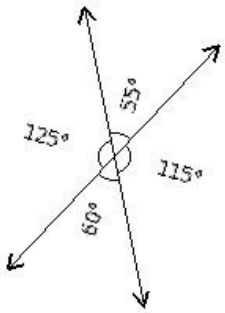


(i) ∠QPO (ii) ∠POQ (iii) ∠PQ (iv) ∠PQO (v) △POQ

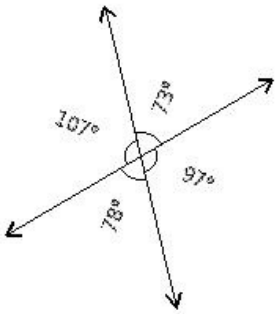
24. Which of the given figures is correct?



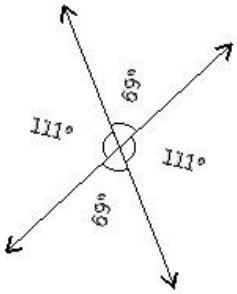
I



II



III



IV

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

25. Multiple lines drawn on a plane are called

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

Assignment Key

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