

PROJECTION OF SOLIDS

1. A square prism 35mm sides of base and 60mm axis length rests on HP on one of its edges of the base **which is inclined to VP at 30°**. Draw the projections of the prism when the axis is inclined to the HP at 45°.
2. A square prism 35mm sides of base and 60mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests makes equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and **appears to be inclined to VP at 45°**.
3. A square prism 35mm sides of base and 60mm axis length rests on **HP on one of its corners of the base** such that the two base edges containing the corner on which it rests makes equal inclinations with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and to VP at 30°.
4. A square prism 35mm sides of base and 60mm axis length rests on HP on one of its edges of the base. Draw the projections of the prism when the axis is inclined to the HP at 45° and **VP at 30°**.
5. A pentagonal prism 25mm sides of base and 60mm axis length rests on HP on one of its edges of the base **which is inclined to VP at 30°**. Draw the projections of the prism when the axis is inclined to HP at 40°.
6. A pentagonal prism 25mm sides of base and 60mm axis length rests on HP on **one of its edges of the base**. Draw the projections of the prism when the axis is inclined to HP at 40° and VP at 30°.
7. A pentagonal prism 25mm sides of base and 60mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and **appears to be inclined to VP 45°**.
8. A pentagonal prism 25mm sides of base and 60mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and **to VP 30°**.
9. A hexagonal prism 25mm sides of base and 50mm axis length rests on HP on one of its edges. Draw the projections of the prism when the axis is inclined to HP at 45° and **appears to be inclined to VP at 40°**.

10. A hexagonal prism 25mm sides of base and 50mm axis length rests on HP on one of its edges of the base. Draw the projections of the prism when the axis is inclined to HP at 45° and VP at 30° .
11. A hexagonal prism 25mm sides of base and 50mm axis length rests on HP on one of its corners of the base such that the two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and appears to be inclined to VP at 45° .
12. A hexagonal prism 25mm sides of base and 50mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the prism when the axis of the prism is inclined to HP at 40° and to VP 30° .
13. A square prism 35mm sides of base and 60mm axis length is suspended freely from one of its corners. Draw the projection of prism when the axis appears to be inclined to VP at 45° .
14. A pentagonal prism 25mm sides of base and 60mm axis length is suspended freely from one of its corners. Draw the projections of prism when the axis appears to be inclined to VP at 45° .
15. A hexagonal prism 25mm sides of base and 50mm axis length is suspended freely from one of its corners. Draw the projections of prism when the axis appears to be inclined to VP at 45° .
16. A square pyramid 35mm sides of base and 65mm axis length rests on HP on one of its edges of the base, which is inclined to VP at 30° . Draw the projections of the pyramid when the axis is inclined to HP at 45° .
17. A square pyramid 35mm sides of base and 60mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP at 45° .
18. A square pyramid 35mm sides of base and 60mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and to VP at 30° .
19. A square pyramid 35mm sides of base and 65mm axis length rests on HP on one of its edges of the base. Draw the projection of the pyramid when the axis is inclined to HP at 45° and VP at 30° .

20. A pentagonal pyramid 25mm side of base and 60mm axis length rests on HP on one of its edges of the base, which is inclined to VP at 30° . Draw the projections of the pyramid when the axis is inclined to HP at 40° .
21. A pentagonal pyramid 25mm sides of base and 60mm axis length rests on HP on one of its edges of the base. Draw the projections of the pyramid when the axis is inclined to HP at 40° and VP at 30° .
22. A pentagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP at 45° .
23. A pentagonal pyramid 25mm sides of base and 50 mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclination with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and to VP at 30° .
24. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its edges of the base, which is inclined to VP at 30° . Draw the projections of the pyramid when the axis is inclined to HP at 40° .
25. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its edges of the base. Draw the projections of the pyramid when the axis is inclined to HP at 45° and VP at 30° .
26. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and appears to be inclined to VP 45° .
27. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its corners of the base such that two base edges containing the corner on which it rests make equal inclinations with HP. Draw the projections of the pyramid when the axis of the pyramid is inclined to HP at 40° and to VP at 30° .
28. A square pyramid 35mm sides of base and 60mm axis length is suspended freely from a corner of its base. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
29. A pentagonal pyramid 25mm sides of base and 50mm axis length is suspended freely from a corner of its base. Draw the projection of pyramid when the axis appears to be inclined to VP at 45° .

30. A hexagonal pyramid 25mm side of base and 50mm axis length is suspended freely from a corner of its base. Draw the projections of pyramid when the axis appears to be inclined to VP at 45° .
31. A square pyramid 35mm sides of base and 60mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
32. A square pyramid 35mm sides of base and 60mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis is inclined to VP at 45° .
33. A square pyramid 35mm sides of base and 60mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
34. A square pyramid 35mm side of base and 60mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis is inclined to VP at 45° .
35. A pentagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
36. A pentagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis is inclined to VP at 45° .
37. A pentagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
38. A pentagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis is inclined to VP at 45° .
39. A hexagonal pyramid 25mm sides of base and 50 mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
40. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant edges. Draw the projections of the pyramid when the axis is inclined to VP at 45° .

41. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis appears to be inclined to VP at 45° .
42. A hexagonal pyramid 25mm sides of base and 50mm axis length rests on HP on one of its slant triangular faces. Draw the projections of the pyramid when the axis is inclined to VP at 45° .
43. A cube of 40mm sides rests on HP on an edge which is inclined to VP at 30° . Draw the projections when the lateral square face containing the edge on which it rests makes an angle of 50° to HP.
44. A tetrahedron of 55mm sides rests on one of its corners such that the edge containing that corner is inclined to HP at 50° and VP at 30° . Draw the projections.
45. A cone of 50mm base diameter and 60mm axis length rests on HP on one of its generators. Draw its projections when the axis is inclined to VP at 30° .
46. A tetrahedron of sides 40mm is resting on one of its sides on HP. This side is parallel to VP and 40mm away from it. It is tilted about resting side such that the base containing this edge is inclined at 30° to HP. Draw the projections of the solid.
47. A hexahedron of 30mm sides is resting on one of its corners on HP such that one of its solid diagonals is perpendicular to VP. Draw the projections of the solid.
48. A pentagonal prism of base side 25mm and height 50mm is resting on HP on one of its base corners such that the top most edge is at a distance of 60mm above HP. Draw its projections, when its top view of the axis is inclined at 45° to VP. Also, determine the inclination of the longer edge of the prism to HP which contains the resting corner.
49. A square pyramid of base sides 30mm and height 45mm is suspended by a thread tied to one of the corners of its base. It is then tilted such that the axis makes an angle 45° with respect to the VP. Considering the apex of the solid to be nearer to the observer, draw the projections of the solid.
50. A cone of base diameter 40mm and axis length 50mm is resting on HP on a point on the circumference of its base such that its apex is at 40mm above the HP and its top view of the axis is inclined at 60° to VP. Draw the top and front views of the solid. Also, determine the inclinations of the axis when base is nearer to the observer.