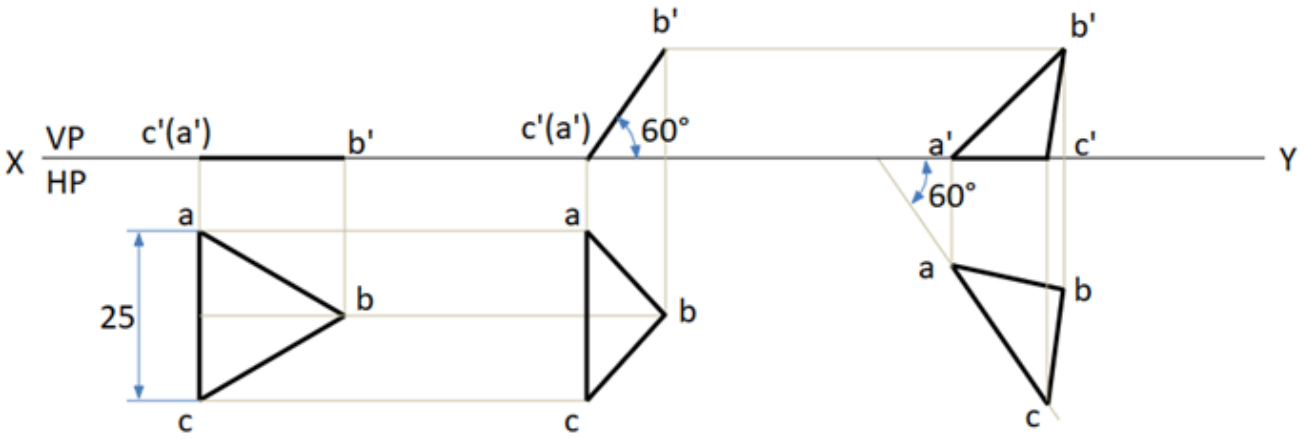
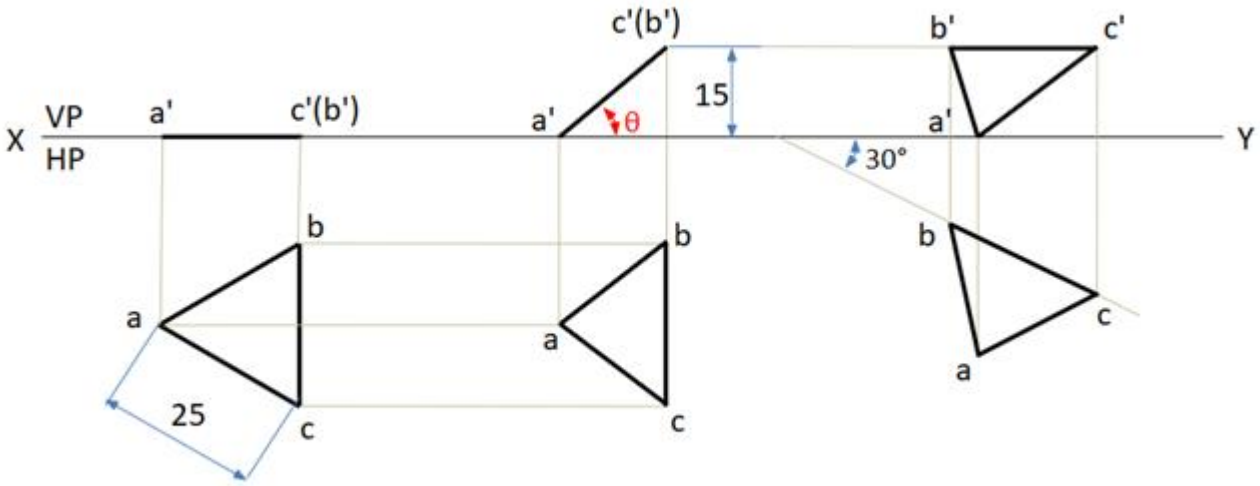
1. An equilateral triangular lamina of 25mm side lies with one of its edges on HP such that the surface of the lamina is inclined to HP at 60°. The edge on which it rests is inclined to VP at 60°. Draw the projections.

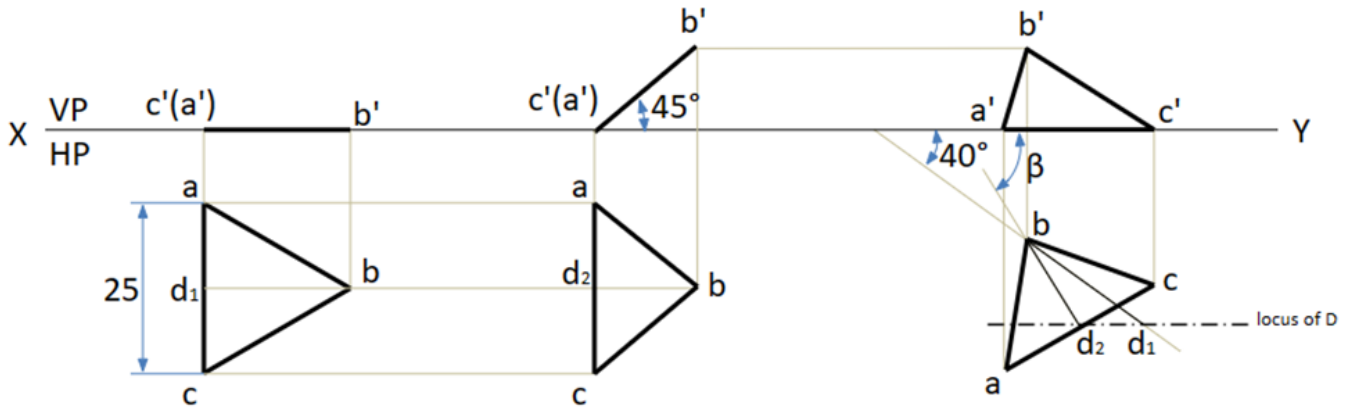


2. A triangular plane lamina of sides 25mm is resting on HP with one of its corners touching it, such that the side opposite to the corner on which it rests is 15mm above HP and makes an angle of 30° with VP. Draw the top and front views in this position. Also determine the inclination of the lamina to the reference plane.

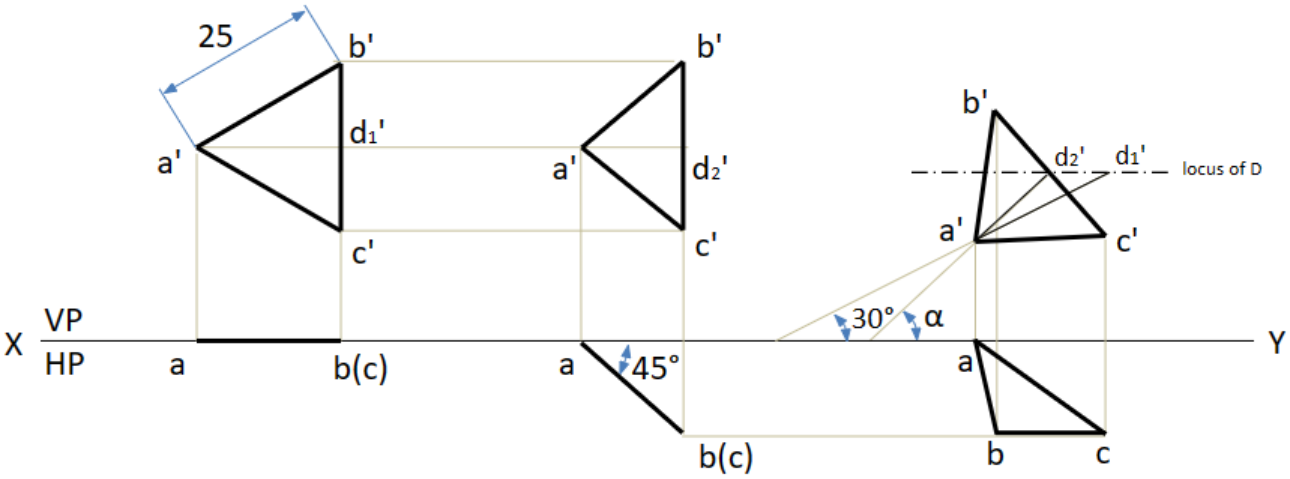


Ans: Lamina Inclination = 44°

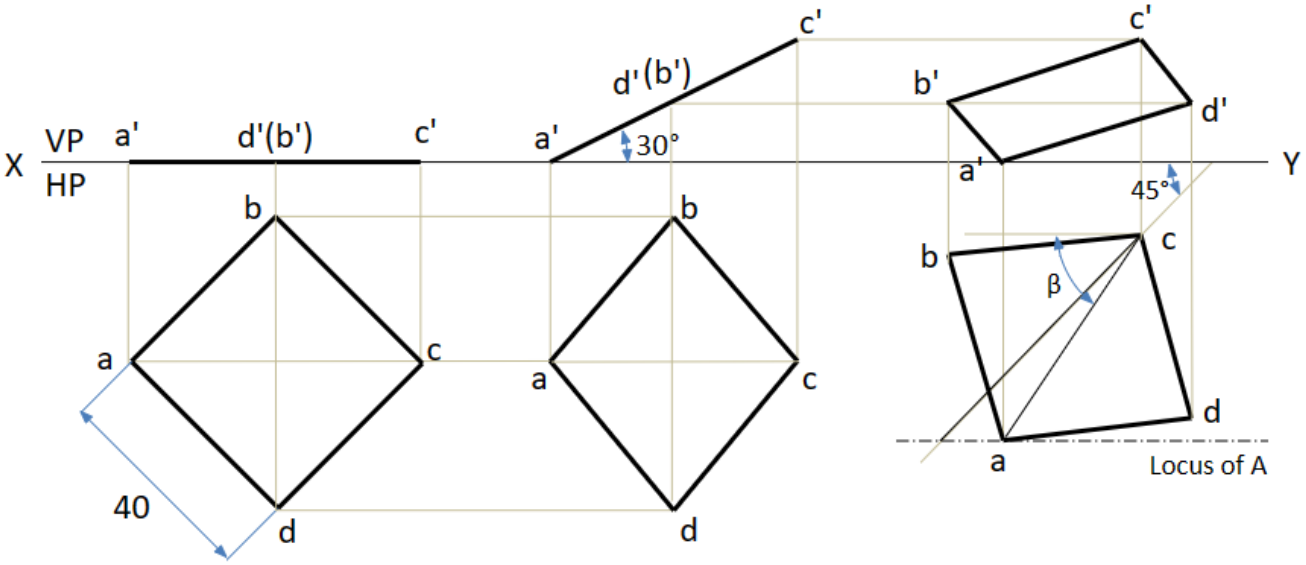
3. An equilateral triangular lamina of 25mm side lies on one of its sides on HP. The lamina makes 45° with HP and one of its medians is inclined at 40° to VP. Draw its projections.



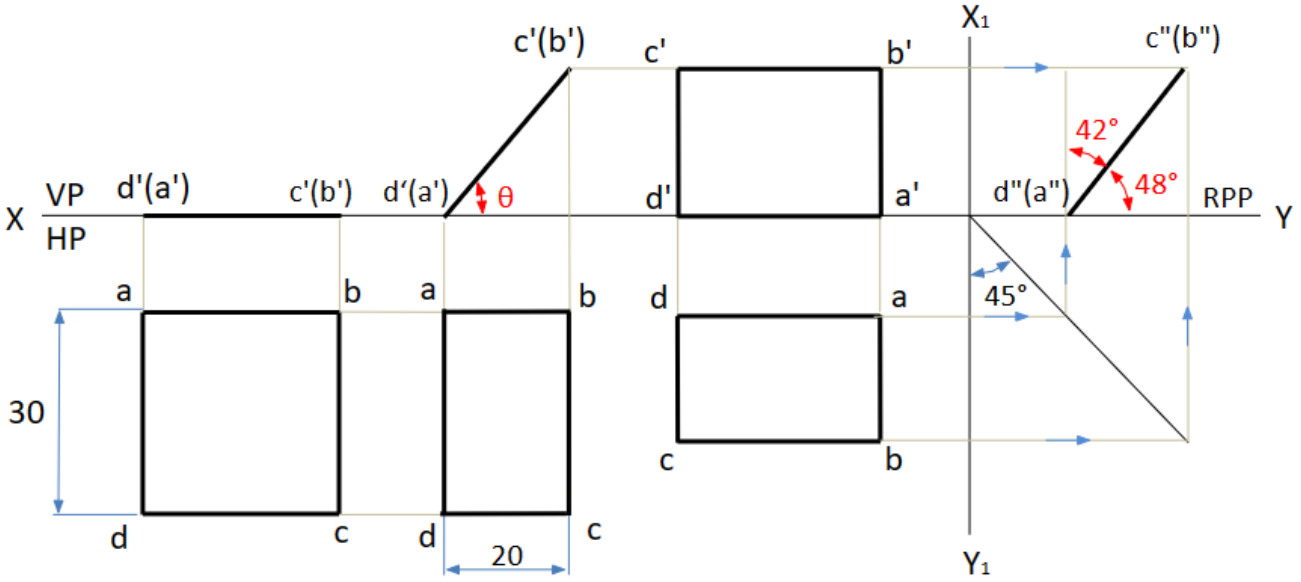
4. A triangular lamina of 25mm sides rests on VP on one of its corners on VP such that the median passing through the corner on which rests is inclined at 30° to HP and 45° to VP. Draw its projections.



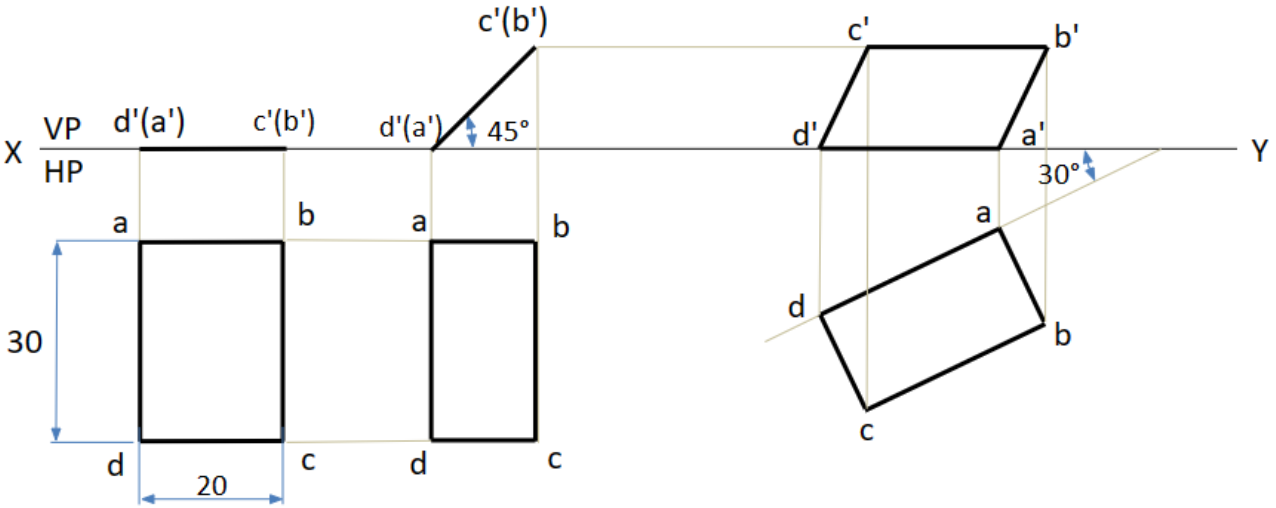
5. A square plate of 40mm sides rests on HP such that one of the diagonals is inclined at 30° to HP and 45° to VP. Draw its projections.



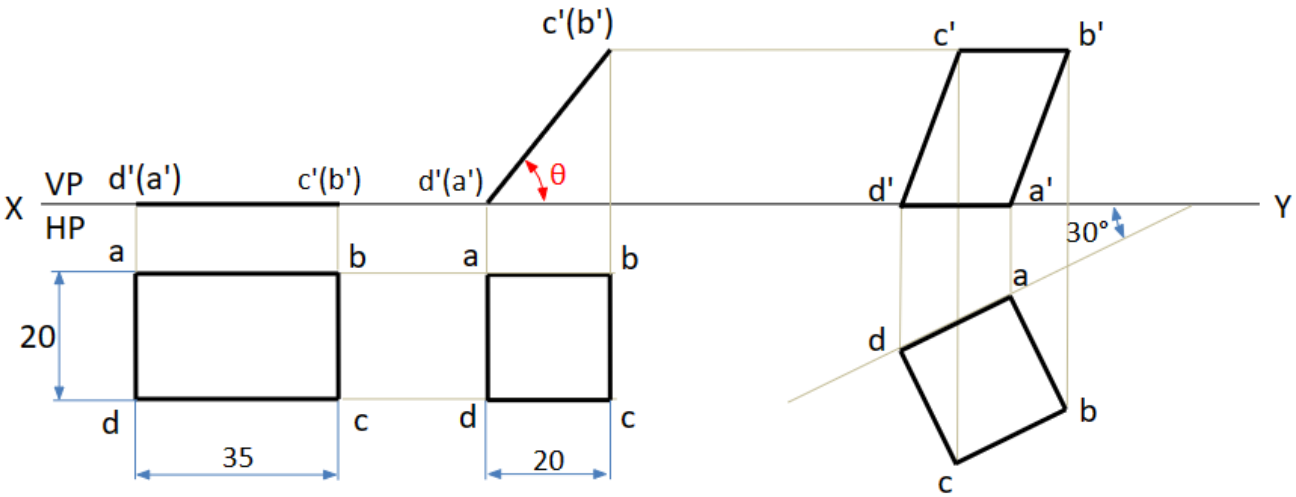
6. The top view of a square lamia of side 30mm is a rectangle of sides 30mm x 20mm with the longer side of the rectangle being parallel to both HP and VP. Draw the top and front views of the square lamina. What is the inclination of the surface of the lamina with HP and VP?



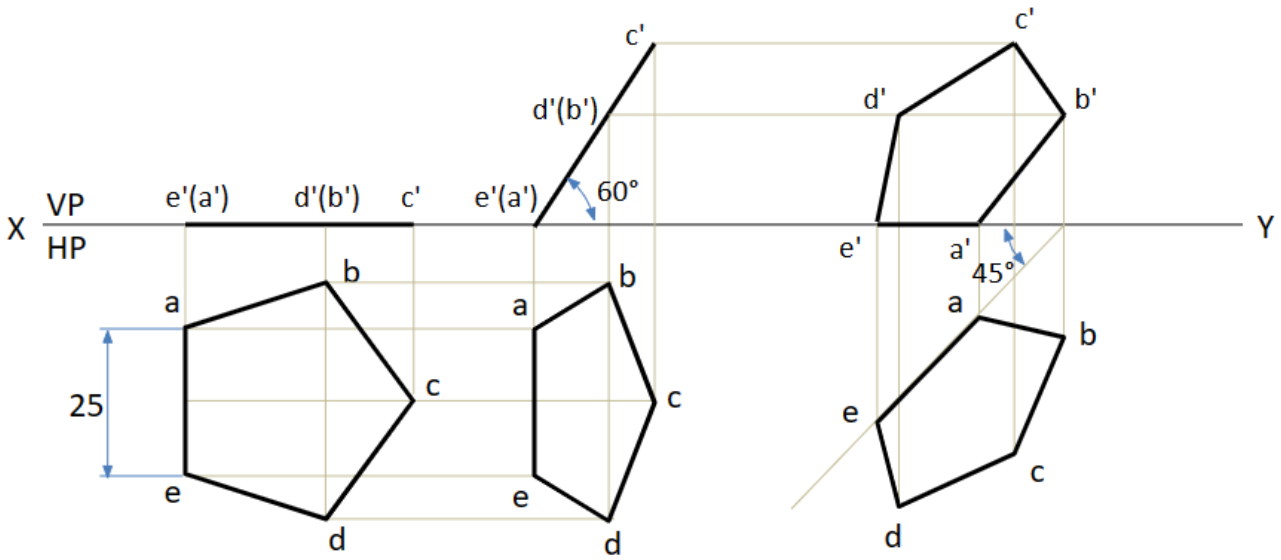
7. A rectangular lamina of sides 20mm x30mm rests on HP on one of its longer edges. The lamina is tilted about the edge on which it rests till its plane surface is inclined to HP at 45°. The edge on which it rests is inclined at 30° to VP. Draw the projections of the lamina.



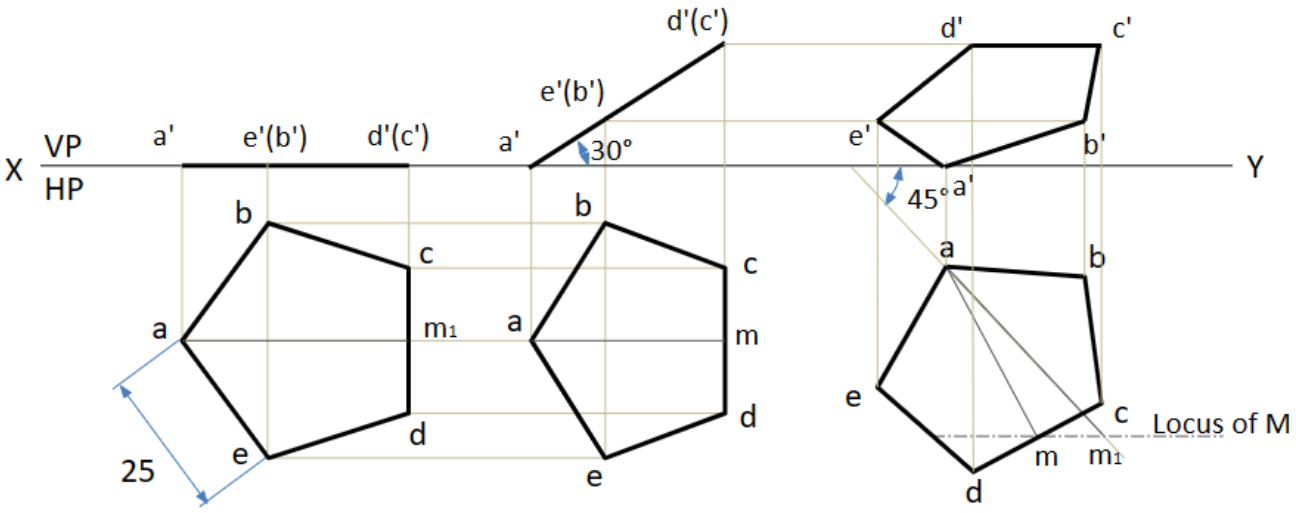
8. A rectangular lamina of 35mm x 20mm rests on HP on one of its shorter edges. The lamina is rotated about the edge on which it rests till it appears as a square in the top view. The edge on which the lamina rests is inclined 30° to VP. Draw its projections and find its inclination to HP.



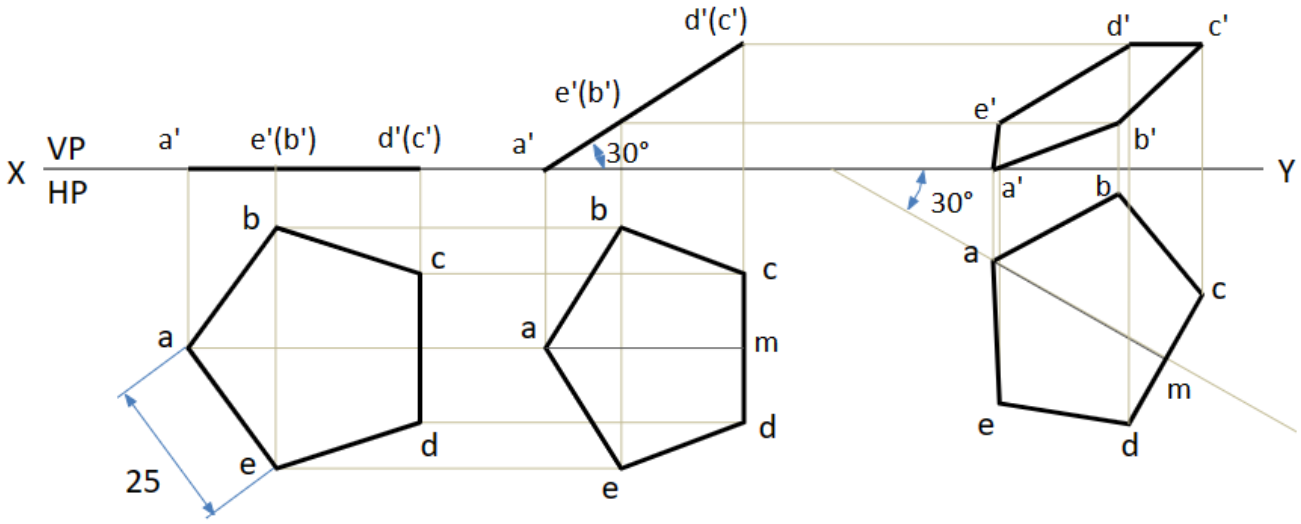
9. A pentagonal lamina of edges 25mm is resting on HP with one of its sides such that the surface makes an angle of 60°with HP. The edge on which it rests is inclined at 45° to VP. Draw its projections.



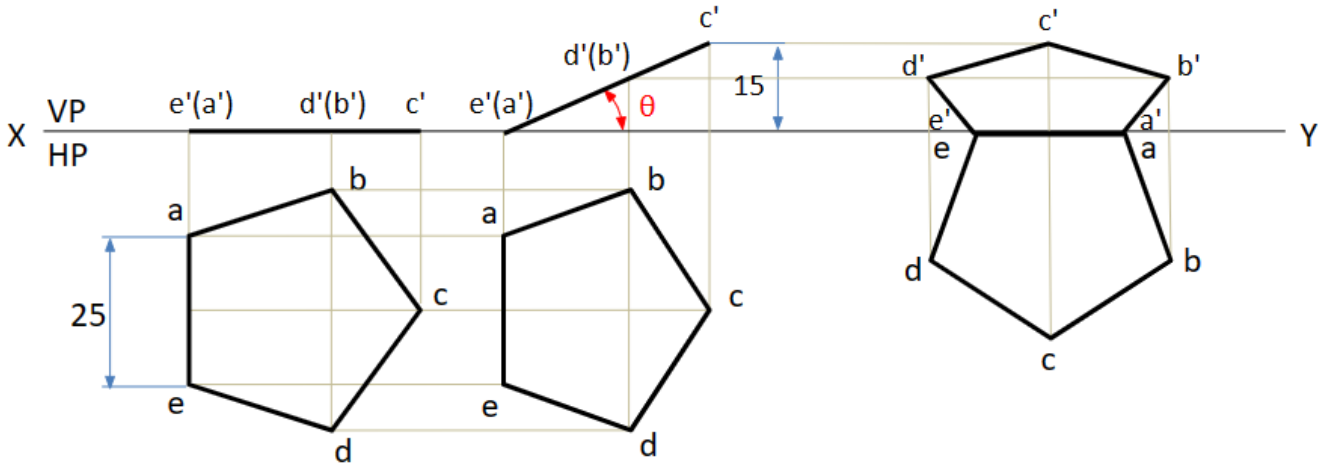
10. A pentagonal lamina having edges 25mm is placed on one of its corners on HP such that the perpendicular bisector of the edge passing through the corner on which the lamina rests is inclined at 30° to HP and 45° VP. Draw the top and front views of the lamina.



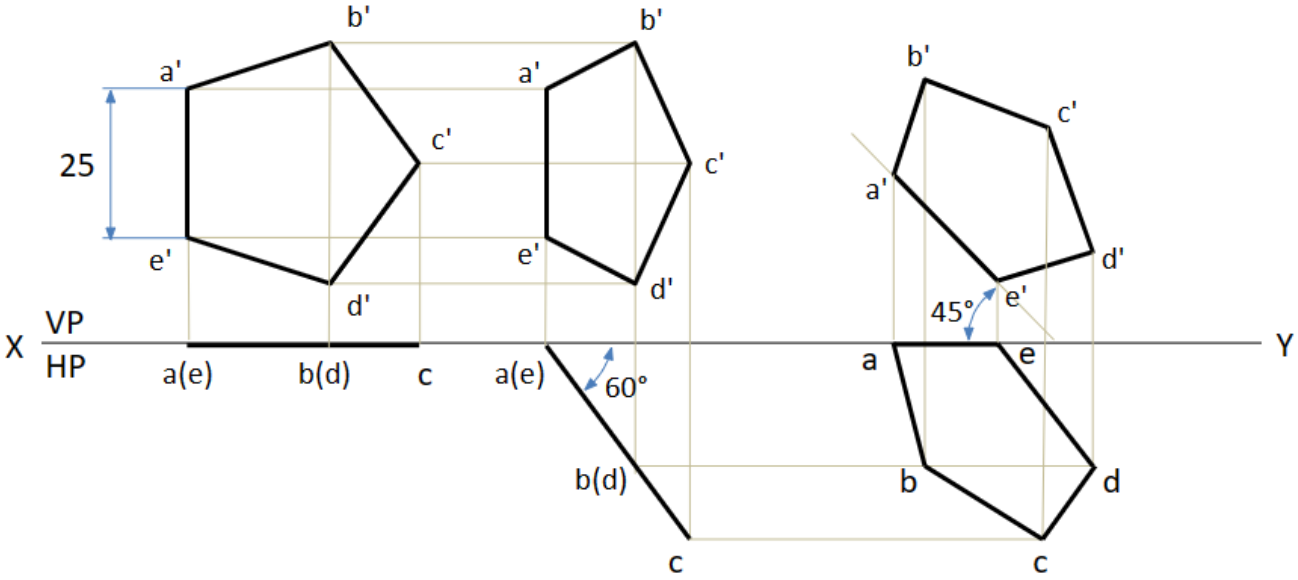
11. A pentagonal lamina having edges 25mm is placed on one of its corners on HP such that the surface makes an angle 30° with HP and perpendicular bisector of the edge passing through the corner on which the lamina rests appear to be inclined at 30° to VP. Draw the top and front views of the lamina.



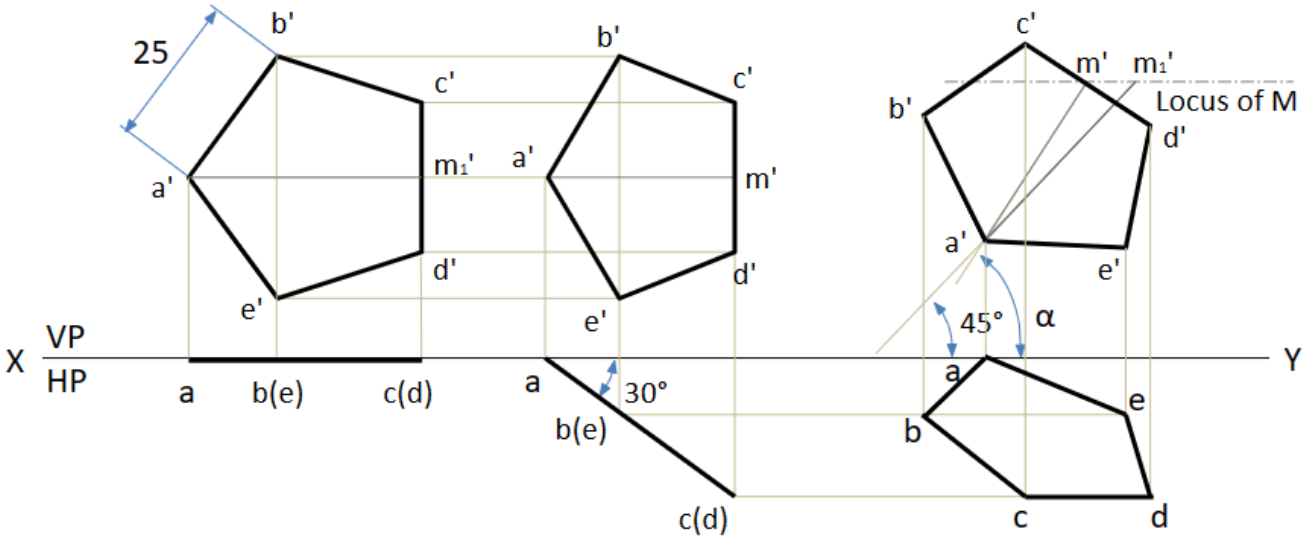
12. A pentagonal lamina of sides 25mm is having a side both on HP and VP. The corner opposite to the side on which it rests is 15mm above HP. Draw the top and front views of the lamina.



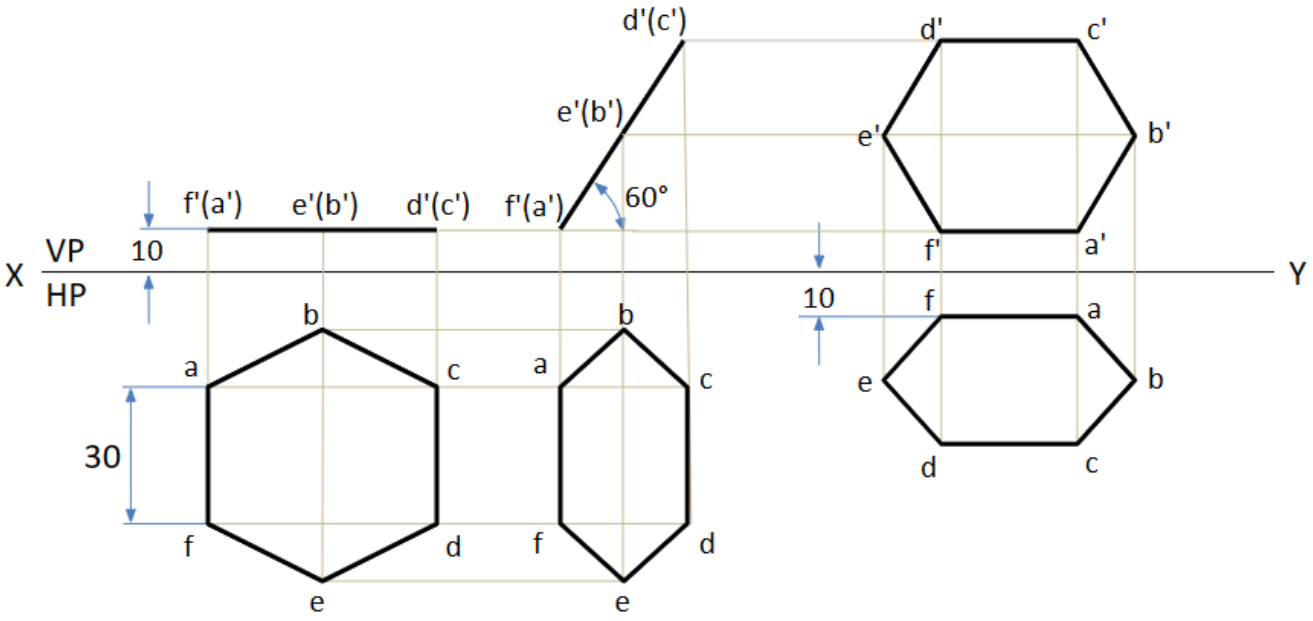
13. A pentagonal lamina of edges 25mm is resting on VP with one of its sides such that the surface makes an angle of 60º with VP. The edge on which it rests is inclined at 45° to HP. Draw its projections.



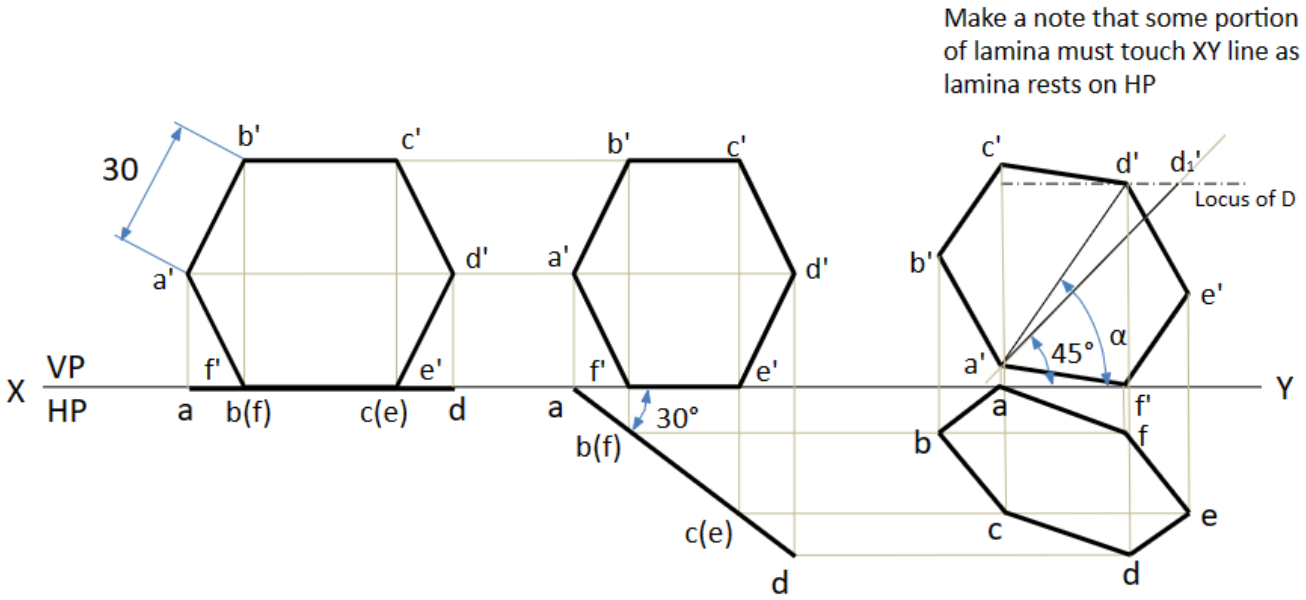
14. A pentagonal lamina having edges 25mm is placed on one of its corners on VP such that the surface makes an angle 30° with VP and perpendicular bisector of the edge passing through the corner on which the lamina rests is inclined at 45° to HP. Draw the top and front views of the lamina.



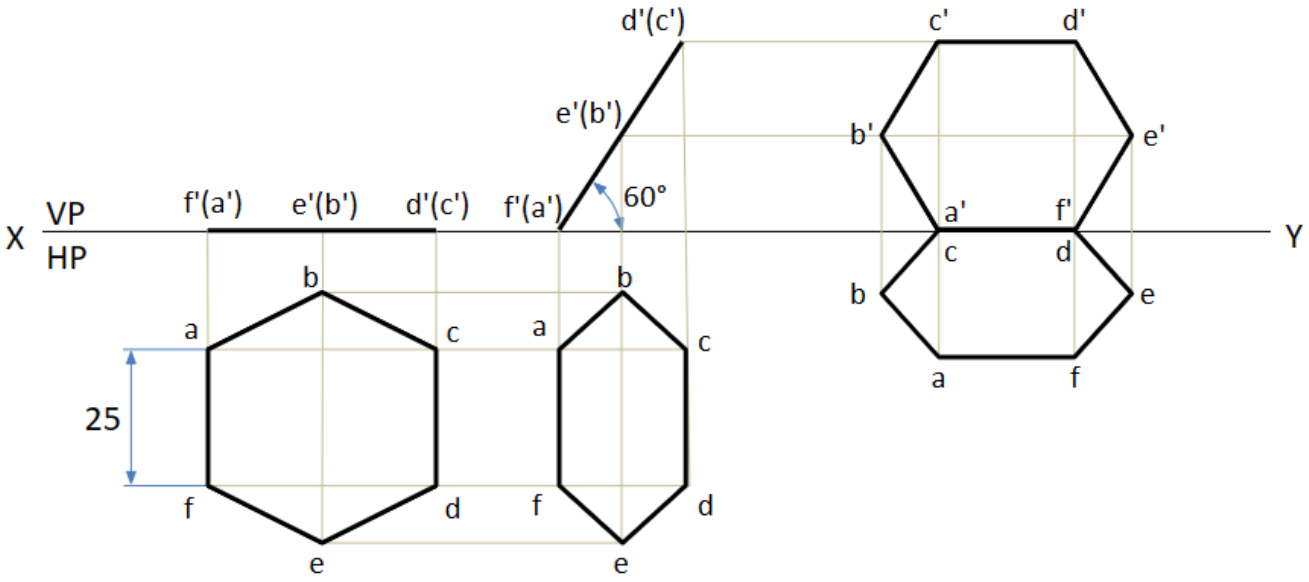
15. Draw the top and front views of a hexagonal lamina of 30mm sides having two of its edges parallel to both vertical and horizontal planes and one of its edges is 10mm from each of the planes of projection. The surface of the lamina is inclined at an angle of 60°to the HP.



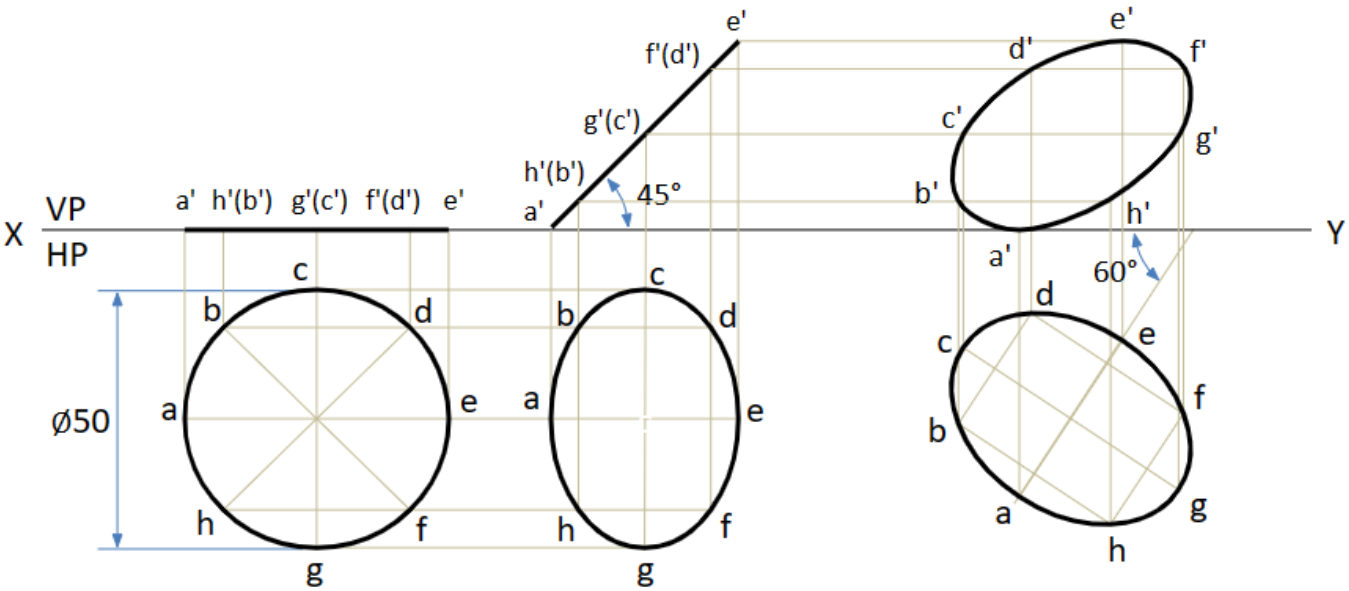
16. A hexagonal lamina of sides 30mm is resting on HP with one of its corners in VP and its surface inclined at an angle of 30° with VP. The diagonal passing through that corner which is in VP is inclined at 45° to HP. Draw the projections of the lamina.



17. A regular hexagonal lamina of sides 25mm is lying in such a way that one of its sides on HP while the side opposite to the side on which it rests is on VP. If the lamina makes 60°to HP, Draw the projections of the lamina.



19. Draw the projections of a circular plate of negligible thickness of 50mm diameter resting on HP on a point A on the circumference, with its plane inclined at 45° to HP and the top view of the diameter passing through the resting point makes 60° with VP.



20. A circular lamina of 30mm diameter rests on VP such that one of its diameters is inclined at 30° to VP and 45° to HP. Draw its top and front views in this position.