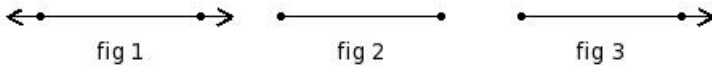# EduSahara™ Learning Center Assignment
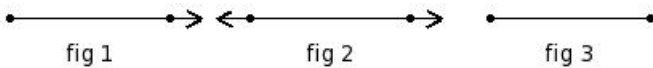
Grade : Class IX, SSC
Chapter : Lines and Angles
Name : Line Concepts

1. Which of the following figures represent a line?
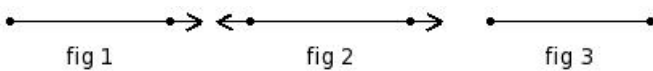

(i) fig 3 (ii) fig 2 (iii) fig 1

2. Which of the following figures represent a ray?

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

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

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

4. Points lying on the same line are called

   (i)   concurrent points (ii) non-linear points (iii) semi-linear points

   (iv) linear points   (v) collinear points

5. Every simple closed curve divides a plane into how many sets of points?

   (i) 4 (ii) 6 (iii) 3 (iv) 2 (v) 0

6. Identify the figure below

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

7. Multiple lines drawn on a plane are called

   (i)   concurrent lines (ii) intersecting lines   (iii) parallel lines

   (iv) coplanar lines   (v) perpendicular lines

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

   (i)   intersecting lines (ii) parallel lines   (iii) concurrent lines

   (iv) coplanar lines   (v) perpendicular lines

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

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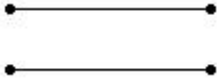
   (iv) perpendicular lines (v) parallel lines

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

   (i)   parallel lines (ii) perpendicular lines (iii) coplanar lines

   (iv) transversal   (v) concurrent lines

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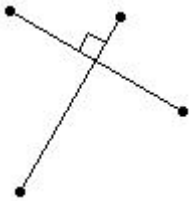
   at the meeting point are called

   (i)   intersecting lines (ii) perpendicular lines (iii) concurrent lines

   (iv) parallel lines   (v) coplanar lines

12. The following lines represent

   (i)   intersecting lines (ii) concurrent lines (iii) perpendicular lines

   (iv) coplanar lines   (v) parallel lines

13. The following lines represent

   (i)   coplanar lines (ii) intersecting lines (iii) perpendicular lines

   (iv) parallel lines   (v) concurrent lines

14. The following lines represent

   (i)   concurrent lines   (ii) parallel lines   (iii) intersecting lines

   (iv) perpendicular lines (v) coplanar lines

15. The representation $\overleftrightarrow{FG}$ indicates

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

16. The representation $\overline{DE}$ indicates

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

17. The representation $\overrightarrow{HI}$ indicates

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

18. Which of the following are true?
   a) Small letters are used to represent lines

b) Capital letters are used to represent points

c) A line has an infinite number of points on it

d) A ray has an infinite number of points on it

e) The length of a line segment cannot be determined

(i) {e,a} (ii) {e,c} (iii) {a,b,c,d} (iv) {e,b} (v) {e,d,a}
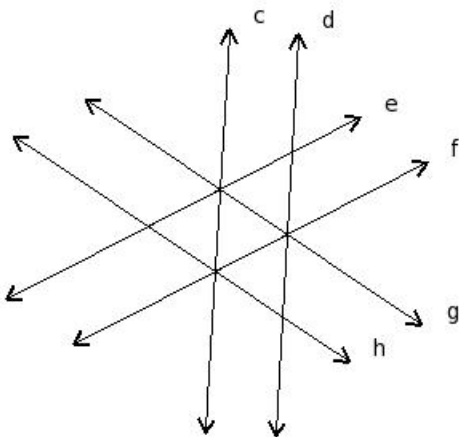
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19. Which of the following are true?

   a) If two lines have no common point, then the lines are parallel

   b) If two lines have infinite common points, then the two lines are concurrent

   c) If a line cuts another line at more than one point, then one of the line is curved

   d) Only one straight line can be drawn between any two points

   e) A straight line meets another straight line at atmost one point

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

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20. Which of the following are true?

   a) If $s \perp t$ and $s \perp u$, then $t \perp u$

   b) If $s \parallel t$ and $t \parallel u$, then $s \parallel u$

   c) If $s \perp t$ and $t \perp u$, then $s \perp u$

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

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

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

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21. 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) c is the transversal of e & g

   b) c ∥ d

   c) f is the transversal of c & d

   d) g is the transversal of e & f

   e) h is the transversal of e & c

   f) c ∥ f

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

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22. Which of the following are true with respect to lines s , t , u , v where s∥t , t⊥u , u⊥v?

   a) u ∥ v

b) $s \perp v$

c) $t \parallel v$

d) $s \parallel v$

e) $s \parallel u$

(i) {b,d} (ii) {c,d} (iii) {a,c} (iv) {b,d,c} (v) {e,a,c}
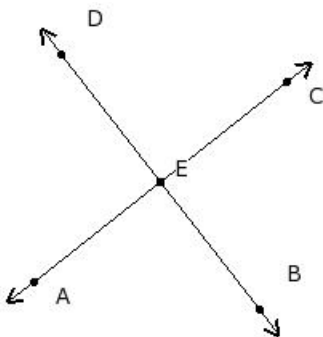
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23. Which of the following points are collinear?
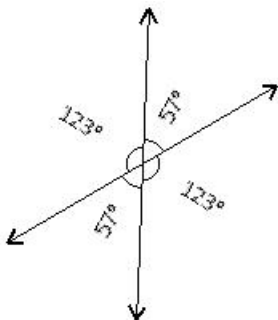
a) A , E , C

b) E , D , C

c) B , E , C

d) D , E , B

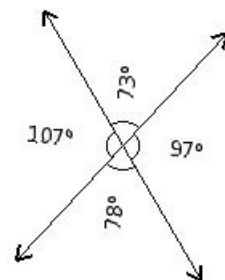e) C , E , D

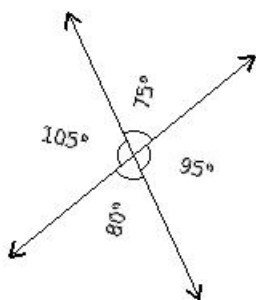(i) {b,a} (ii) {e,b,a} (iii) {a,d} (iv) {c,d} (v) {c,d,a}

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24. Which of the given figures is correct?
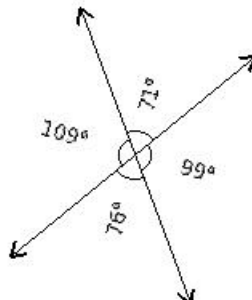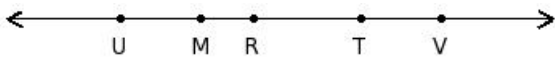

I

II

III

IV

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

25.
Consider the following figure $\overleftrightarrow{UV}$.

State which of the following statements are true?

a) U , M , R , V , T are points on the line $\overleftrightarrow{UV}$

b) U , V are end points of line $\overleftrightarrow{UV}$

c) R , T are end points of line segment $\overline{TU}$

d) U , V are points on the line segment $\overline{MT}$

e) U , V are end points of line segment $\overline{MT}$

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

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26. In the figure below, if AB = 5.80 cm and BC = 9.70 cm ,find AC = ?

(i) 15.50 cm (ii) 16.50 cm (iii) 13.50 cm (iv) 14.50 cm (v) 17.50 cm

Assignment Key

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