

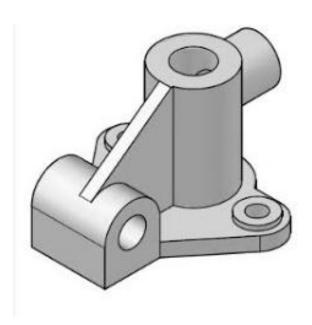
ENGINEERING DRAWING

<u>Topic:</u> Orthographic Projections

https://www.youtube.com/watch?v=e6tMYAmPZOQ

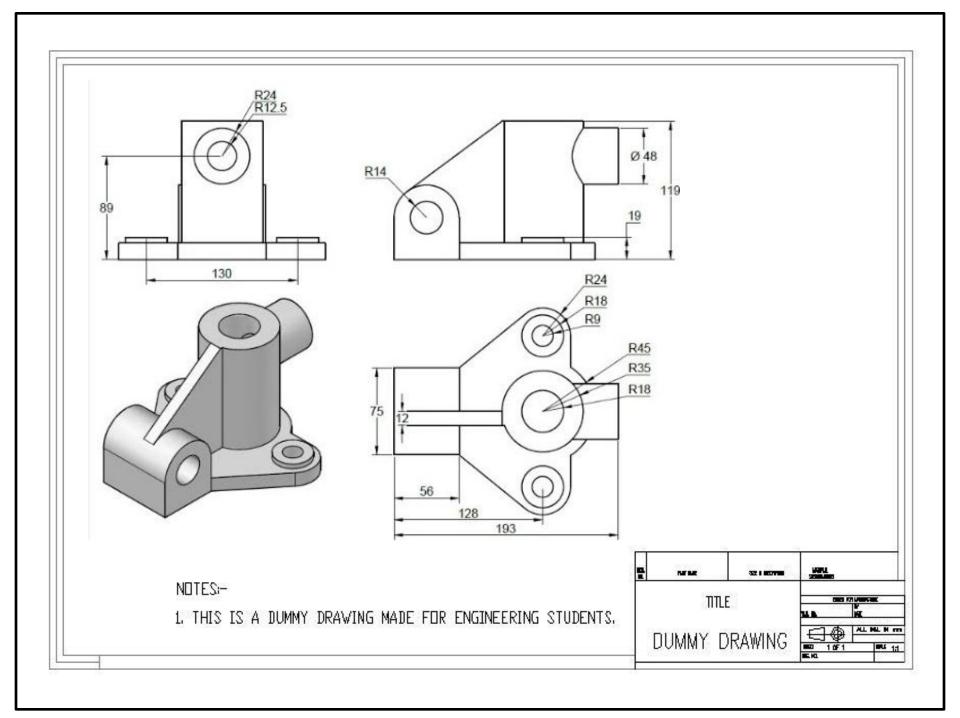
Orthographic Projections



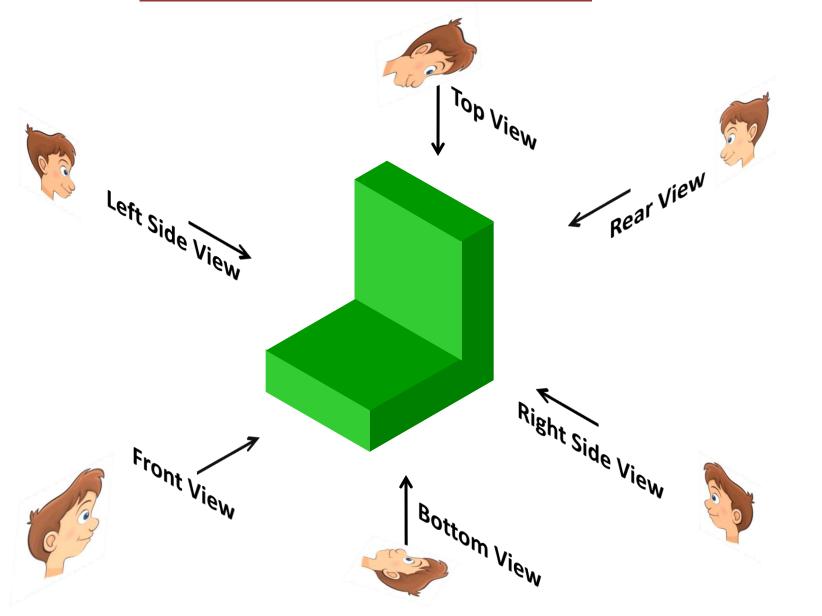


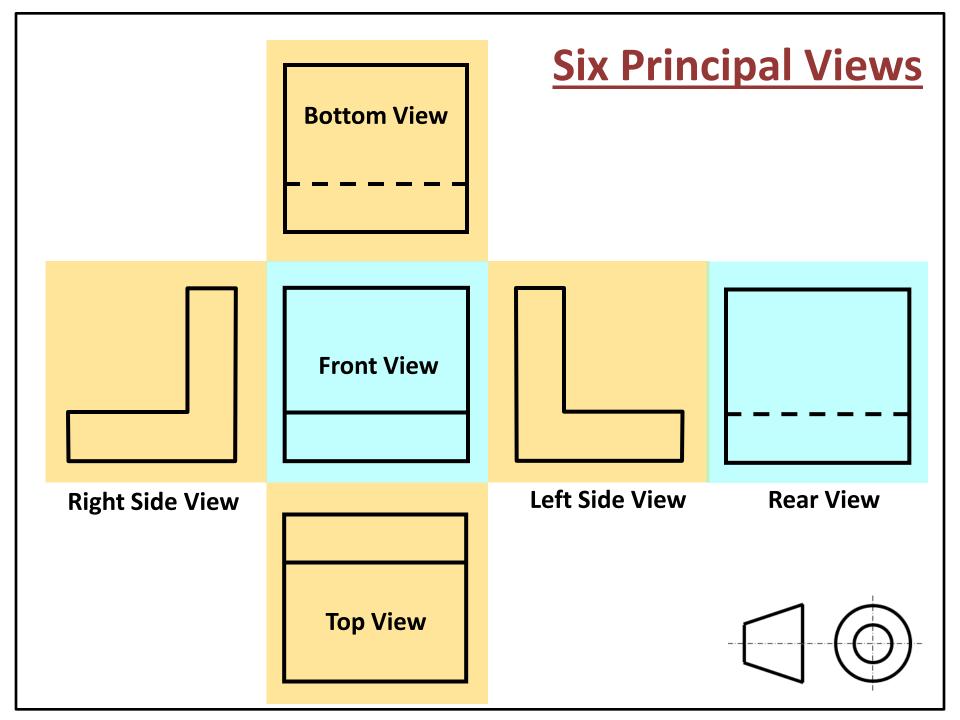




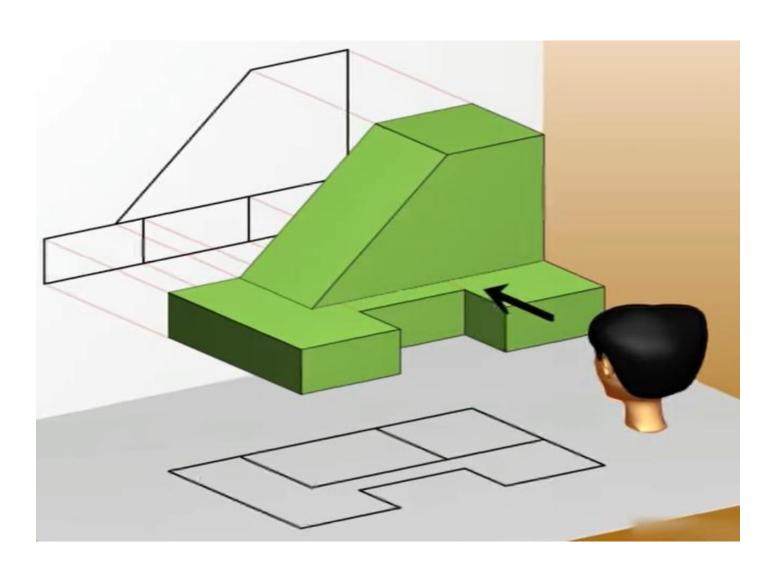


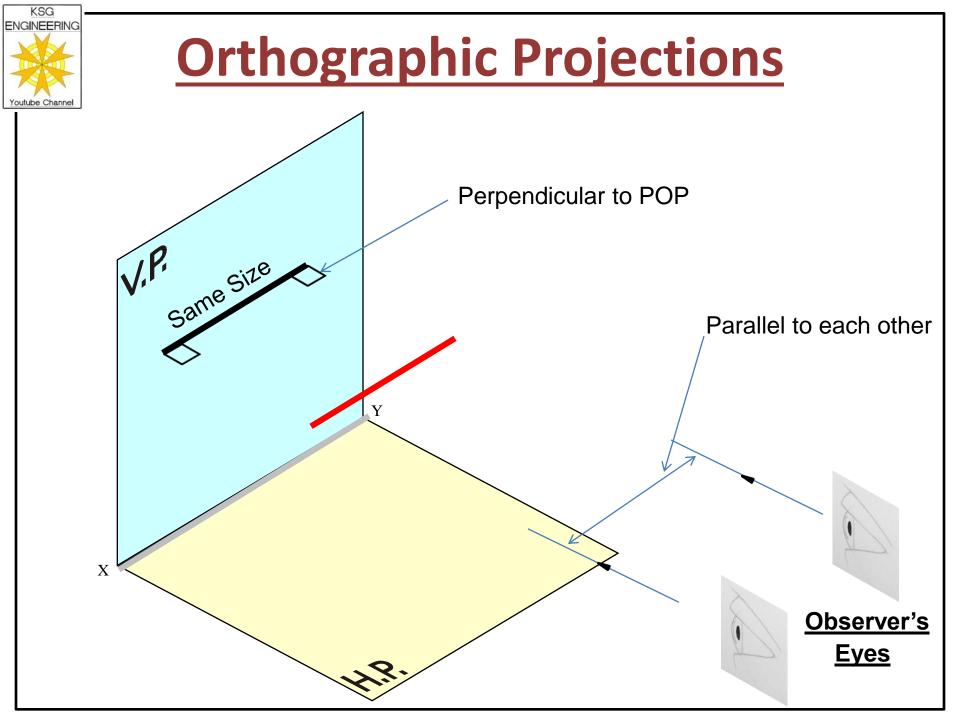
Six Principal Views





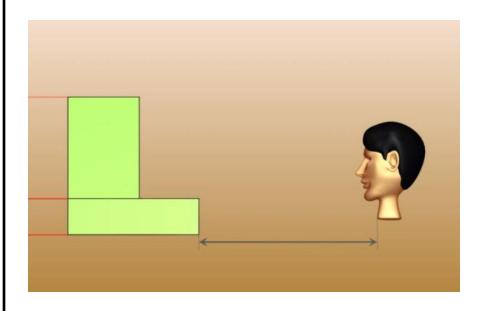
Orthographic Projections

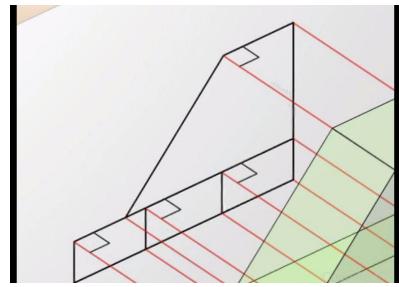


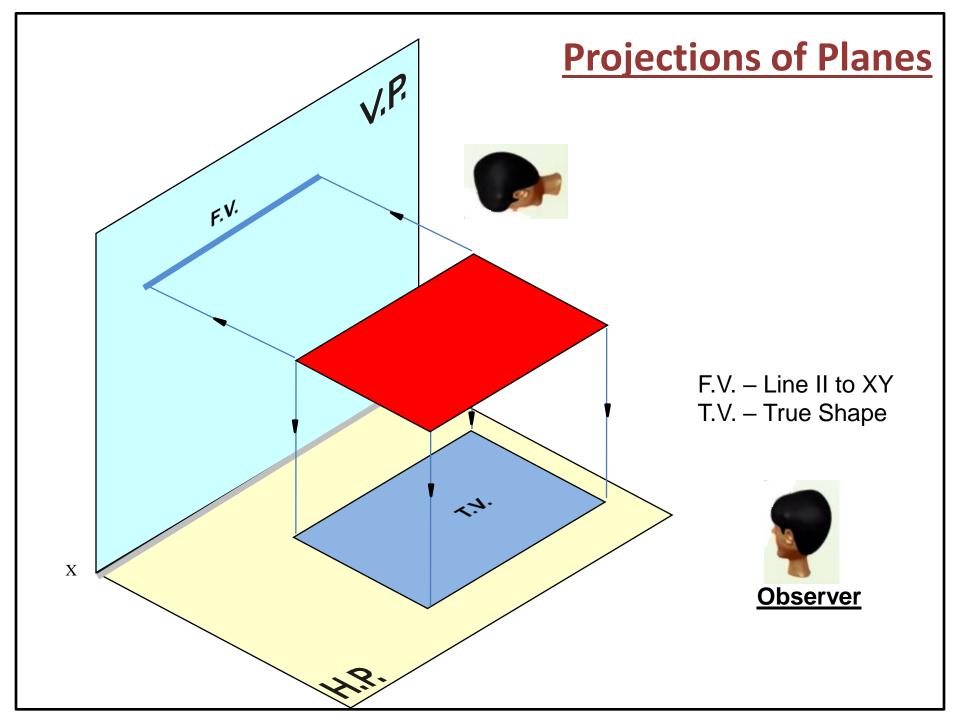


Orthographic Projections

If observer's eye is at an infinite distance from an object such that the lines of sight are parallel to each other and perpendicular to the plane of projection, the projection obtained, which would be of the same size and shape as the facing surface of the object, is called an orthographic projection.



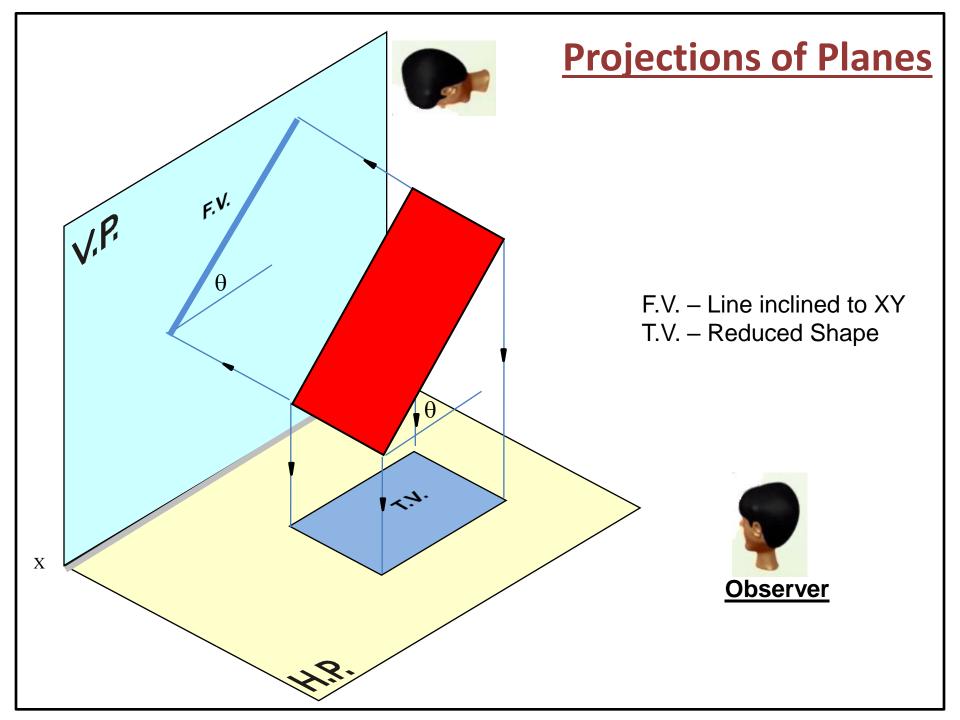




Projections of Planes

Important Points:

- 1. When a plane is perpendicular to a reference plane, its projection on that plane is an edge view, i.e., a straight line.
- 2. When a plane is parallel to a reference plane, its projection on that plane projects its true shape and size.



Projections of Planes

Important Points:

1. When a plane is inclined to a reference plane, its projection on that plane is smaller in size than the plane itself.

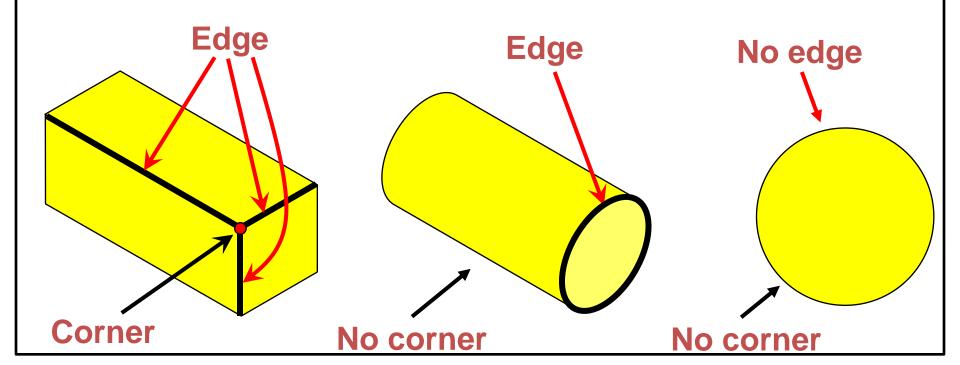
Features of Objects

Edge:

It is a line that represent the boundary between two faces.

Corner:

It represent the intersection of two or more edges.



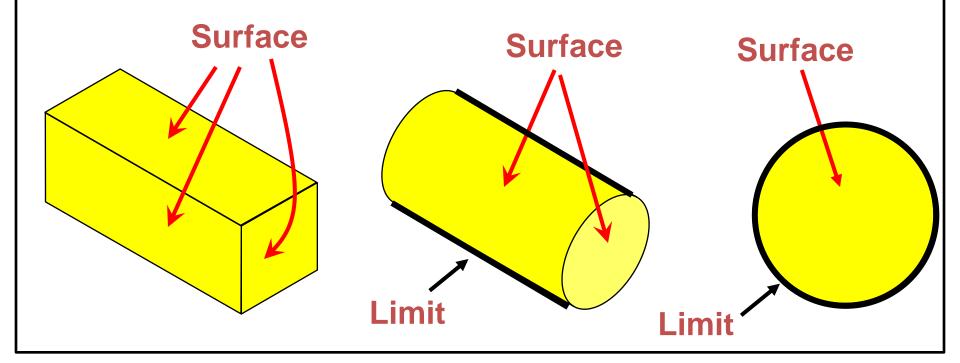
Features of Objects

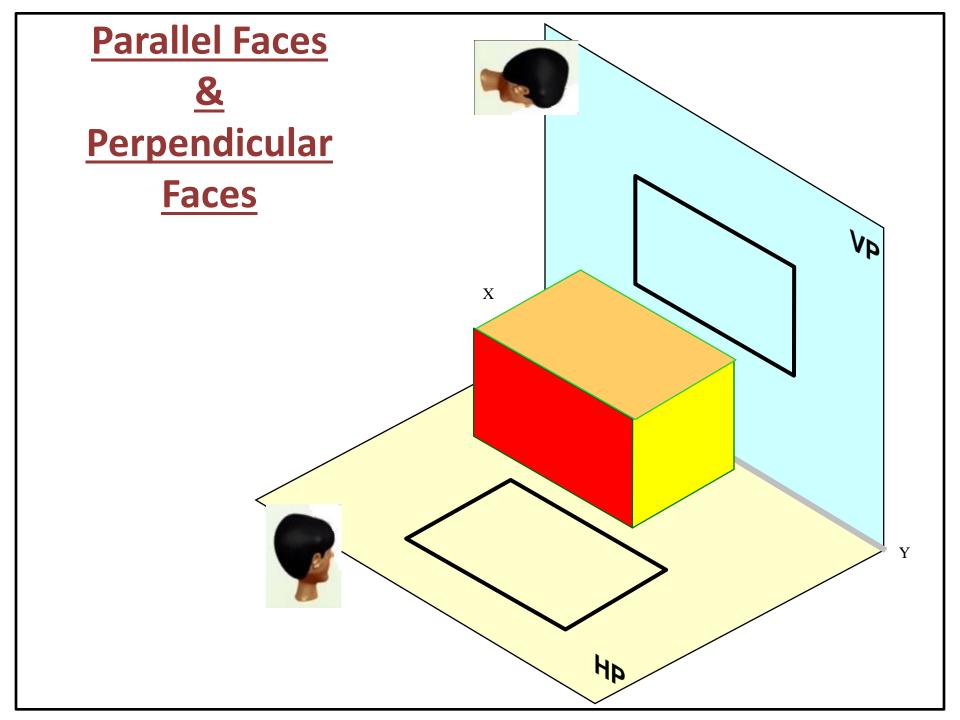
Surfaces:

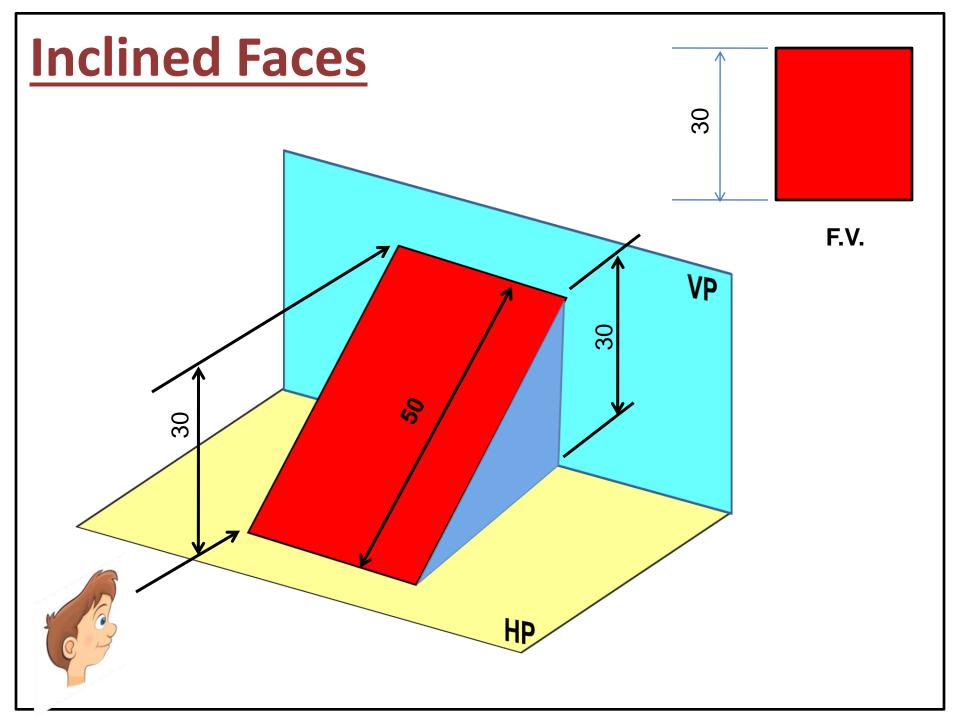
Surfaces are areas that are bound by edges or limiting element.

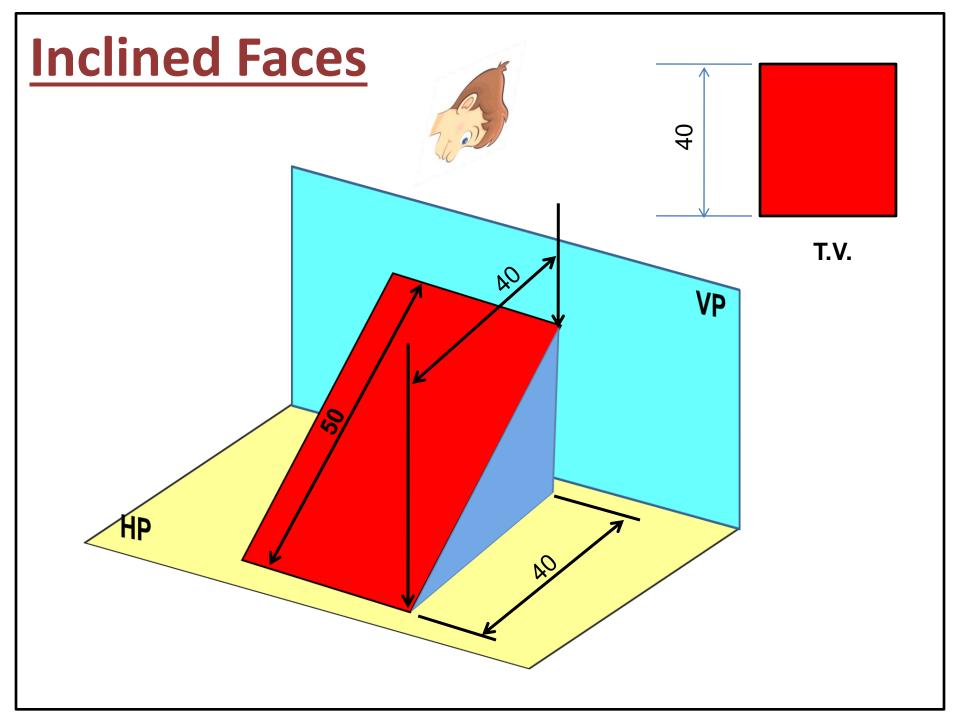
Limiting element:

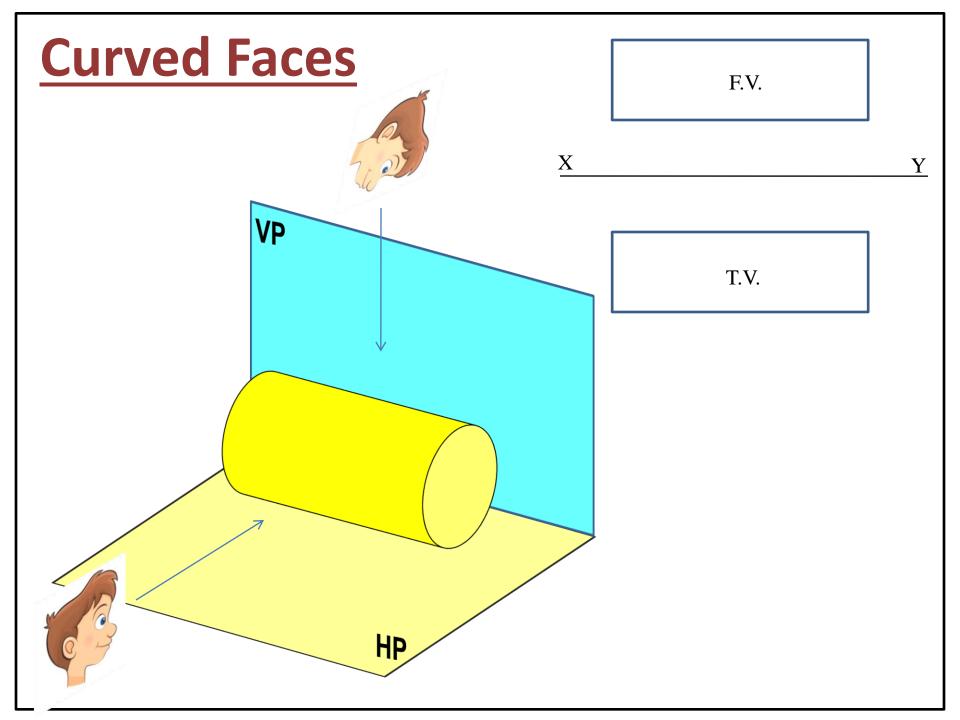
It is a line that represents the last visible part of the curved surface.



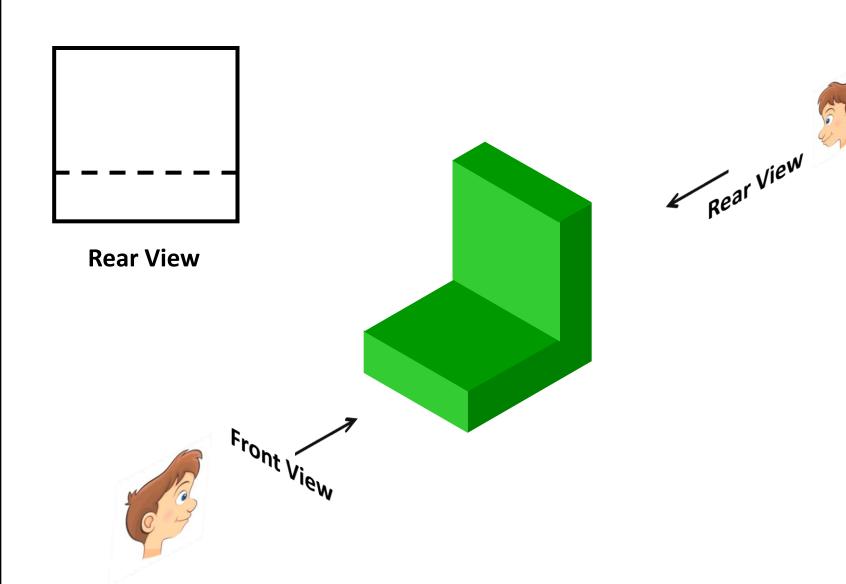




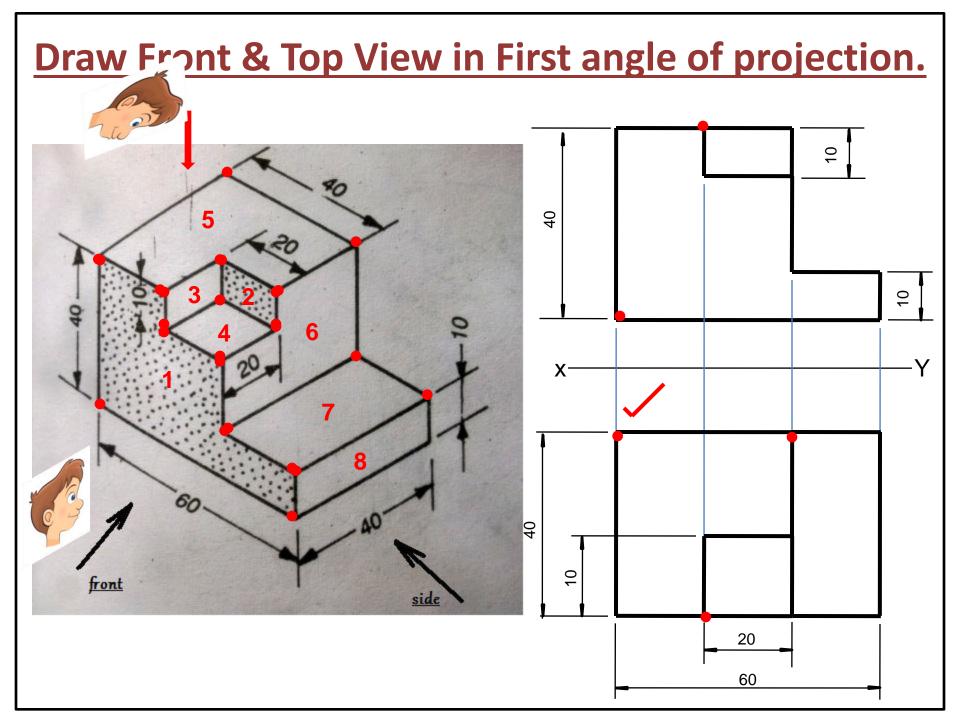




Hidden Faces



Representation of holes **Top View** X **Front View**



Thanks