

Shri Ramdeobaba College of Engineering & Management, Nagpur.

Department of Mechanical Engineering

Engineering Drawing Practical Problem Sheet

Sheet No.:- 1.

Scales and Curves

(AutoCAD)

1. The distance between two places is 350 km and corresponding distance shown on map measures 7 cm. Draw a diagonal scale showing single km. The scale should be long enough to read up to 700 km. What is its RF also indicate on this scale 480 km, 300 km and 8 km.
2. The area of a field is 50,000 sq. m the length and breadth of the field, on the map is 10 cm and 8 cm respectively. Construct a vernier scale, which can read upto one meter. Mark the lengths of 235 meter and 62 meter on the scale. What is RF of the scale?
3. Two fixed points A and B are 100 mm apart. Trace the complete path of a point P is moving (in the same plane as that of A and B) in such a way that the sum of its distance from A and B is always the same and equal to 125 mm. Name the curve.
4. A cricket ball thrown up reaches the maximum height of 50 m and falls on the ground at a distance 125 m from the point of projection. Draw the path of cricket ball and name the curve. Assume the path of projection is from the ground level.
5. Two straight lines OA and OB make an angle of 75° between them. P is a point 40 mm from OA and 50 mm from OB. Draw a hyperbola through P, with OA and OB as asymptotes.

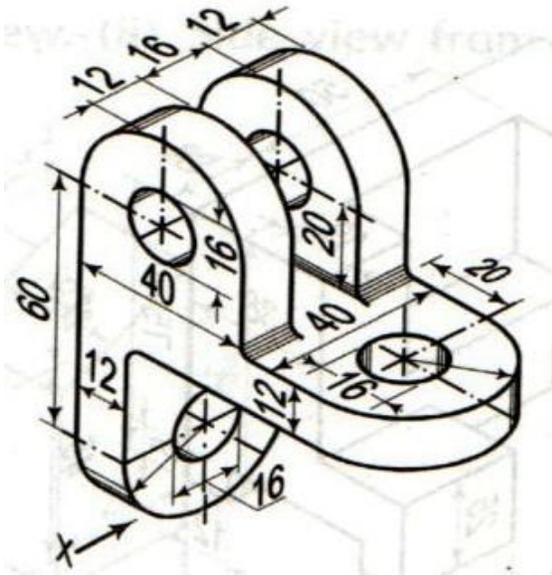


Fig. No.:- 1

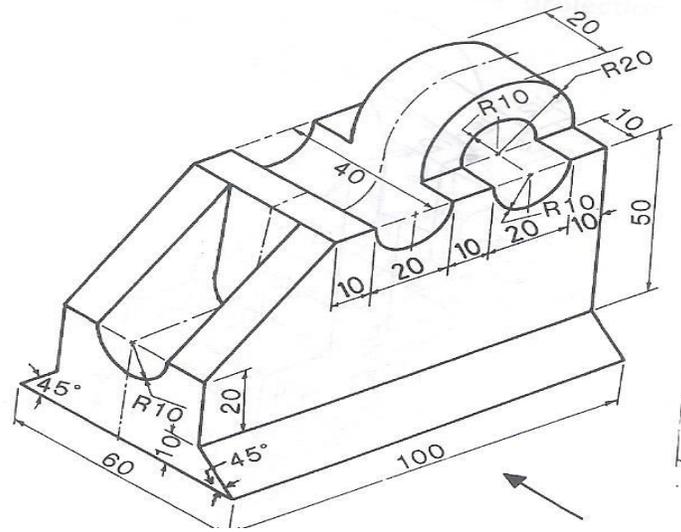


Fig. No.:- 2

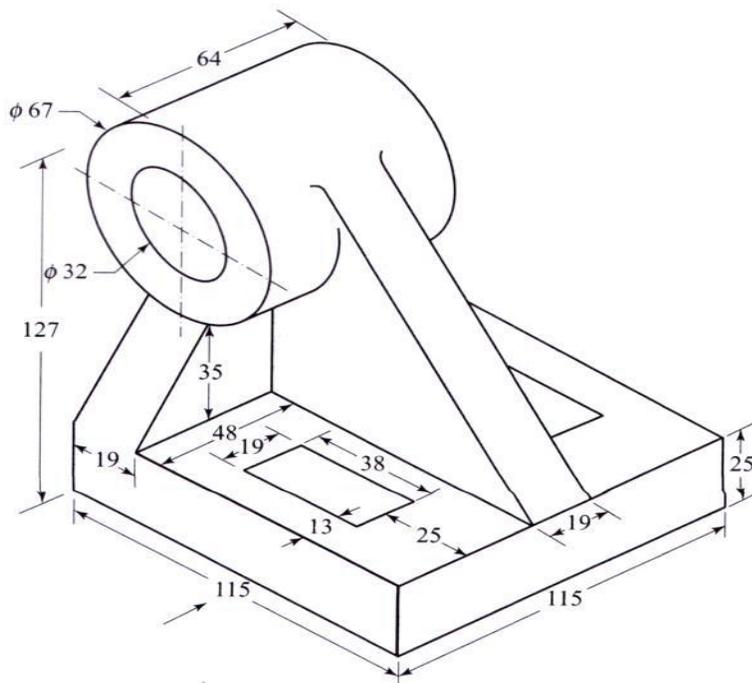


Fig. No.:- 3

Figure 1: Draw FV, TV & SV

Figure 2: Draw FV & TV

Figure 3: Draw FV & TV