

I PROJECTION OF POINTS AND STRAIGHT LINES

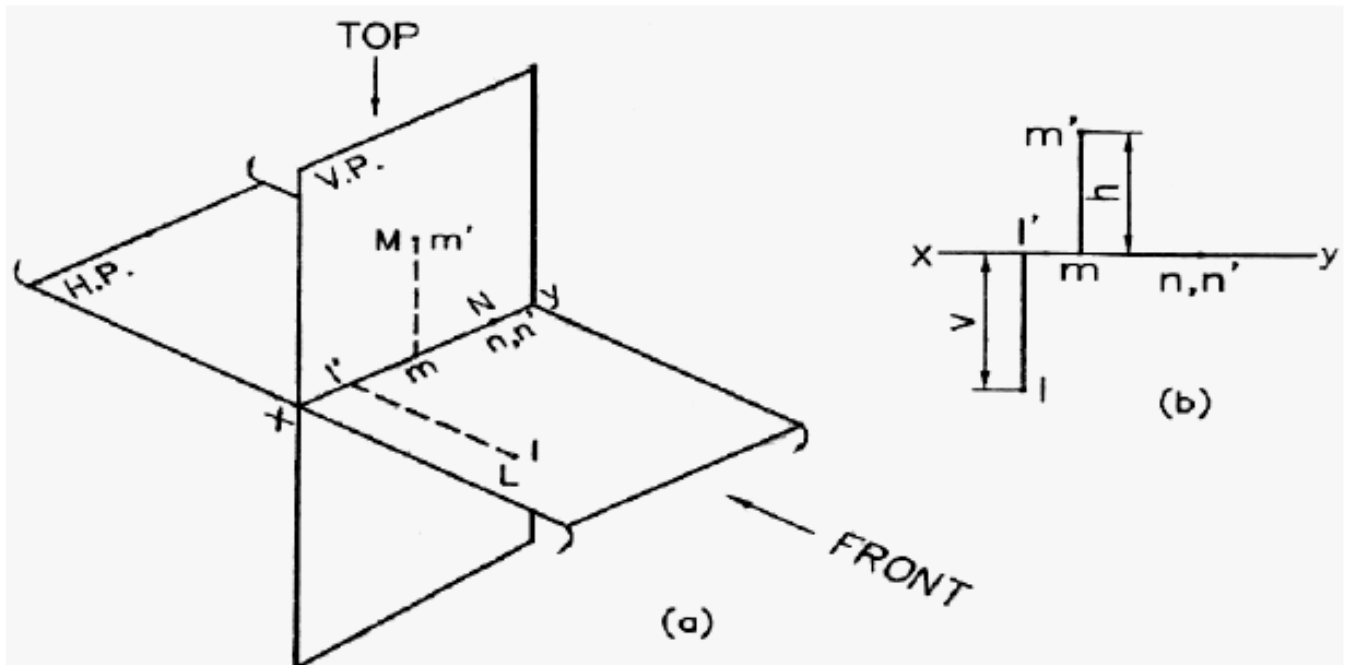
An element which has no dimensions, it can be situated in the following positions with respect to principal planes of the projections.

- Point situated above H.P and in front of V.P.
- Point situated above H.P and behind V.P
- Point situated below H.P and behind V.P.
- Point situated below H.P and in front of V.P.
- Point situated on H.P and in front of V.P.
- Point situated above H.P and on V.P.
- Point situated on H.P and behind V.P.
- Point situated below H.P and on V.P.
- Point situated on both H.P and V.P.

Conventional Representation:

- Actual Position of a point designated by capitals i.e. A, B, C, D ...
- Front view of a point is designated by small letters with dashes i.e. a', b', c', d'
- Top view of a point is designated by only small letters i.e. a, b, c, d
- Side view of a point is designated by small letters with double dashes i.e. a'', b'', c'', d''...

The Intersection of reference planes is a line known as reference line denoted by x-y and the line connecting the front and top view is known as projection line; it is always perpendicular to the principal axis (x-y line).



Problem:

Draw the orthographic projections of the following points?

- (a.) Point P is 30 mm. above H.P and 40 mm. in front of VP
- (b.) Point Q is 25 mm. above H.P and 35 mm. behind VP
- (c.) Point R is 32 mm. below H.P and 45 mm behind VP
- (d.) Point S is 35 mm. below H.P and 42 mm in front of VP
- (e.) Point T is in H.P and 30 mm behind VP
- (f.) Point U is in V.P and 40 mm. below HP
- (g.) Point V is in V.P and 35 mm. above H.P
- (h.) Point W is in H.P and 48 mm. in front of VP

Solution:

