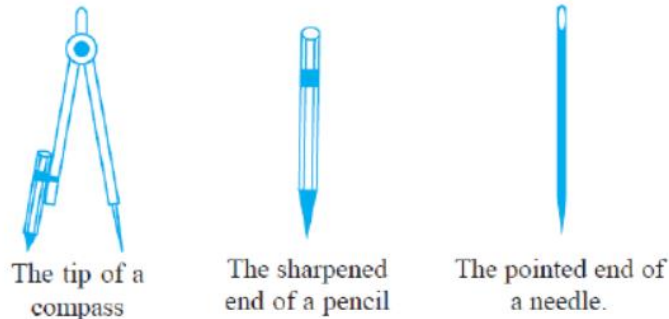


### I. Important Concepts/ Result

**Point:** A point determines a location.

Points are denoted by capital letter. Point P, Point Q etc Models for point :



### A Line Segment

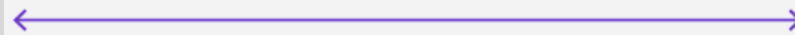
In geometry, a line segment is a part of a straight line that is bounded by two distinct end points, and contains every point on the line that is between its end points.



- Here AB is a line segment
- Length of line segment can be measured
- It is denoted by two capital letters

### A Line

In geometry, a line is a straight one-dimensional figure that does not have a thickness, and it extends endlessly in both directions.

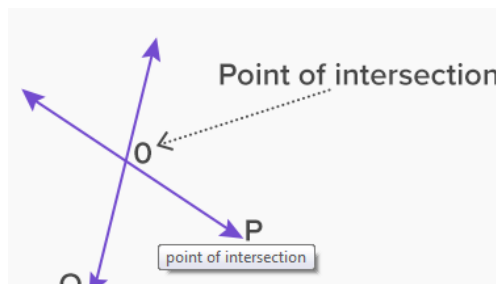


- It does not have end points
- It is extended infinitely in both directions
- The length of a line cannot be measured.
- If you extend line segment in both directions endlessly you obtain a line
- Line is denoted by a small letter or two capital letters.

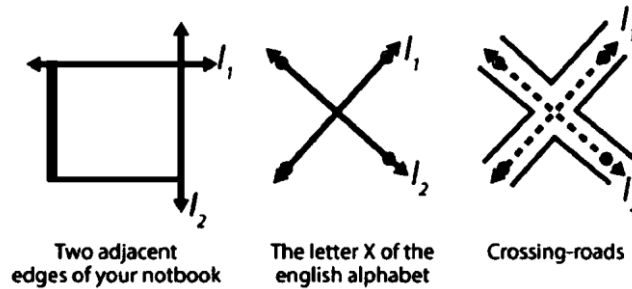
### Intersecting Lines :

When two or more **lines** cross each other in a plane, they are called intersecting lines. The intersecting lines share a common point, which exists on all the intersecting lines, and is called the **point** of intersection.

Here, lines P and Q intersect at point O, which is the point of intersection.

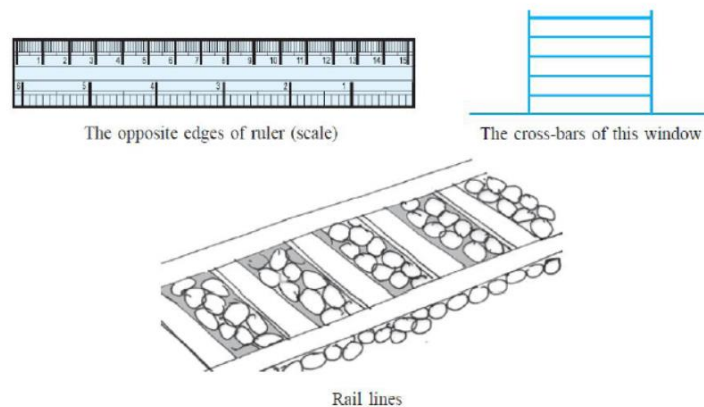


**Examples of intersecting lines:**



**Parallel lines:** Lines like these which do not meet are said to be parallel; and are called parallel lines.

**Examples Parallel lines:**

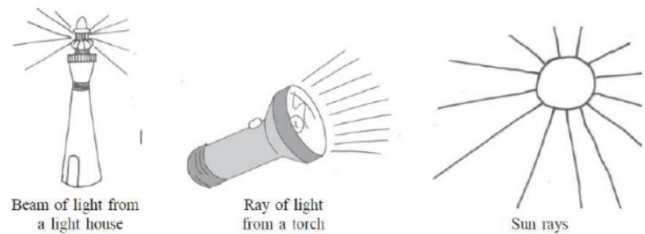


**Ray:** A ray is a portion of a line. It starts at one point (called starting point) and goes endlessly in a direction.

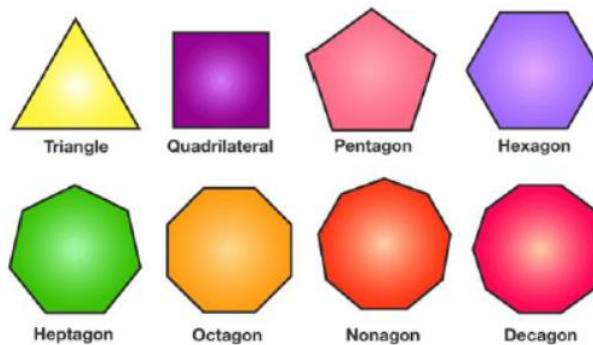
**Examples of Ray:**

**Curves:** You can draw some of these drawings without lifting the pencil from the paper and without the use of a ruler. These are all curves

**Polygons:** A figure is a polygon if it is a simple closed figure made up entirely of line segments.



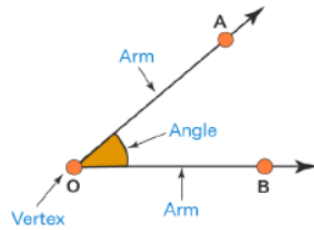
### TYPES OF POLYGONS



**Angles:** An angle is made up of two rays starting from a common end point. The two rays forming the angle are called the **arms** or sides of the angle. The common end point is the **vertex** of the angle.

**New information**

The word “angle” is derived from the Latin word “angulus”, which means “corner”.



**Note:** Angle is denoted using one capital letter or three capital letter.