EduSahara™ Worksheet

Name : Chapter Based Worksheet

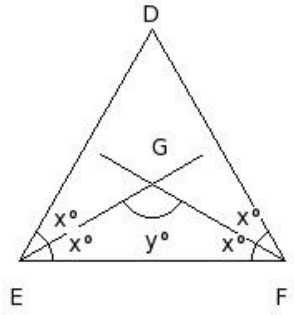
Chapter : Lines and Angles

Grade : SSC Grade IX

1. Which of the following is a right angle?

   (i) 90° (ii) 235° (iii) 360° (iv) 60° (v) 180°

2. In the given figure, $\triangle DEF$ is a triangle in which $\angle D = \angle E = \angle F$.
   This bisectors of $\angle E$ and $\angle F$ intersect at G. Find $\angle G =$



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

3. The complementary angle of 22° is

   (i) 68° (ii) 83° (iii) 73° (iv) 78° (v) 98°

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

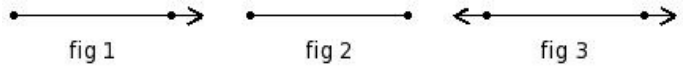
   a) They are on either side of the transversal
   b) Both are interior angles
   c) They are in the same side of the transversal
   d) They are not adjacent angles
   e) They are adjacent angles
   f) One is interior angle and the other is exterior

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

5. Which of the following is a straight angle?

   (i) 115° (ii) 90° (iii) 180° (iv) 0° (v) 32°

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



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

7. In the figure below, if $BC = 5.20$ cm and $CD = 14.70$ cm, find $BD = ?$

   (i) 21.90 cm (ii) 18.90 cm (iii) 20.90 cm (iv) 19.90 cm (v) 17.90 cm

8. Which of the following is an obtuse angle?

   (i) 30° (ii) 180° (iii) 120° (iv) 0° (v) 256°

9. The supplementary angle of $95°$ is

(i) $100°$ (ii) $115°$ (iii) $85°$ (iv) $90°$ (v) $95°$

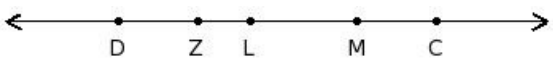
10. Which of the following are true?

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

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

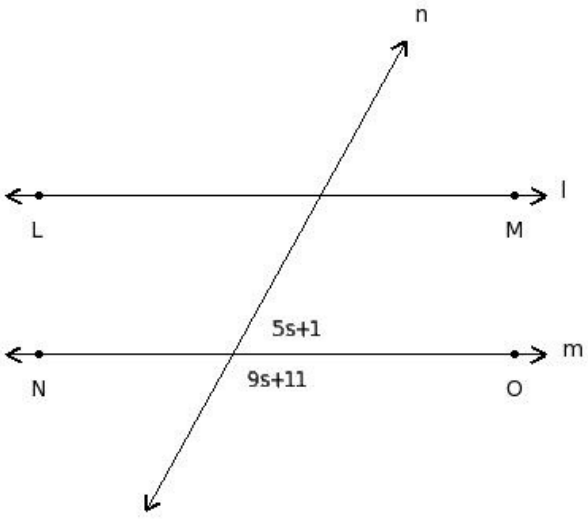
11. Consider the following figure $\overleftrightarrow{DC}$. State which of the following statements are true?

a) D,Z,L,C,M are points on the line $\overleftrightarrow{DC}$
b) L,M are end points of line segment $\overline{MD}$
c) D,C are points on the line segment $\overline{ZM}$
d) D,C are end points of line segment $\overline{ZM}$
e) D,C are end points of line segment $\overline{DC}$



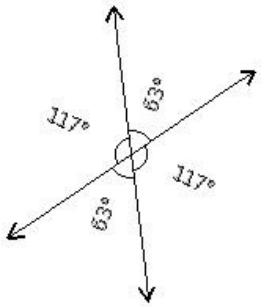
(i) {a,e} (ii) {b,a} (iii) {c,e,a} (iv) {c,e} (v) {d,b,a}

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

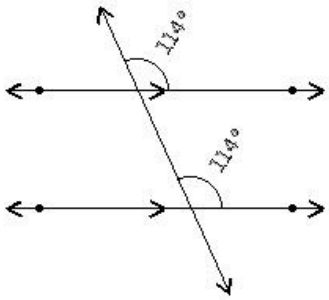


(i) 9 (ii) 11 (iii) 13 (iv) 14 (v) 12

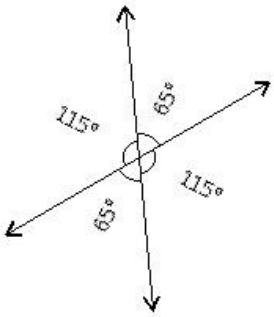
13. Which of the given figures is wrong?



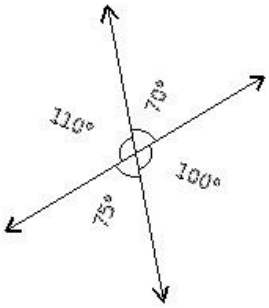
I



II



III

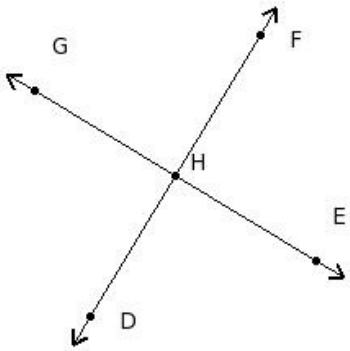


IV

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

14. Which of the following points are collinear?

a) H, G, F
b) D, H, F
c) E, H, F
d) F, H, G
e) G, H, E

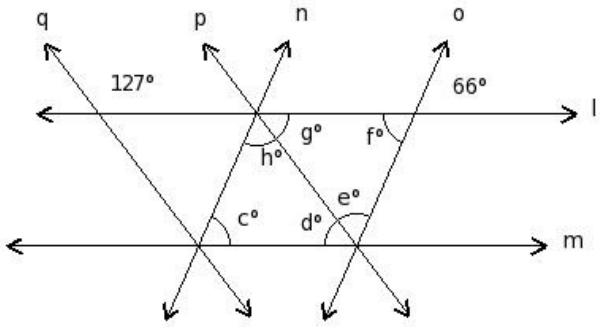


(i) {c,e,b} (ii) {d,a,b} (iii) {b,e} (iv) {c,e} (v) {a,b}

15. In $\triangle GHI$, if $\angle G = 50°$ and $\angle H = \angle I$, find the measure of each of the equal angles of the triangle

(i) 64° (ii) 63° (iii) 66° (iv) 65° (v) 67°

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



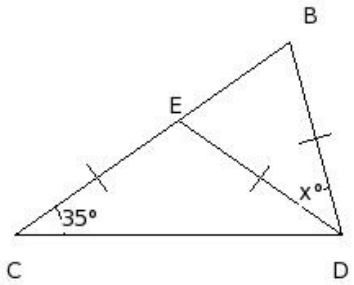
(i) 61°,53°,66°,66°,61°,53° (ii) 66°,53°,53°,66°,61°,61° (iii) 53°,66°,53°,66°,61°,61°

(iv) 66°,53°,61°,66°,53°,61° (v) 53°,66°,61°,53°,66°,61°

17. Which of the following is a reflex angle?

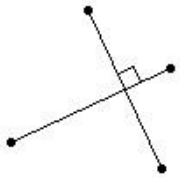
(i) 180° (ii) 267° (iii) 129° (iv) 0° (v) 360°

18. In the given figure, if DB = DE = EC, find the value of x



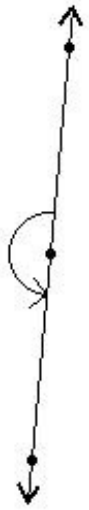
(i) x=41° (ii) x=40° (iii) x=39° (iv) x=42° (v) x=38°

19. The following lines represent



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

20. The following angle represents



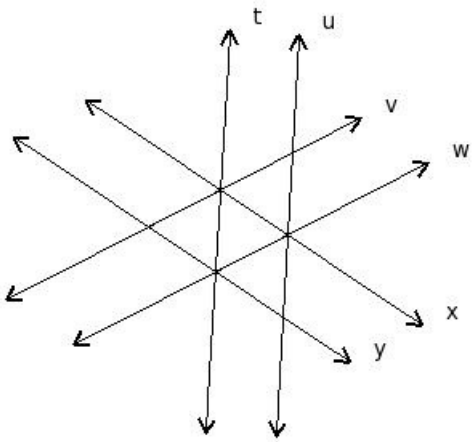
(i) straight angle (ii) complete angle (iii) acute angle (iv) obtuse angle (v) reflex angle

21. The representation $\overleftrightarrow{GH}$ indicates

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

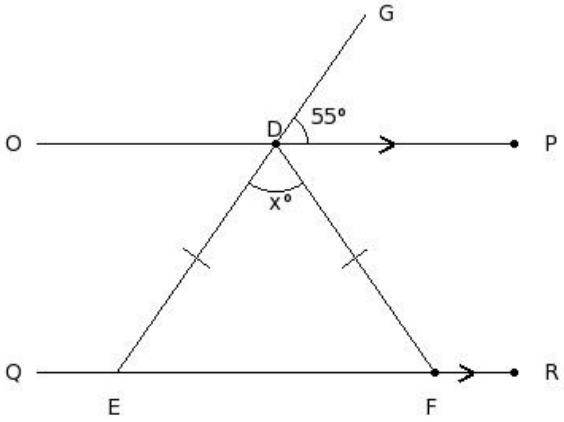
22. In the given figure, t , u , v , w , x , y are lines in a plane. By looking at the figure, which of the following are true?

a) t is the transversal of v & x
b) y is the transversal of v & t
c) t ∥ w
d) t ∥ u
e) x is the transversal of v & w
f) w is the transversal of t & u



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

23. In the given figure, OP ∥ QR, ∠GDP = 55° and DE = FD. Find the measure of x.



(i) x=69° (ii) x=68° (iii) x=70° (iv) x=71° (v) x=72°

24. Where will the hour hand of a clock stop, if it starts from 5 and turns through 4 right angles?

(i) 4 (ii) 3 (iii) 6 (iv) 7 (v) 5

25. Find the supplementary angles pair in the following

(i) 78°,102° (ii) 88°,112° (iii) 118°,132° (iv) 68°,102° (v) 108°,122°

Assignment Key

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