EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Lines and Angles

Grade : CBSE Grade IX

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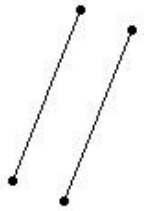
1. The following lines represent

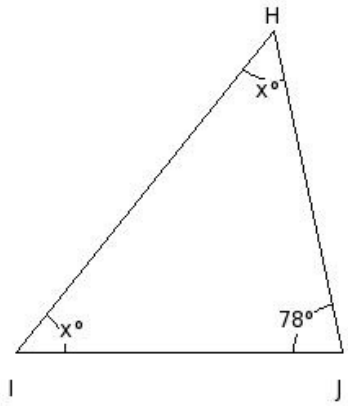


(i) parallel lines (ii) coplanar lines (iii) concurrent lines (iv) intersecting lines (v) perpendicular lines

2. The following angle represents

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

3. Find the unknown angles in the following figure



(i) H=53°,I=53° (ii) H=50°,I=50° (iii) H=49°,I=49° (iv) H=52°,I=52° (v) H=51°,I=51°

4. Consider the following figure $\overleftrightarrow{GB}$. State which of the following statements are true?

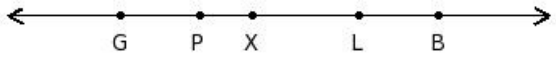
a) G,P,X,B,L are points on the line $\overleftrightarrow{GB}$

b) X,L are end points of line segment $\overline{LG}$

c) G,B are end points of line segment $\overline{GB}$

d) G,B are end points of line segment $\overline{PL}$

e) G,B are points on the line segment $\overline{PL}$



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

5. Which of the following are true?

a) If $h \parallel i$ and $i \parallel j$, then $h \parallel j$

b) If $h \perp i$ and $i \perp j$, then $h \perp j$

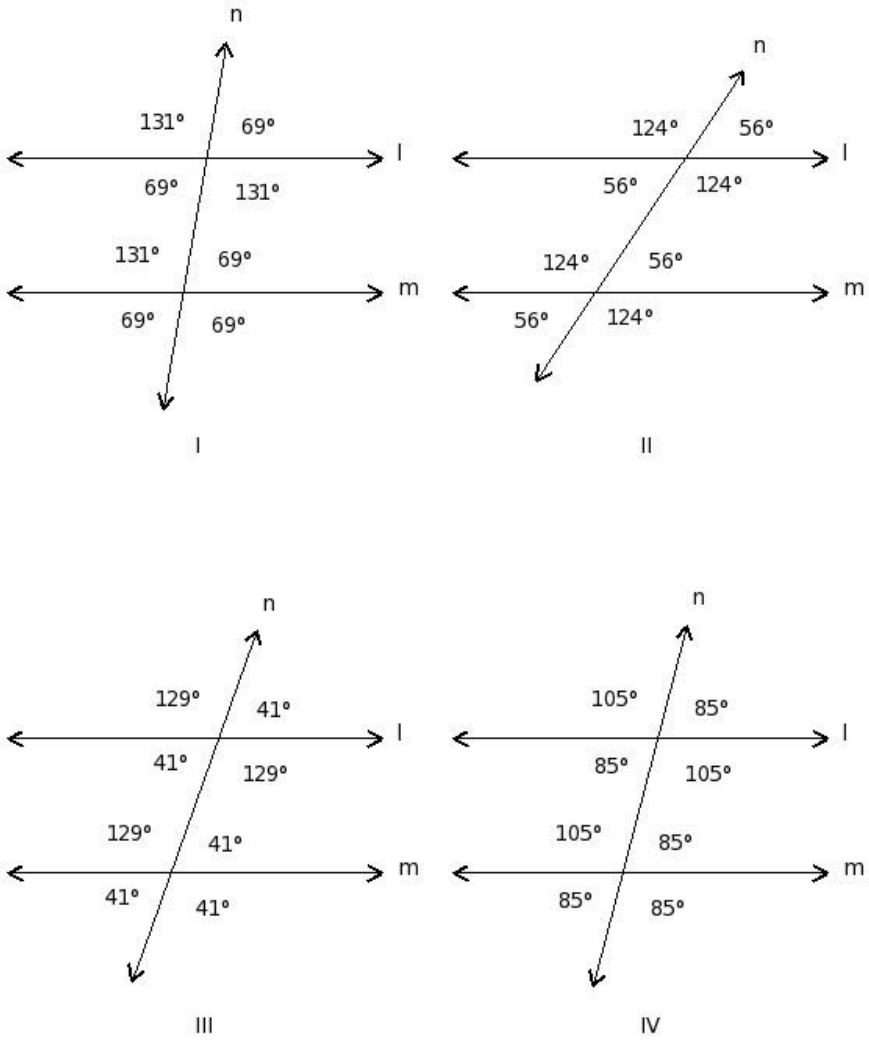
c) If two lines are parallel to the same line, then they are perpendicular to each other

d) If two lines are parallel to the same line, then they are parallel to each other

e) If $h \perp i$ and $h \perp j$, then $i \perp j$

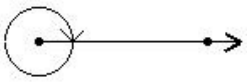
(i) {c,d} (ii) {b,a} (iii) {e,b,a} (iv) {a,d} (v) {c,d,a}

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



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

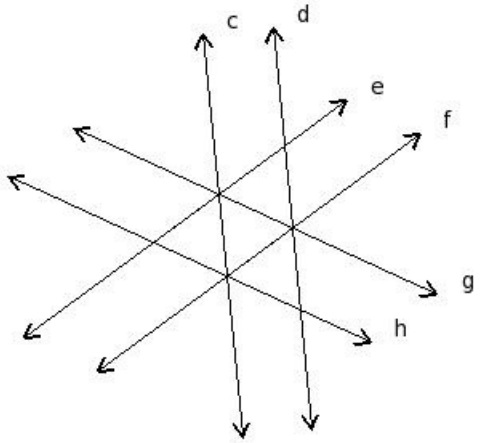
7. The following angle represents



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

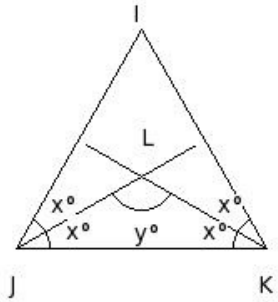
8. In the given figure, c , d , e , f , g , h are lines in a plane. By looking at the figure, which of the following are true?

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



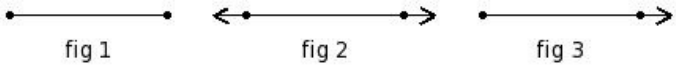
(i) {d,a} (ii) {d,f,a} (iii) {e,b} (iv) {d,e,c} (v) {a,b,c,f}

9. In the given figure, $\triangle IJK$ is a triangle in which $\angle I = \angle J = \angle K$.
This bisectors of $\angle J$ and $\angle K$ intersect at L. Find $\angle L =$



(i) 120° (ii) 122° (iii) 119° (iv) 121° (v) 118°

10. Which of the following figures represent a ray?

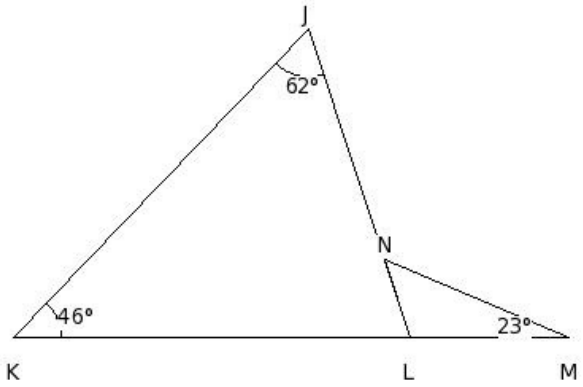


(i) fig 3 (ii) fig 1 (iii) fig 2

11. Two lines meeting at a point and making an angle of 90° at the meeting point are called

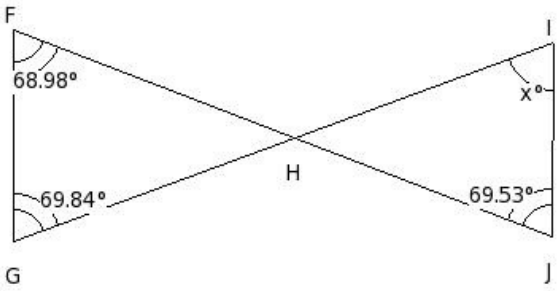
(i) intersecting lines (ii) parallel lines (iii) coplanar lines (iv) perpendicular lines (v) concurrent lines

12. In the given figure, find ∠MNL



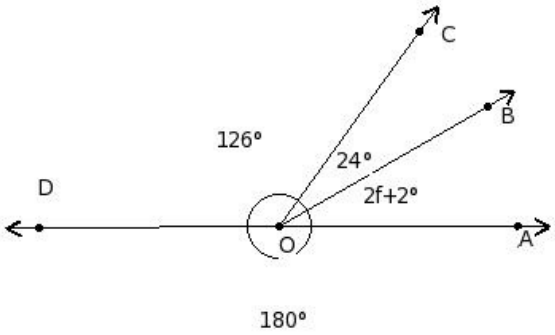
(i) 49° (ii) 50° (iii) 48° (iv) 47° (v) 51°

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



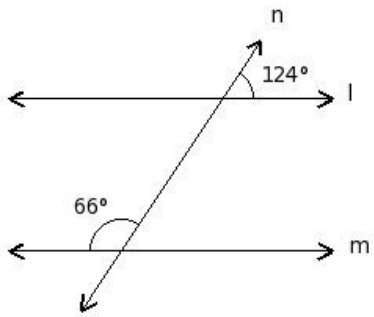
(i) x=67.29° (ii) x=71.29° (iii) x=70.29° (iv) x=69.29° (v) x=68.29°

14. Find the value of f in the figure below

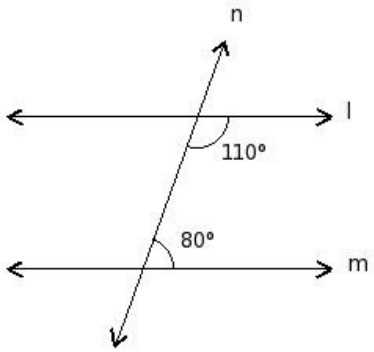


(i) 12 (ii) 15 (iii) 17 (iv) 13 (v) 14

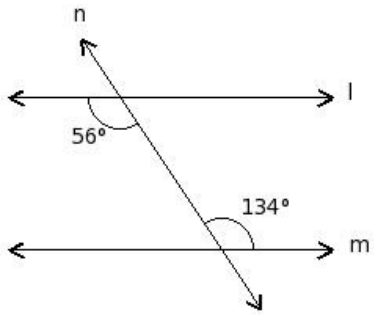
15. In which of the figures given bellow, l ∥ m?



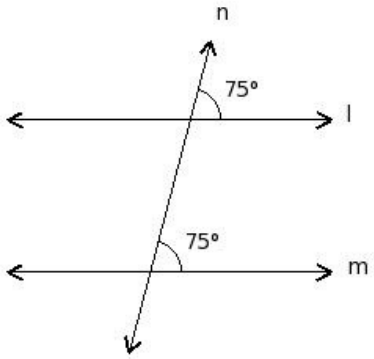
I



II



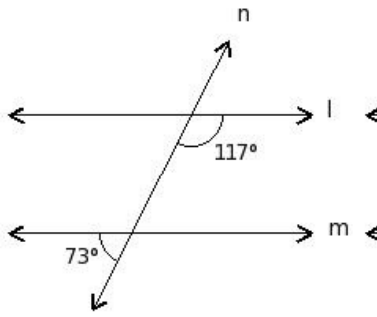
III



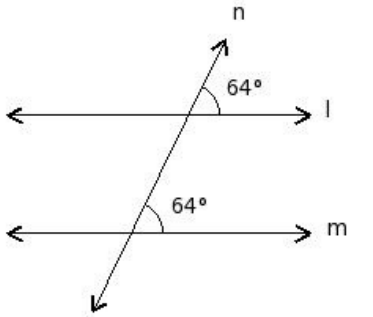
IV

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

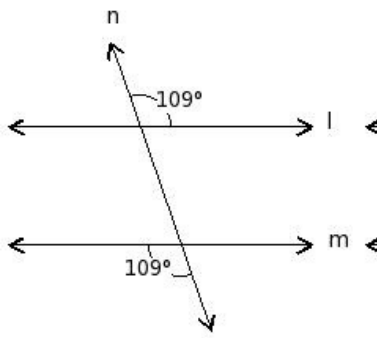
16. In which of the figures given bellow, l ∦ m(not parallel)?



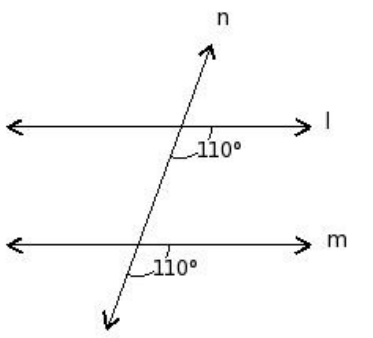
I



II



III



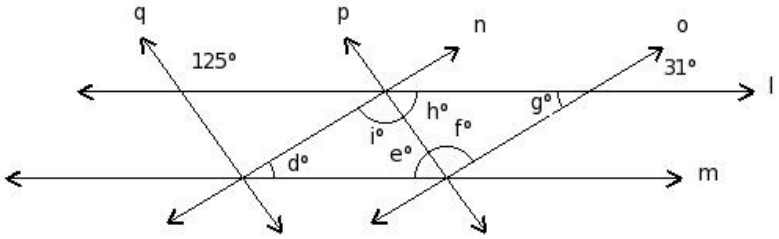
IV

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

17. The following angle represents

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

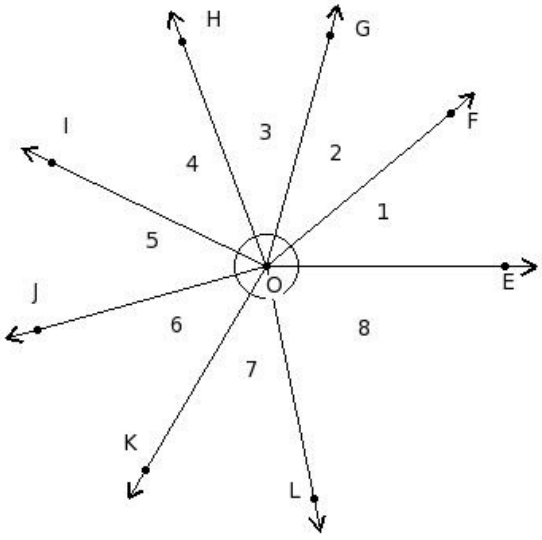
18. In the given figure, $l \parallel m$ and $n \parallel o$ and $p \parallel q$. Find the values of {d,e,f,g,h,i}



(i) 94°,55°,31°,55°,94°,31° (ii) 94°,94°,55°,55°,31°,31° (iii) 94°,55°,94°,55°,31°,31°

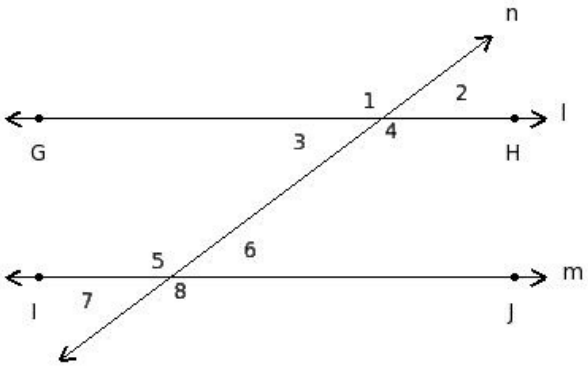
(iv) 31°,55°,94°,31°,55°,94° (v) 94°,55°,31°,94°,31°,55°

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



(i) ∠IOJ (ii) ∠JOK (iii) ∠EOF (iv) ∠FOG (v) ∠LOE

20. Find the vertically opposite angles in the given figure



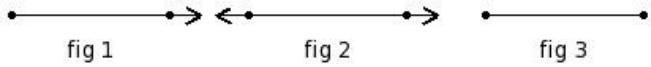
(i) ∠1 , ∠5 ; ∠2 , ∠6 ; ∠3 , ∠7 ; ∠4 , ∠8 (ii) ∠3 , ∠5 ; ∠4 , ∠6 (iii) ∠1 , ∠8 ; ∠2 , ∠7

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

21. In $\triangle GHI$, if $\angle G = 60°$ and $\angle H = 63°$, find the measure of $\angle I$

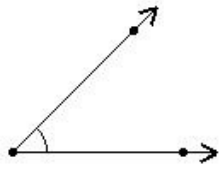
(i) I=59° (ii) I=56° (iii) I=57° (iv) I=58° (v) I=55°

22. Which of the following figures represent a line segment?



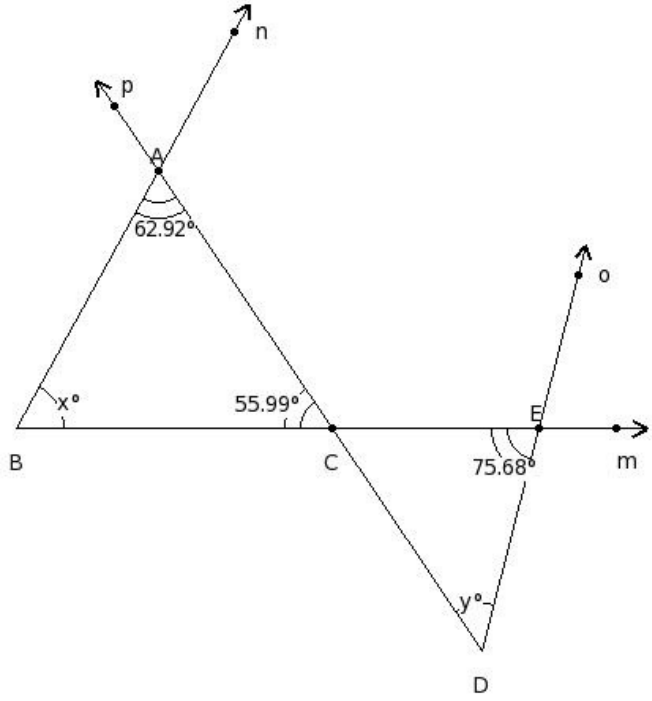
(i) fig 3 (ii) fig 2 (iii) fig 1

23. Identify the figure below



(i) angle (ii) decagon (iii) pentagon (iv) circle (v) triangle

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



(i) x=62.09°,y=49.33° (ii) x=61.09°,y=48.33° (iii) x=59.09°,y=46.33° (iv) x=60.09°,y=47.33°

(v) x=63.09°,y=50.33°

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

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

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

Assignment Key

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

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