

- 1) A line AB, 70 mm long has its end A 10 mm above the H.P. and 20 mm in front of the V.P. The end B is 45 mm above the H.P. and 70 mm in front of V.P. Draw the projection of line AB and find its inclination with the H.P. and V.P.
- 2) The T.V. of line AB, 70 mm long measures 60 mm. The end point A is 10 mm above the H.P. and 20 mm in front of the V.P. The other end point B is 70 mm in front of the V.P. and above the H.P. Draw the projection of line AB and find its inclination with the H.P. and the V.P.
- 3) The distance between the end projectors of a line AB is 35 mm. The line AB is 70 mm long and is inclined at 30° to the H.P. The end point A is 10 mm above the H.P. and 20 mm in front of the V.P. Draw the projection of line AB.
- 4) The F.V. and the T.V. of line AB measures 50 mm 60 mm respectively. The line is 70 mm long. Point A is 10 mm above the H.P. and 20 mm in front of the V.P. Draw the projections of line AB and determine its inclinations with the H.P. and the V.P. Assume the line to be in the 1st quadrant.

- 5) The F.V. of 85 mm long straight line AB measures 60mm while its T.V. measures 70 mm. Draw the projection of AB if its end A is 10 mm above the H.P. and 20 mm behind V.P. while its end B is in the 1st quadrant. Determine the inclination of line AB with the reference plane.
- 6) The F.V. of a line AB is 60 mm long and is inclined at 60° to the XY line. The end point A is 12 mm above the H.P. and 25 mm in front of the V.P. Draw the projections of line if it is inclined at 45° to the H.P. and is located in the first quadrant. Find the true length and true inclination of a line with the V.P.
- 7) The plan ab of a straight line AB is 140mm long and it makes an angle of 45° with XY. The end A is in the V.P. and is 85 mm below the H.P. The end B is 20 mm below the H.P. and the whole line in the fourth quadrant. Draw the projections of the line. Draw the projections, determine the true length and the inclination of line.

- 8) *The end A of a straight line AB 90mm long, is in the 2nd quadrant and 15 mm from both the H.P. and the V.P. End B is in the 3rd quadrant. The line is inclined at 30° with the H.P. and the distance between the end projectors measured parallel to the XY line is 60 mm. Draw the projections of line, find its inclination with the V.P.*
- 9) *A line AB, 90mm long has its one end A in the H.P. and 35 mm behind the V.P. and other end B in the V.P. and 55mm below the H.P. Draw the projection of line and find its inclination with the H.P. and the V.P.*
- 10) *Distance between the end projectors of line AB are 70mm apart and A is 30mm below the H.P. and 50mm behind the V.P. and B is 20mm above the H.P. and 65mm in front of the V.P. Draw the projections of line AB and determine its true length and true inclination with the H.P. and the V.P.*
- 11) *Elevation of a line AB is 75mm and is inclined to XY line at 45° . End A is 25mm above H.P. and end B is 10mm behind V.P. Draw its projection if length of line AB is 95mm and end B is in 3rd quadrant. Find the inclination of the line AB with H.P. and V.P.*

- 12) The plan of 100mm line PQ measures 80mm. Point P is 30mm in front of V.P. and end Q 50mm above H.P. The end P is in the 4th quadrant and end Q is in 2nd quadrant. The line is inclined at 30° to V.P. Draw its projections. Also find its inclinations with H.P.
- 13) End A of line AB is in 2nd quadrant; and is 40 mm and 15 mm from H.P. and V.P. respectively. The line is inclined at 40° to both reference planes. Draw its projections when end B is in 3rd quadrant and 45mm from H.P. Find its true length and distance of end B from V.P.
- 14) The distance between the end projectors of line PQ is 50mm. The end P is 45mm behind V.P. and 10mm below H.P. The end Q is 30mm above H.P. and 40mm in front of V.P. Draw the projections of line; determine the true length of line and the true inclination of the line with both the reference plane.
- 15) Elevation of line AB is 75mm and is inclined to XY line at 45° . End A is 25mm above H.P. and end B is 10mm behind V.P. Draw its projections, length of line AB is 95mm and end B is in 3rd quadrant. Find the inclination of the line AB with H.P.

16) *The end projectors of a line AB are 55mm apart. Point A is 55mm below the H.P. and 60mm behind the V.P. Point B is 30 mm above the H.P. and 25mm in front of V.P. Draw the projections of AB and find it's true length and it's true inclination with H.P. and V.P.*