

Tender Heart High School, Sec-33 B, Chd.

Class - IV

Date :- 01.10.24

Subject - Mathematics.

Teacher - Ms. Sushma

Chapter - 7 Geometry

Point!:- A point shows an exact location.
It has no length, breadth or height.
It is represented by a dot (.) and is named with a capital letter.

Point A $\leftarrow \dot{A}$ $\dot{B} \rightarrow$ Point B.

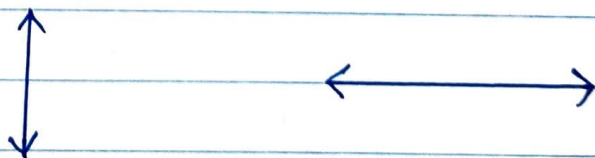
Line! $\rightarrow$ A line is a series of points joined together, extending indefinitely in both directions.



Line AB is written as $\overleftrightarrow{AB}$

Types of lines! $\rightarrow$

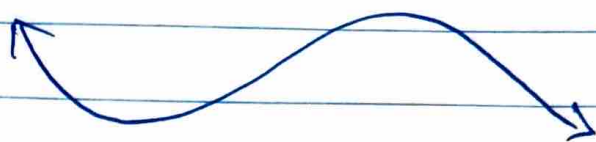
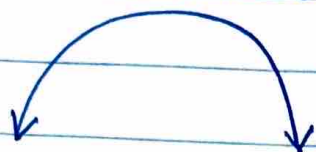
- **Straight line : $\rightarrow$** A line formed by joining points in the same direction without any turn is called a straight line.



* A straight line may be vertical, horizontal or slanting.

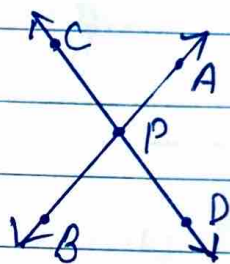
Curved line :→

A line formed by joining points that turn in a different direction is called a curved line.



Intersecting lines :→

Two or more lines that meet at a point are called intersecting lines.

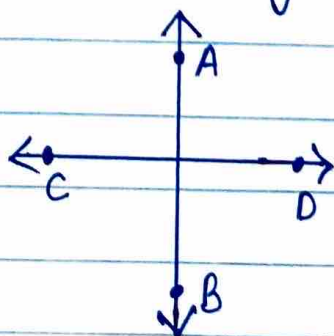


$\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ are intersecting lines. They intersect at point P.

Point 'P' is called the point of intersection.

- An unlimited number of intersecting lines can be drawn through a point.

Perpendicular lines :→ When a horizontal line and a vertical line intersect, they are called perpendicular lines.



Parallel lines: →

Two or more lines that run at an equal distance from each other and never meet are called parallel lines.



Line Segment: →

A line segment is a part of a line. It has a definite length. Line segment AB is written as $\overline{AB}$



A line segment is a straight path between two points.

Exercise 7.1

A. Write T for true or F for false.

1. A point has breadth.
2. A line segment has a definite length.
3. A line is a part of a line segment.
4. A ray can be measured.

F

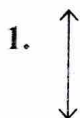
T

F

F



B. Name the type of lines.



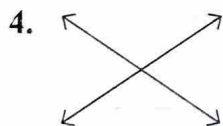
vertical line



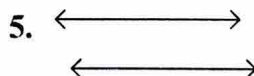
Horizontal line



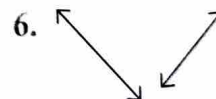
curved line



Intersecting line

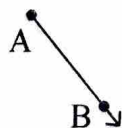


Parallel lines



Slanting lines

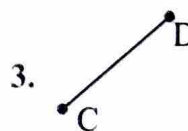
C. Identify the given figures as point, line, ray or line segment.



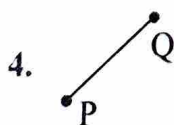
Ray
 $\overrightarrow{AB}$



Point
A



line Segment
 $\overline{CD}$



line Segment
 $\overline{PQ}$



line
 $\overleftrightarrow{RS}$



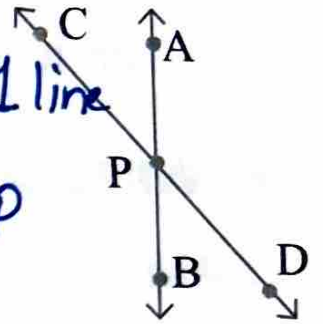
Point
N

D. Fill in the correct answer.

1. A point (point/line) has no length, breadth or height.
2. The sides of a plane figure are line segment (line segments/lines).
3. Two or more lines that meet at a point are called _____ (intersecting/parallel) lines.
4. A ray (line segment/ray) has a starting point and goes on indefinitely in one direction.

E. Answer these questions.

1. How many lines can be drawn through the two points X and Y? $\rightarrow 1$ line
2. Name the point of intersection of $\overleftrightarrow{AB}$ and $\overleftrightarrow{CD}$ in the given figure. $\rightarrow P$
3. What is a plane? $\rightarrow$ A smooth flat surface that extends indefinitely in all directions.



MEASURING A LINE SEGMENT

Exercise 7.2



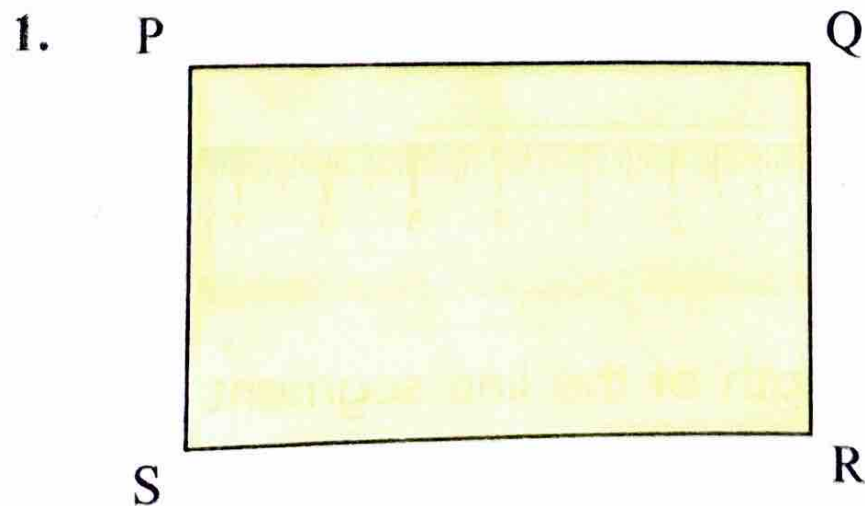
A. Measure the following line segments and write their length.

1. C  D $\rightarrow$ 6 cm $\overline{CD} = \underline{6}$ cm

2. E  F $\overline{EF} = \underline{7}$ cm

3. R  S $\overline{RS} = \underline{3}$ cm

B. Measure the sides of the given shapes and write their length.



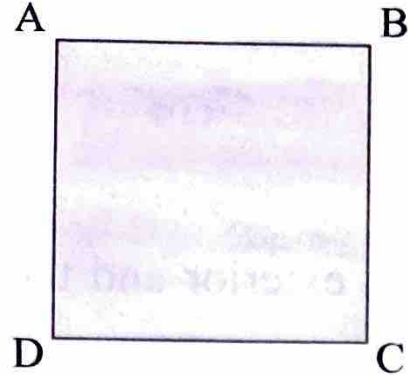
$$\overline{PQ} = \underline{5} \text{ cm}$$

$$\overline{QR} = \underline{3} \text{ cm}$$

$$\overline{RS} = \underline{5} \text{ cm}$$

$$\overline{SP} = \underline{3} \text{ cm}$$

2.



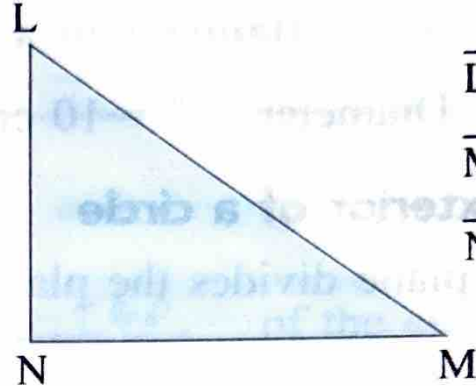
$$\overline{AB} = \underline{3} \text{ cm}$$

$$\overline{BC} = \underline{3} \text{ cm}$$

$$\overline{CD} = \underline{3} \text{ cm}$$

$$\overline{DA} = \underline{3} \text{ cm}$$

3.



$$\overline{LM} = \underline{5} \text{ cm}$$

$$\overline{MN} = \underline{4} \text{ cm}$$

$$\overline{NL} = \underline{3} \text{ cm}$$