

Vertex: The point at which conics intersects the axis is known as Vertex

Eccentricity: The ratio of the distance of a moving point from the focus to its distance from the directrix is known as eccentricity.

Ellipse: It is the locus of a point moving in a plane in such a way that the ratio of its distance from a fixed point at a fixed straight line is always a constant and is less than 1.

Parabola: It is the locus of a point moving in a plane in such a way that the ratio of its distance from a fixed point to the fixed straight line is a constant and is always equal to 1.

Hyperbola: It is the locus of a point moving in a plane in such a way that the ratio of its distance from a fixed point to the straight line is a constant and is greater than 1.

Archimedean Spiral: It is a curve generated by a point moving uniformly along a straight line, while the line swings or rotates about a fixed point with uniform angular velocity.

Pole: The point about which the line rotates is called a Pole.

Convolution: Each complete revolution of the curve is termed the Convolution.

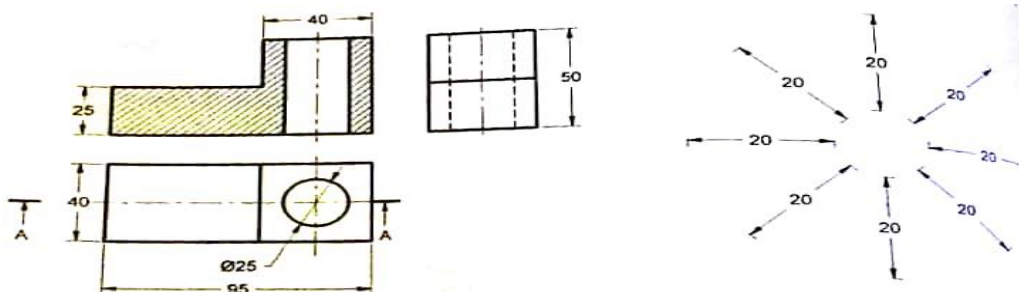
No.	First angle projection method	Third angle projection method
1.	The object is situated in the first quadrant.	The object is situated in the third quadrant.
2.	The object lies in between the observer and the plane of projection.	The plane of projection lies in between the observer and the object.
3.	The plane of projection is assumed to be opaque.	The planes of projection is assumed to be transparent.
4.	The FV remains above the X-Y line.	The FV remains below the X-Y line.
5.	The TV remains below the X-Y line.	The TV remains above the X-Y line.
6.	The LHSV remains to the right of the FV.	The LHSV remains to the left of the FV.
7.	The RHSV remains to the left of the FV.	The RHSV remains to the right of the FV.
8.	This method of projection is in practice in our country since 1991.	This method of projection is not in use in our country.

System of Dimensioning:

There are two systems of dimensioning:

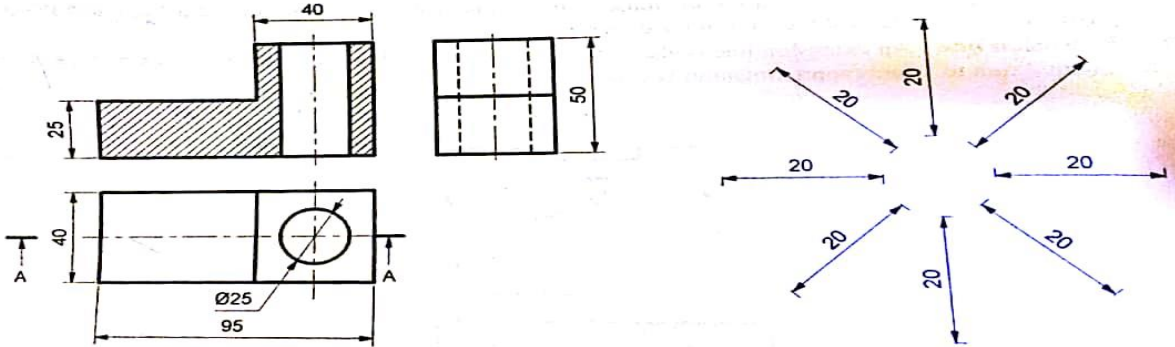
1. Aligned system
2. Unidirectional system

1. Aligned system: In this system the dimension is placed perpendicular to the dimension line in such a way that it may be read from the bottom edge or the right-hand edge of the drawing sheet. The



dimensions should be placed near the middle and above, but clear of the dimension lines.

2. Unidirectional system: In this system all dimensions are so placed that they can be read from the bottom edge of the drawing. The dimension lines are broken near the middle for inserting the dimensions.



Involute:

It is defined as a curve traced out by an end of a piece of thread unwound from (or wound on) a circle or a polygon keeping the thread always tight.

OR

It is also defined as a curve traced out by a point on the straight line, which rolls without slipping around a circle or a polygon.

Hypocycloid:

It is the locus of a point on the circumference of a rolling circle, which rolls without sliding or slipping inside another circle called directing circle.