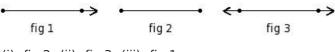
Name: Chapter Based Worksheet

**Chapter: Fundamental Geometrical Concepts** 

Grade: ICSE Grade VII

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1. Which of the following figures represent a line?



- (i) fig 2 (ii) fig 3 (iii) fig 1
- 2. Consider the following figure  $\overrightarrow{VA}$ . State which of the following statements are true?
  - a) V,A are points on the line segment
  - b) J,N are end points of line segment  $\overline{\text{NV}}$
  - c) V,A are end points of line segment  $\overline{\text{DN}}$
  - d) V,A are end points of line segment  $\overline{VA}$
  - e) V,D,J,A,N are points on the line  $\overrightarrow{VA}$



- (i)  $\{d,e\}$  (ii)  $\{c,a,d\}$  (iii)  $\{a,d\}$  (iv)  $\{b,e\}$  (v)  $\{b,e,d\}$
- 3. Identify the figure below



- (i) line (ii) angle (iii) nonagon (iv) octagon (v) circle
- 4. Which of the following are true?
  - a) The length of a line segment cannot be determined
  - b) A line has an infinite number of points on it
  - c) A ray has an infinite number of points on it
  - d) Small letters are used to represent lines
  - e) Capital letters are used to represent points
  - (i)  $\{a,c\}$  (ii)  $\{b,c,d,e\}$  (iii)  $\{a,e,b\}$  (iv)  $\{a,d\}$  (v)  $\{a,b\}$
- 5. Which of the following figures represent a ray?



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

6. The following lines represent



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

7. Which of the following figures represent a line?



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

8. The representation  $\overrightarrow{AB}$  indicates

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

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

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

10. Which of the following are true?

a) Small letters are used to represent lines

b) The length of a line segment cannot be determined

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

d) Capital letters are used to represent points

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

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

11. The representation HI indicates

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

12. Identify the figure below



(i) circle (ii) line (iii) heptagon (iv) hexagon (v) decagon

13. Which of the following are true?

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

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

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

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

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

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

14. The following lines represent



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

15.	Points lying on the same line are called  (i) semi-linear points (ii) linear points (iii) concurrent points (iv) collinear points (v) non-linear points
16.	Multiple lines which pass through the same point are called  (i) intersecting lines (ii) perpendicular lines (iii) coplanar lines (iv) concurrent lines (v) parallel lines
17.	Points lying on the same line are called  (i) concurrent points (ii) semi-linear points (iii) non-linear points (iv) collinear points (v) linear points
18.	The representation $\overline{DE}$ indicates  (i) line segment (ii) line (iii) ray (iv) angle (v) arc
19.	The following lines represent  (i) perpendicular lines (ii) parallel lines (iii) coplanar lines (iv) intersecting lines (v) concurrent lines
20.	Multiple lines which do not meet each other are called  (i) parallel lines (ii) concurrent lines (iii) perpendicular lines (iv) intersecting lines (v) coplanar lines
	Which of the following are true?  a) If two lines have infinite common points, then the two lines are concurrent b) A straight line meets another straight line at atmost one point c) If two lines have no common point, then the lines are parallel d) Only one straight line can be drawn between any two points e) If a line cuts another line at more than one point, then one of the line is curved  (i) {a,d} (ii) {a,c} (iii) {a,b} (iv) {a,e,b} (v) {b,c,d,e}
	Consider the following figure $\overrightarrow{DO}$ . State which of the following statements are true?  a) D,O are end points of line segment $\overrightarrow{NV}$ b) D,N,J,O,V are points on the line $\overrightarrow{DO}$ c) D,O are points on the line segment $\overrightarrow{NV}$ d) J,V are end points of line segment $\overrightarrow{VD}$ e) D,O are end points of line segment $\overrightarrow{DO}$

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

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

fig 1 fig 2 fig 3

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

- 24. Multiple lines drawn on a plane are called
  - (i) intersecting lines (ii) perpendicular lines (iii) parallel lines (iv) concurrent lines (v) coplanar lines
- 25. The representation  $\overrightarrow{EF}$  indicates
  - (i) ray (ii) line segment (iii) arc (iv) angle (v) line

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

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