Projection of Lines

1. The FV and TV of line AB measures 50 and 60 mm respectively. The line is 70 mm long. The point A is 10 mm above the HP and 20 mm in front of VP. Draw the projections lf line AB and determine the inclinations with HP and VP. Assume the line to be in 1st quadrant**.**
   Re – exam: 10 M, SVU 2023
2. The elevation length and plan length of line AB measures 50 mm and 60 mm respectively. The line AB is inclines at 30^0 to the HP and the end point A is 10 mm above the HP and 20 mm in front of the VP. Draw the projections of line AB. **Set A-ISE,8 M, Odd T,SVU 2023**
3. A line AB, 70 mm long is inclined at an angle 30^0 to the HP and 45^0 to the VP. Its end A is 10 mm above the HP and 20 mm in front of the VP. Draw the projections of line AB. Assume complete line to be in the first quadrant. **Set A-ISE,8 M, Odd T, SVU 2023**
4. The FV of line AB, 70 mm long is inclined at 45^0 to XY, measures 50 mm. The end point A is 10 mm above the HP and 20 mm in front of VP. Draw the projections of line AB and find its inclination with the HP and VP. **Set B-ISE,8 M, Odd T, SVU 2023**
5. The distance between end projectors of a line AB is 35 mm. The line AB is 70 mm long and is inclined at 30^0 to the HP. The end A is 10 mm above the HP and 20 mm front of the VP. Draw the projections of line AB. **Set B-ISE,8 M, Odd T, SVU 2023**
6. The FV of a line AB is 60 mm long and is inclined at 60^0 to the XY line. The end point A is 12 mm above the HP and 25 mm in front of the VP. Draw the projections of line if it is inclined at 45^0 to the HP and located in the first dihedral angle. Find the true length and true inclinations of a line with the VP. **Set C-ISE,8 M, Odd T, SVU 2023**
7. The FV of line AB measure 50 mm and makes and angle 45^0 with the XY line. The point A is 10 mm above the HP and 20 mm in front of VP. Draw the projections of line AB if it is inclined with the VP at 45^0. **Set C-ISE,8 M, Odd T, SVU 2023**
8. A line CD 60 mm long is inclined at an angle of 30˚ to HP and 45˚ to VP. The point D is 15 mm above HP and 20 mm in front of VP. Draw the projections of the line if end C is in first quadrant. Find the angle of inclination of FV and TV with XY line.
   RE-ISE,8 M, Odd T, SVU 2023
9. Line EF is kept in first quadrant in such a way that the end E is 15mm above the HP and 20mm in front of the VP. The end F is 45mm above the HP and 60mm in front of the VP. Draw the projections of the line if the true length of line is 70 mm. Find the angle of inclination of FV and TV with XY line. **RE-ISE,8 M, Odd T, SVU 2023**
10. A line AB 70 mm long has its end A above HP and 15 mm in front of VP. Its top view and front view measures 60 mm and 40 mm respectively. Draw the projections of line and determine its inclinations with HP and VP. **Set A,10 M, SVU 2023**
11. The FV of a line AB is 60 mm long and is inclined at 60^0 to the XY line. The end point A is 12 mm above the HP and 25 mm in front of the VP. Draw the projections of line if it is inclined at 45^0 to the HP and is in the first quadrant. Find the true length and true inclinations of a line with the VP. **Set B,10 M, SVU 2023**
12. A line AB 100 mm long having inclinations of 30^0 and 45^0 with HP and VP respectively. Its one end A is 15 mm above HP, 20 mm in front of VP. Draw the projections of line.
    Set C,10 M, SVU 2023
13. The top view of straight line AB measures 60 mm and is inclines at an angle 56^0 with XY. The end A is 10 mm above H.P. 20 mm in front of V.P. Point B is 45 mm above HP and in front of

VP. Draw the projections of the line; determine the true length and inclinations of the line. **Set B,10 M, SVU 2020**

Projection of planes

1. A pentagonal plane lamina of sides 30 mm is resting on the HP on one of its corners so that the surface makes an angle 60^0 with the HP. Draw its projections. **Re – exam: 10 M, SVU 2023**
2. A regular hexagonal plate ABCDEF has its corner A in the VP. The plate is inclined to the VP at 45^0. Draw its projections. The side of the plate is 35 mm. **Set A-ISE,8 M, Odd T, SVU 2023**
3. A circular plane of diameter 70 mm has one of the ends of the diameter in the HP. The plane is inclined at 30^0 to the HP. Draw its projections. **Set B-ISE,8 M, Odd T, SVU 2023**
4. The rectangular plane of edges 35 mm and 70 mm long is resting on an edge in the HP. The surface is inclined to the HP such that the top view appears as a square. Draw its projections and find its inclination. **Set C-ISE,8 M, Odd T, SVU 2023**
5. A pentagonal plane lamina of side 30 mm is resting on H.P. on one of its corners so that the surface makes an angle of 60° with H.P. draw Front & Top views. **RE-ISE,8 M, Odd T, SVU 2023**
6. A pentagonal plate of 30 mm side has one of its sides in VP. The corner opposite to this side is 20 mm in front of VP. Draw the projections and find the inclination of surface with VP. **Set A,10 M, SVU 2023**
7. A hexagonal plate of 30 mm side has an edge in the VP. The surface of the plane is inclined at 45^0 to the VP. Draw its projection. **Set B,10 M, SVU 2023**
8. A regular pentagonal lamina of side 20 mm, is resting on one of the corners in the HP and it is inclined at 45^0 with HP. Draw the projections of lamina. **Set C,10 M, SVU 2023**
9. Draw the projections of a circular plate of 50 mm diameter resting in VP on a point A on the circumference. Its surface is inclines at 45^0 to VP. **Set B,10 M, SVU 2020**
10. An isosceles triangular plate with base 45 mm and altitude 60 mm has its base in VP. Draw its projections if surface is inclines at 30^0 to the VP. **Set B,10 M, SVU 2020**
11. Draw the projections of a pentagonal plate of 30 mm side resting in HP on the one of the edge such that its surface is inclined at 50^0 to HP. **Set A,10 M, SVU 2020**
12. A square plate with side 50 mm is resting on VP on one of its corner. The lamina is seen as a rhombus in the FV with one of its diagonal measuring 54 mm. Draw projections of a plane and its angle with VP. **Set A,10 M, SVU 2020**