

Projection of Lines

1) Line parallel to HP & VP

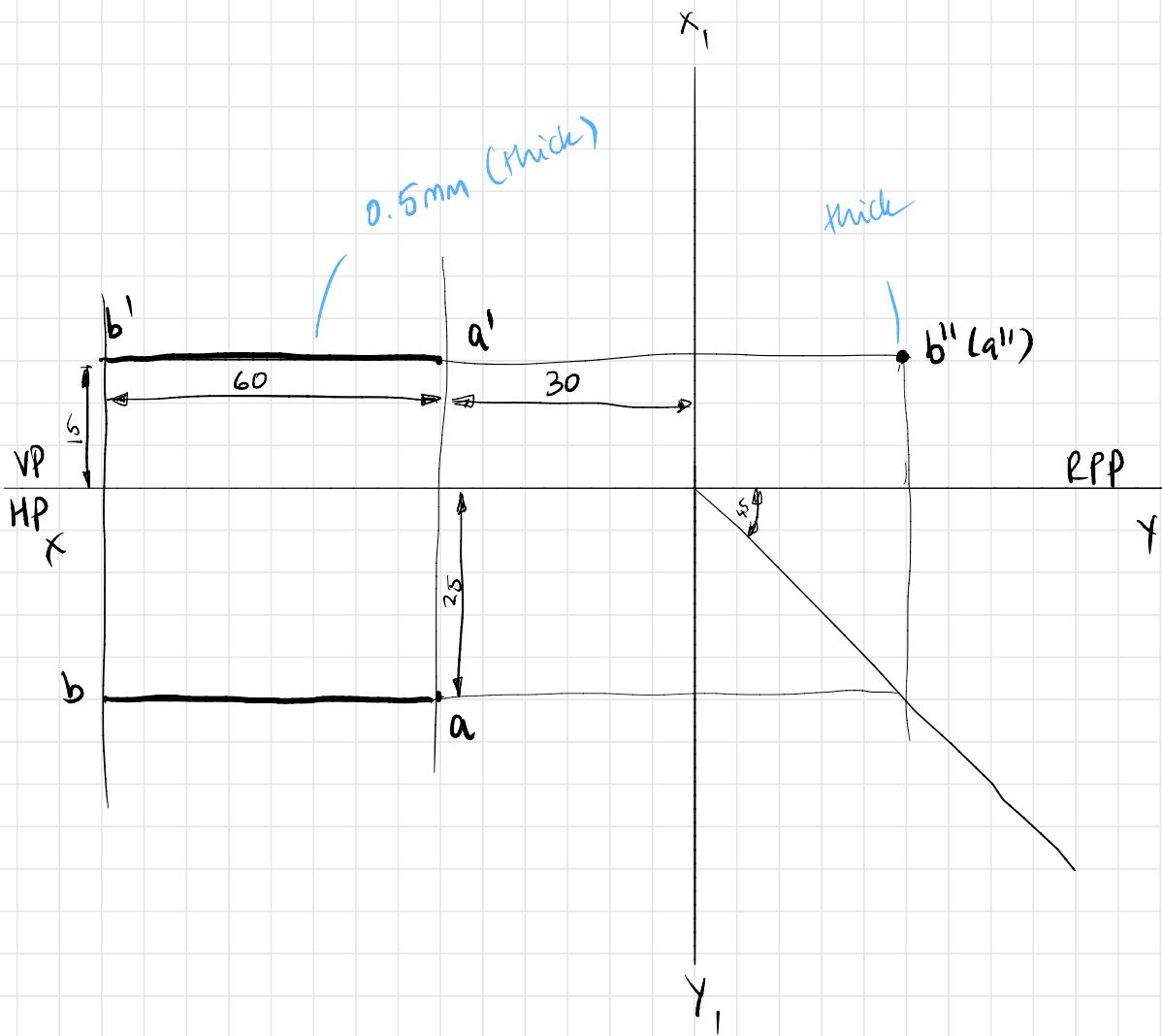
2) Line \perp to one & parallel to other

3) line inclined to one & parallel to other

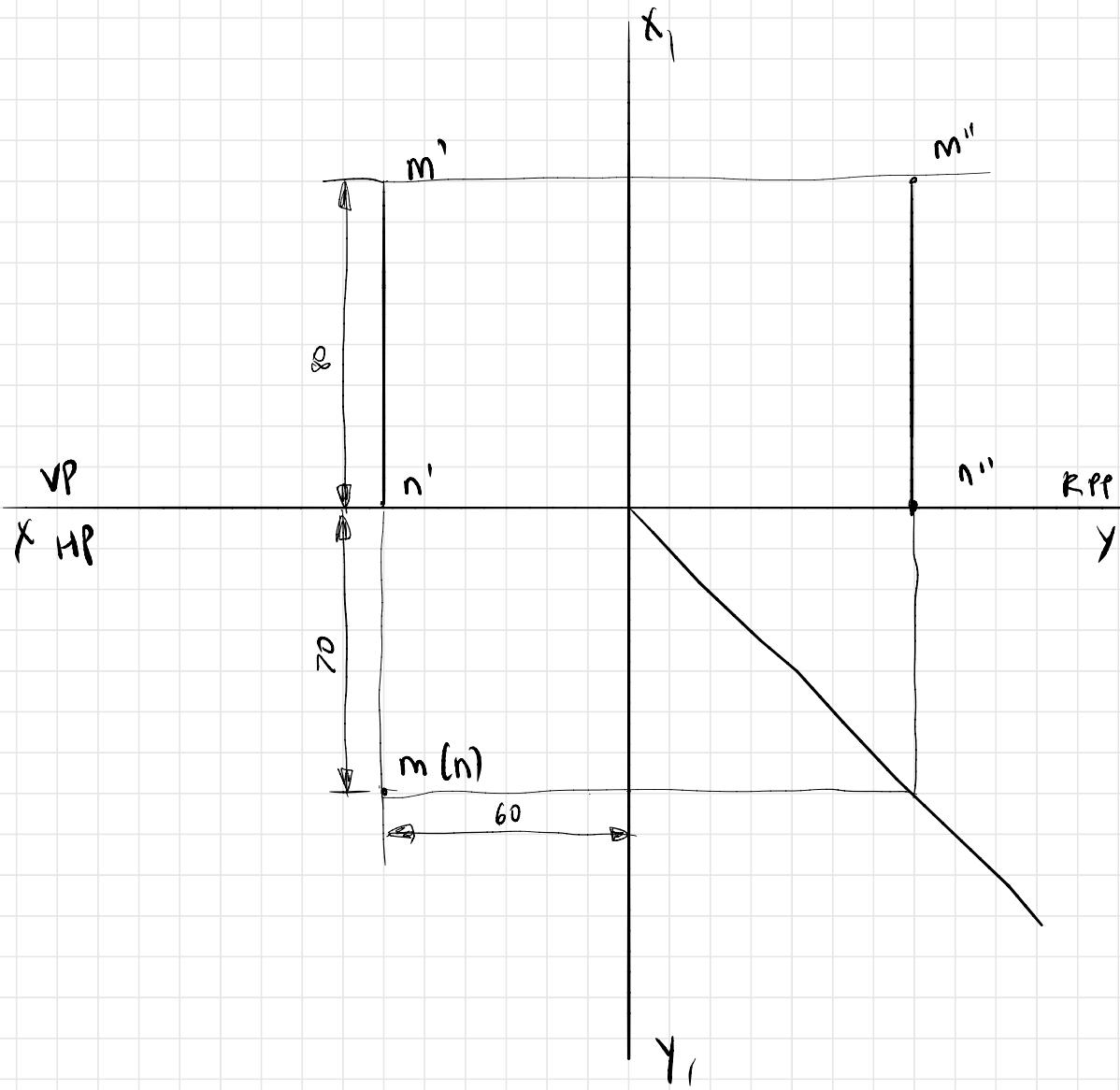
4) line inclined to both planes

- Always in 1st angle
- True length and apparent length
- Line thicknesses

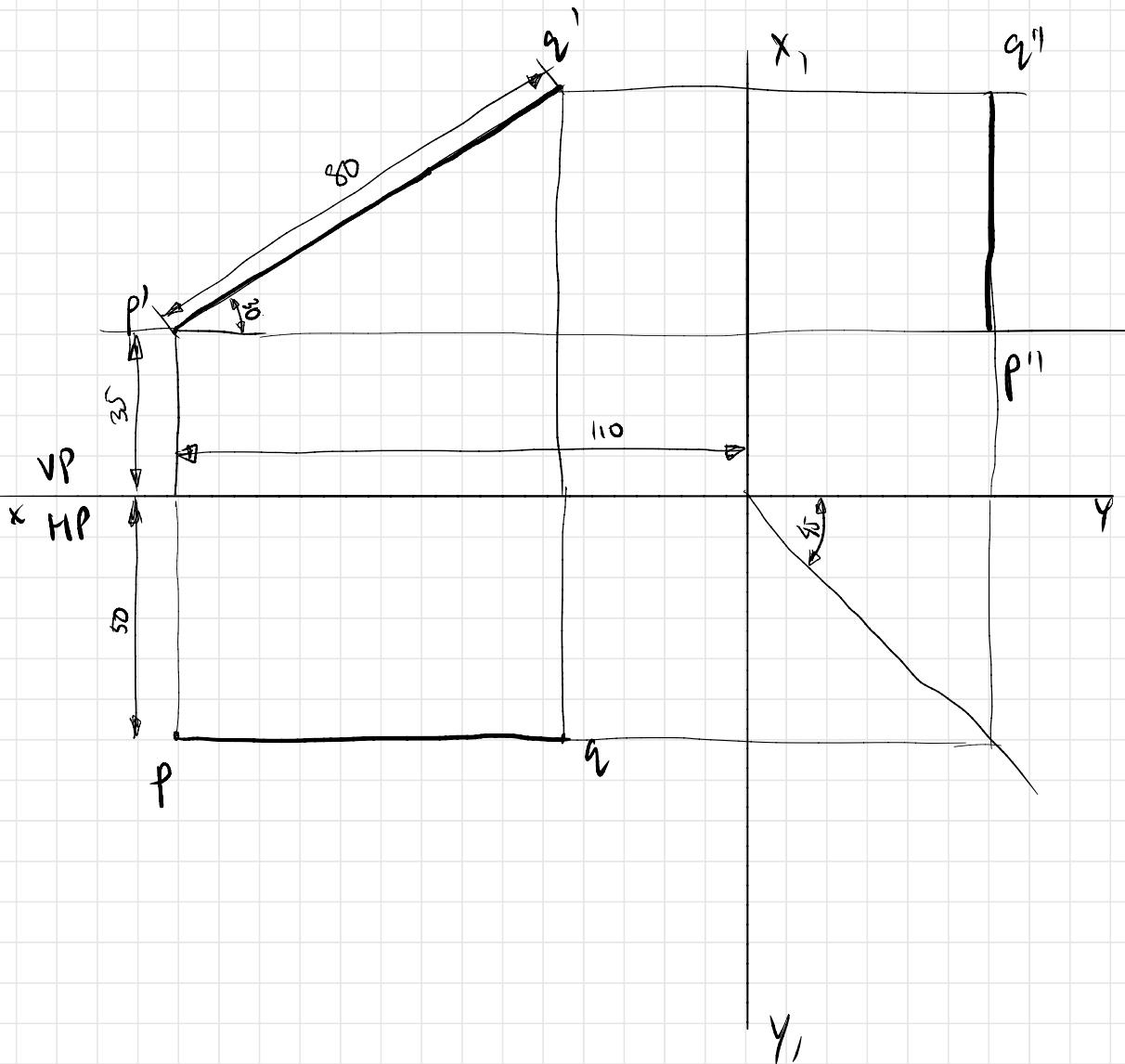
Q1. Line AB 60mm long placed parallel to both HP and VP. One end of a line is 15 mm above HP, 25 mm in front of VP and 30mm in front of RPP. Draw the projections of the line.



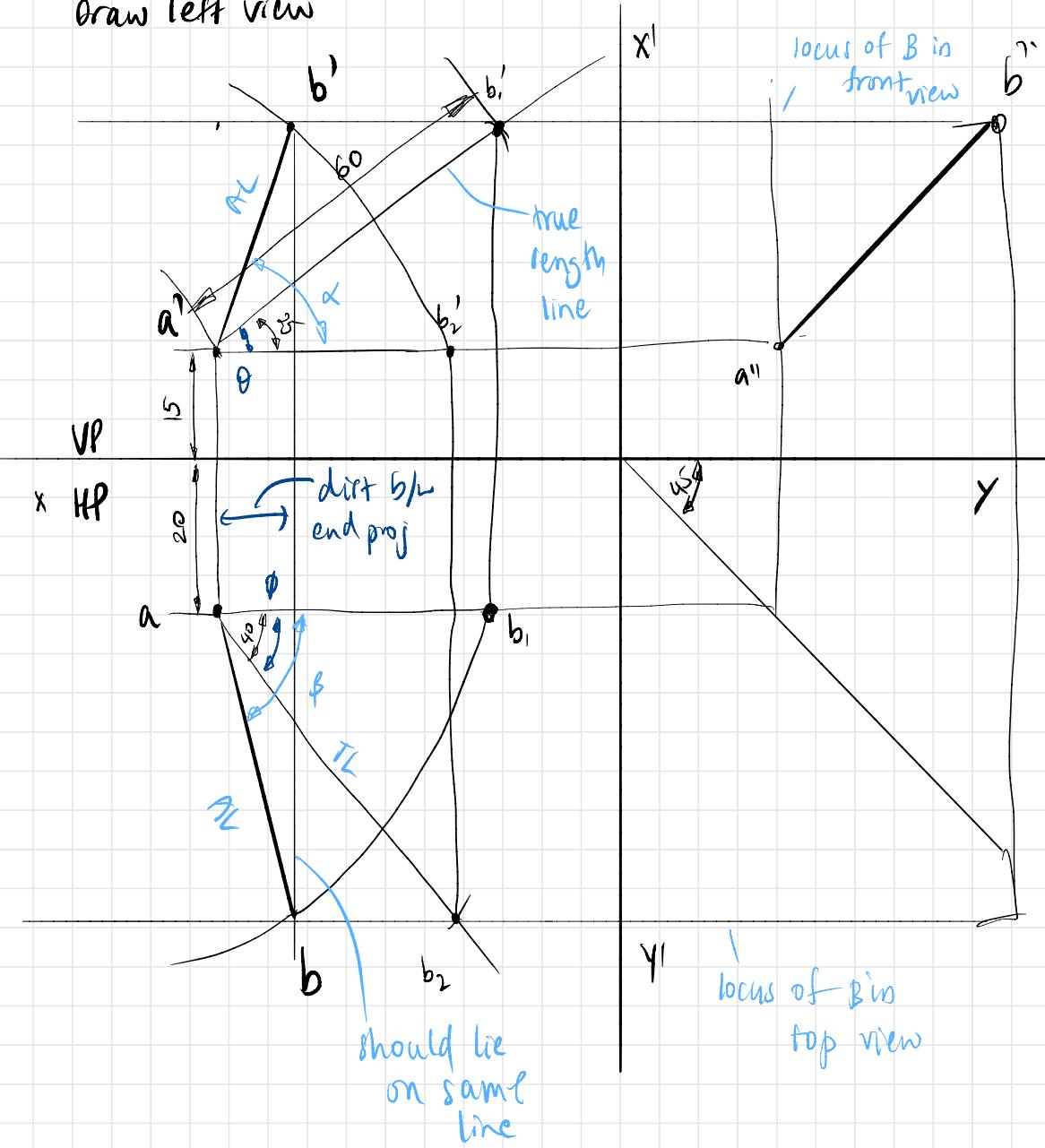
Q2- Draw the projection of line MN 80 mm long placed perpendicular to HP and parallel to VP. Line is 20 mm in front of VP, 60 mm in front of RPP. Lower end of the line is in HP.



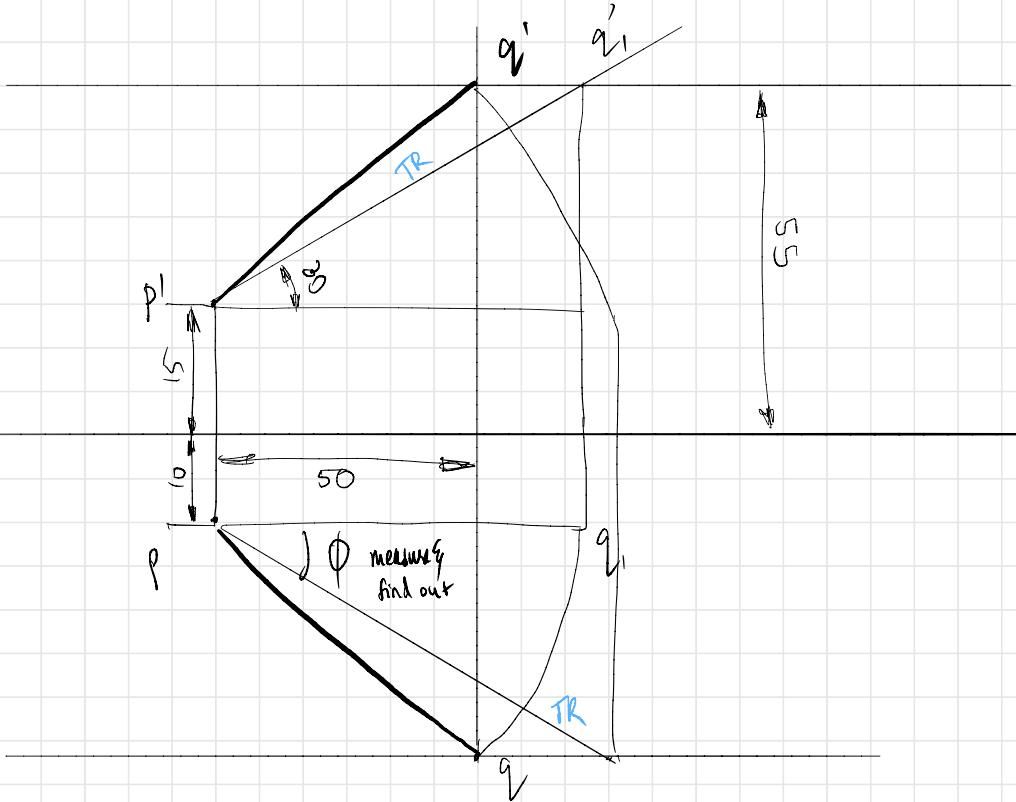
Q3. Line PQ, 80 mm long is inclined at 30° to HP and is parallel to VP. The line is 50 mm in front of VP and the lower end P is 35 mm above HP and 110 mm in front of RPP and away from it (than the upper end) - Draw its projections.



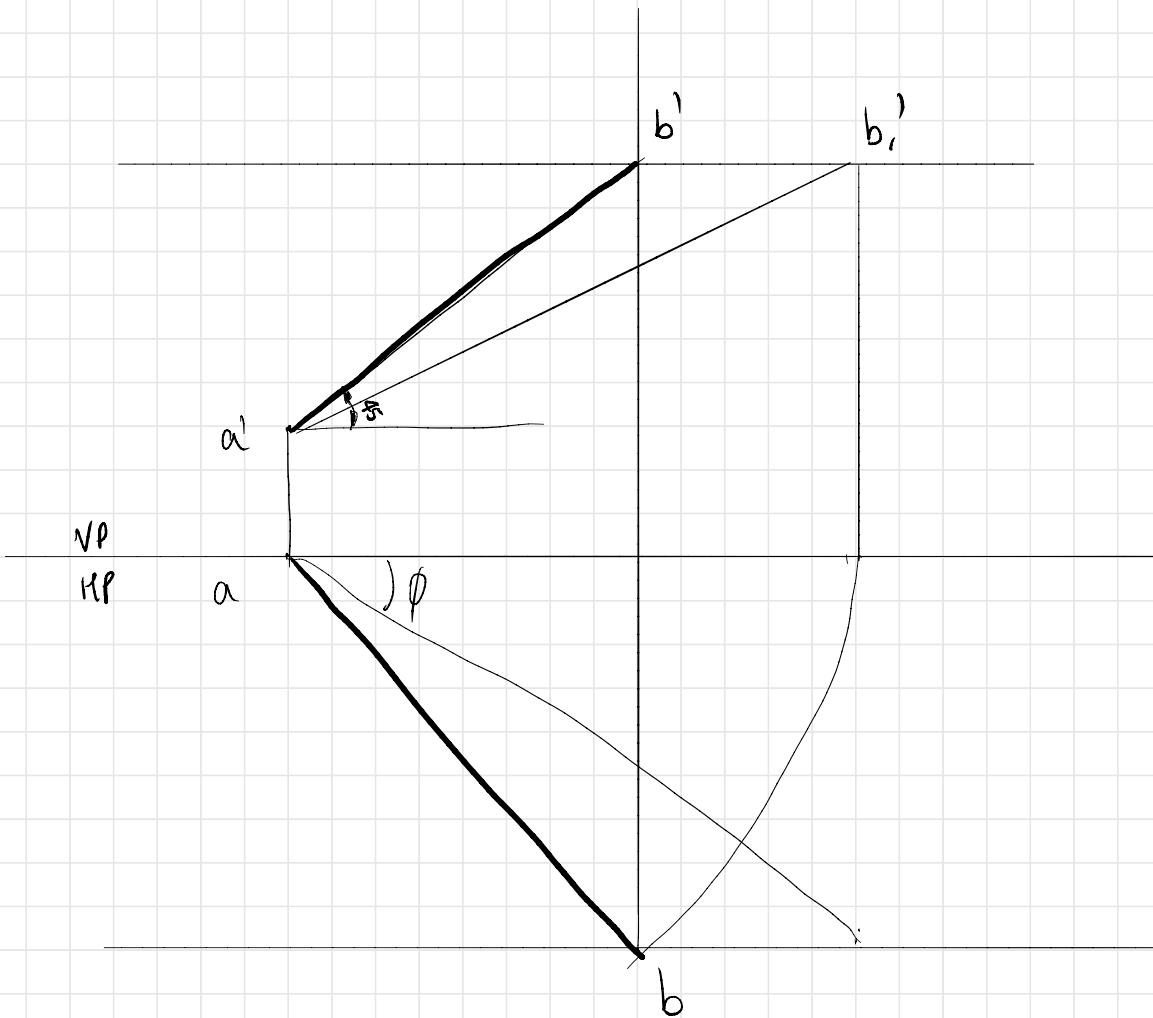
Q5. Line AB 60mm long has one of its extremities 20 mm in front of VP and 15 mm above HP. Line is inclined at 25° to HP and 45° to VP. Draw left view.



Q6. A line PQ has its end P 15mm above HP and 10mm in front of VP. The end Q is 55 mm above HP and the line is inclined at 30° to HP. The distance between the end projectors of the line when measured parallel to XY line is 50 mm. Draw projections of the line and find its inclination with VP.



Q7. A line AB, 90mm long measures, 65mm front view and is inclined at 45° to XY line. A is 15mm above HP and on VP. Draw the projections of the line and find its inclination with HP and VP.



l b h

Q8- A room $5m \times 3m \times 4m$ high. An electric lamp is suspended vertically from the centre of the ceiling and at a distance of $0.8m$ from it. Find the distance of the lamp from any one of the ground corners and the slope angle of the connecting line with the ground.

Take a ratio 1:100

