

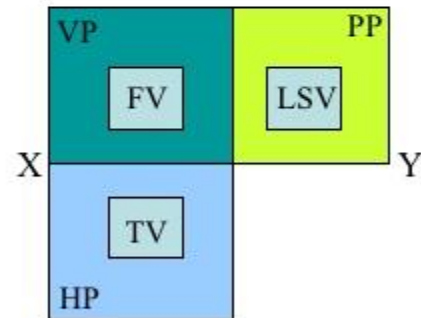
Orthographic Sketching

محاضرة يوم الاحد ٢٠-٩-٢٠٢٠
ومحاضرة يوم الثلاثاء ٢٢-٩-٢٠٢٠
مع التمارين الازمه

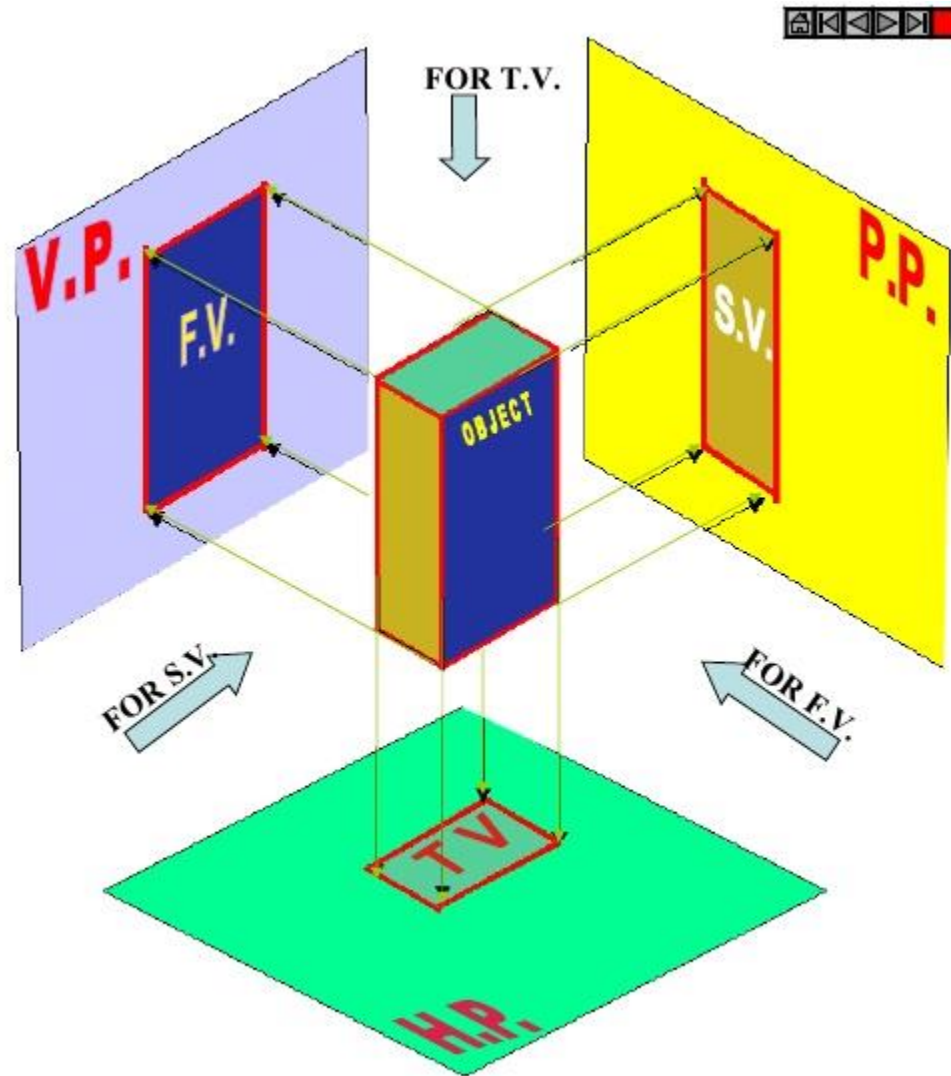
FIRST ANGLE PROJECTION

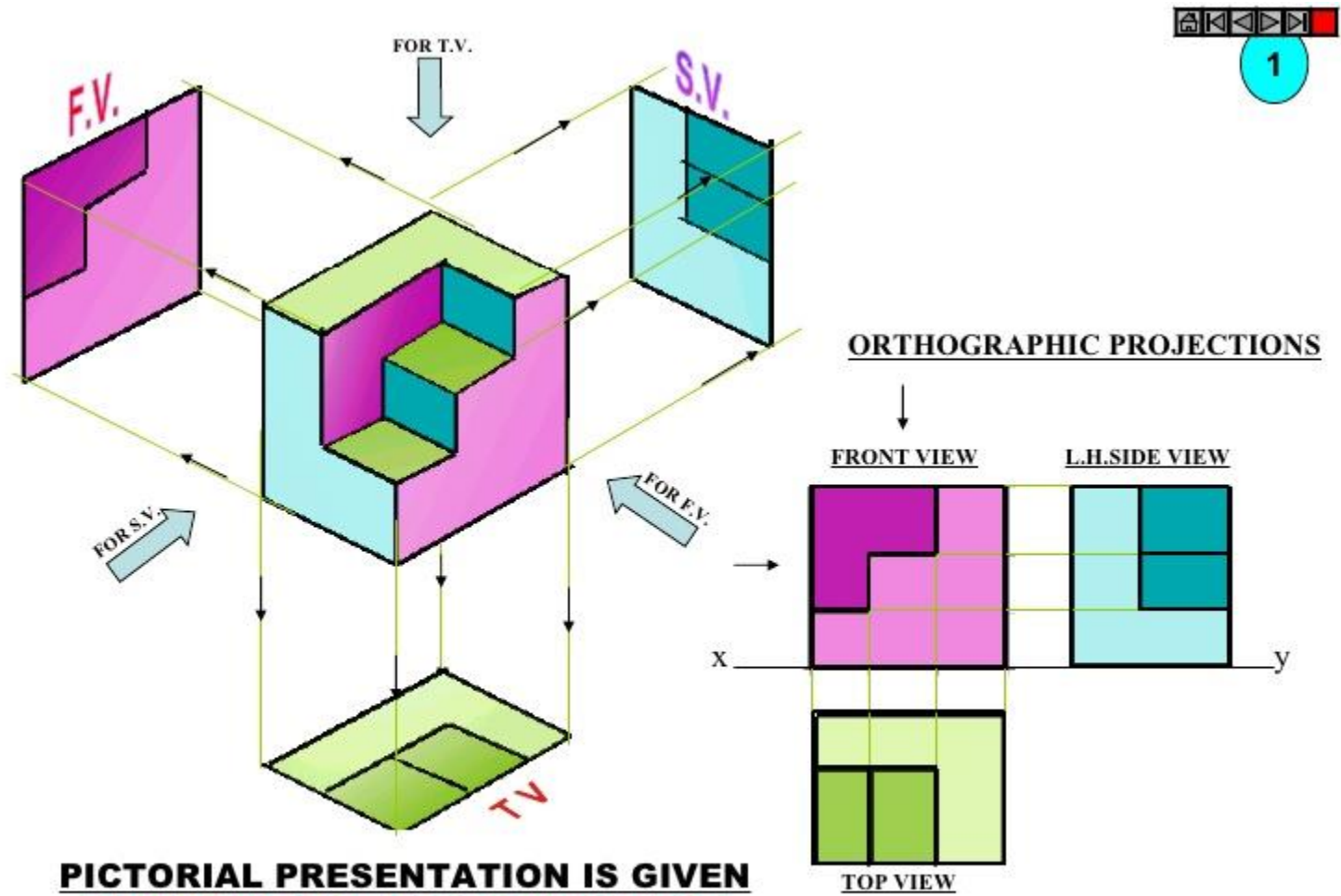
IN THIS METHOD,
THE OBJECT IS ASSUMED TO BE
SITUATED IN FIRST QUADRANT
MEANS
ABOVE HP & INFRONT OF VP.

OBJECT IS INBETWEEN
OBSERVER & PLANE.

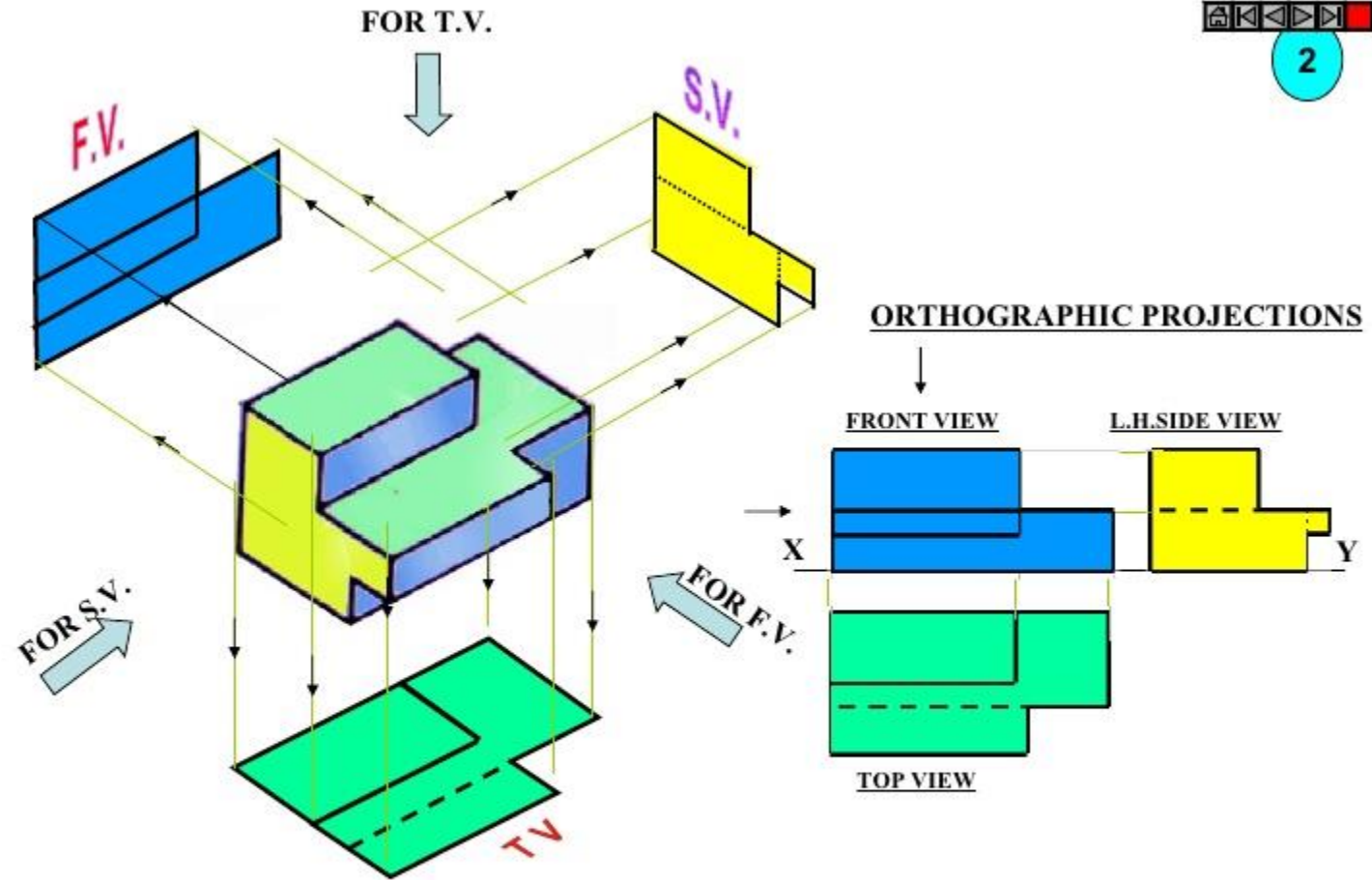


ACTUAL PATTERN OF
PLANES & VIEWS
IN
FIRST ANGLE METHOD
OF PROJECTIONS

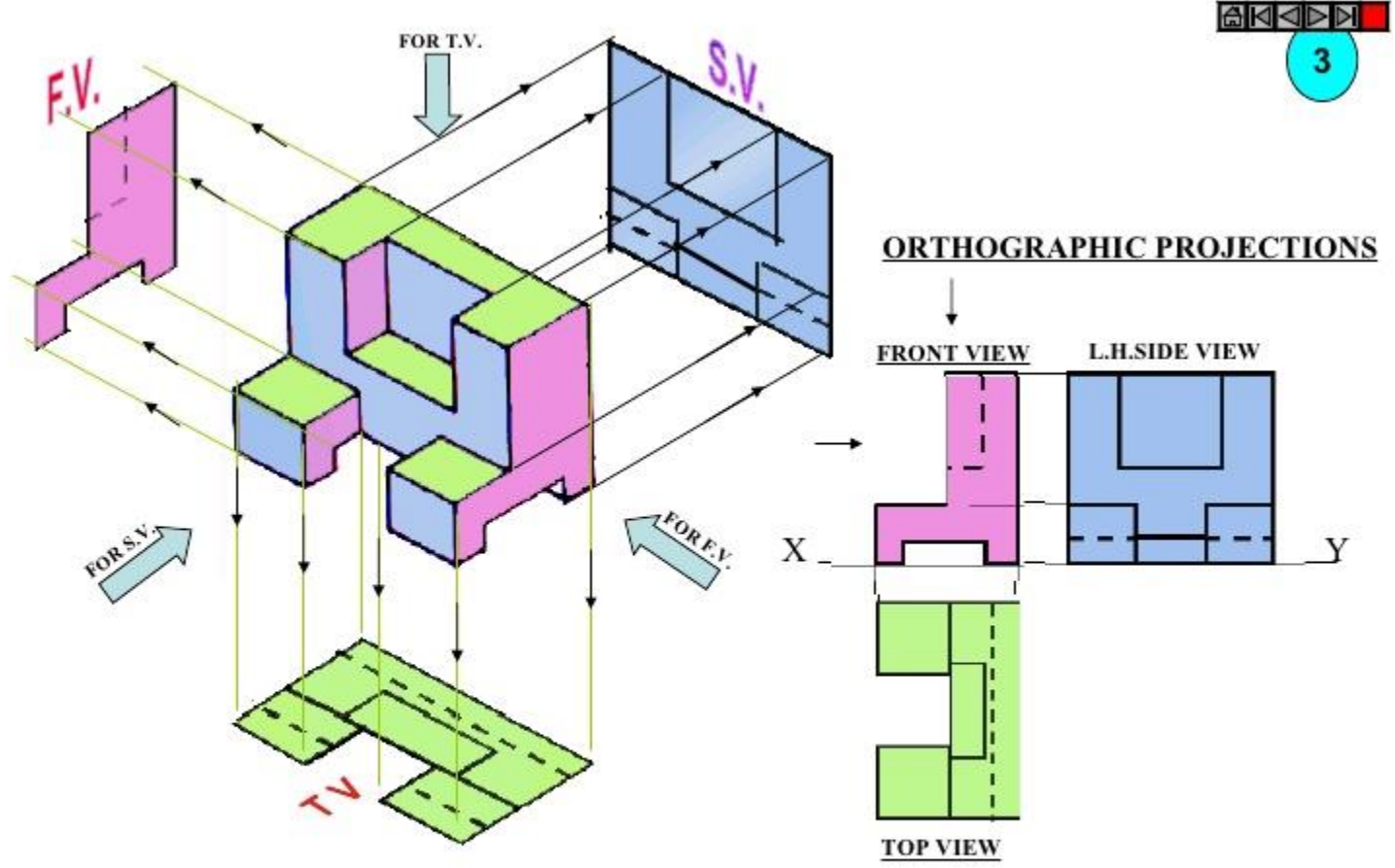




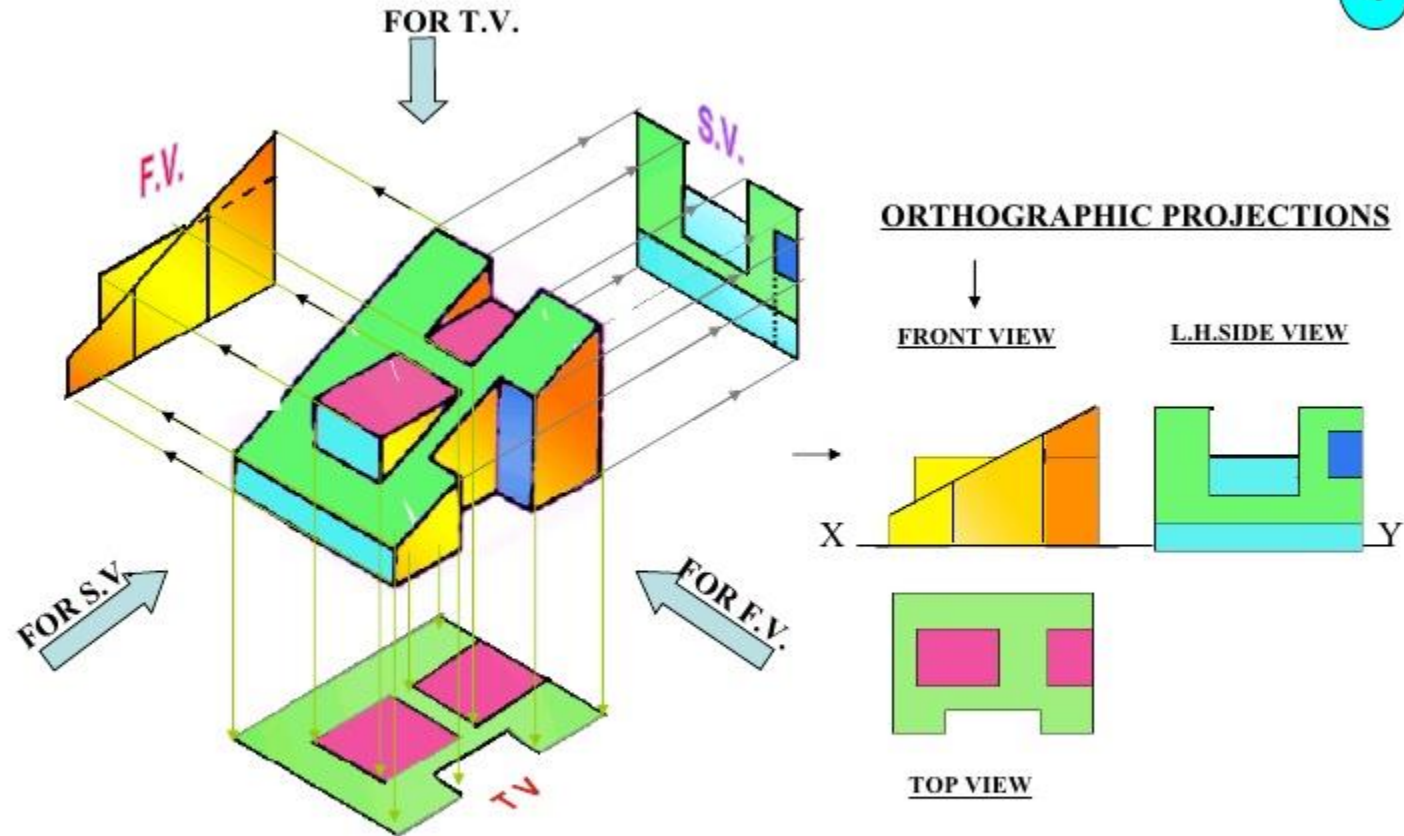
PICTORIAL PRESENTATION IS GIVEN
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



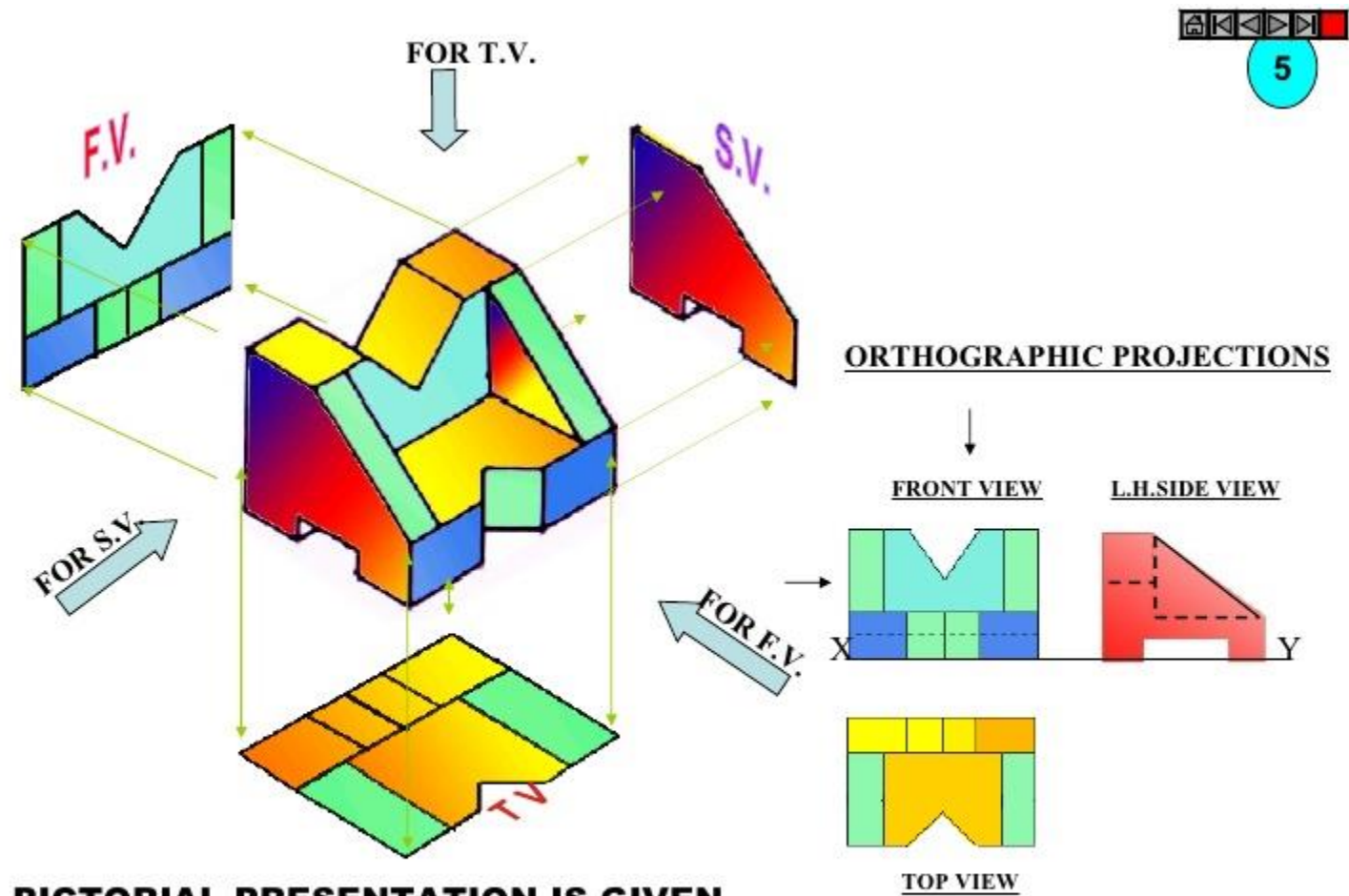
PICTORIAL PRESENTATION IS GIVEN
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



PICTORIAL PRESENTATION IS GIVEN
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

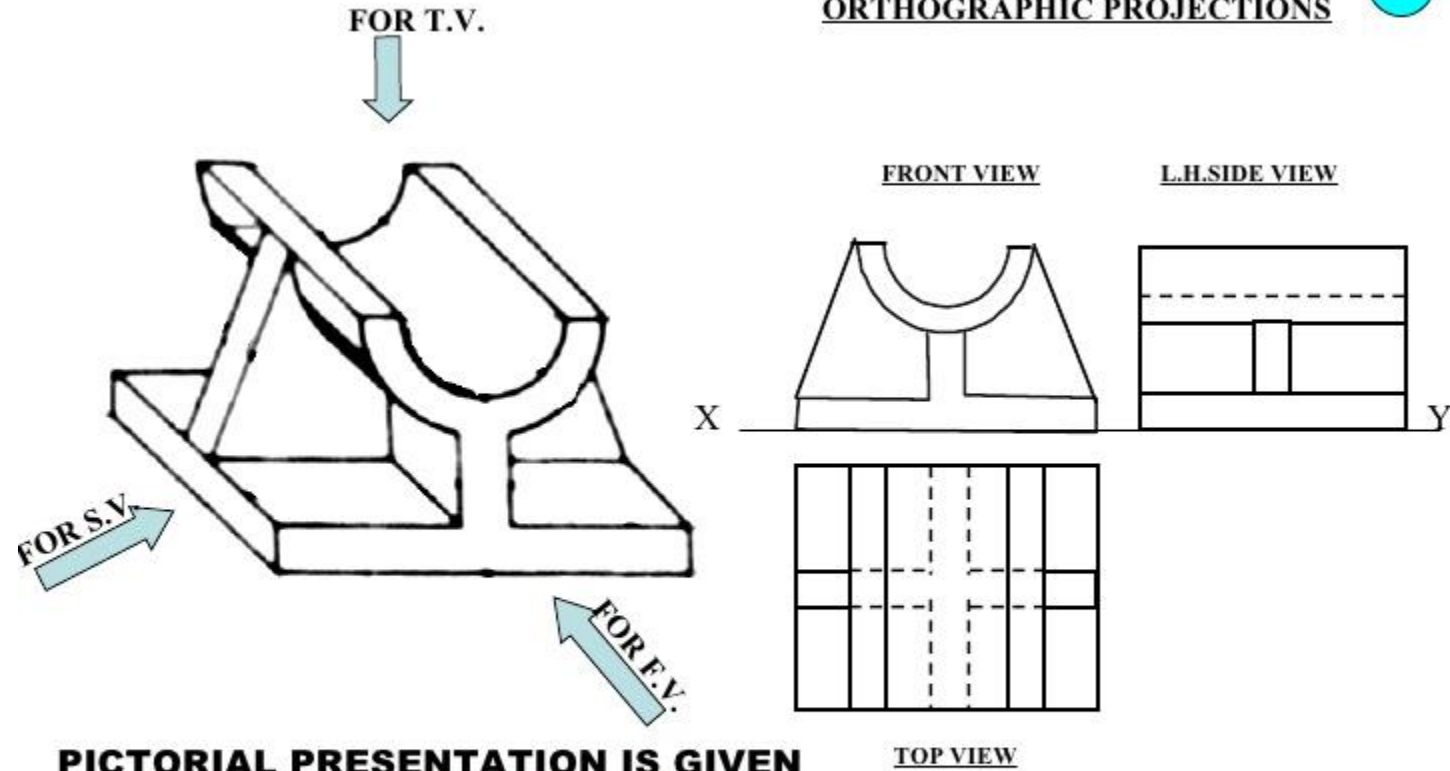


PICTORIAL PRESENTATION IS GIVEN
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



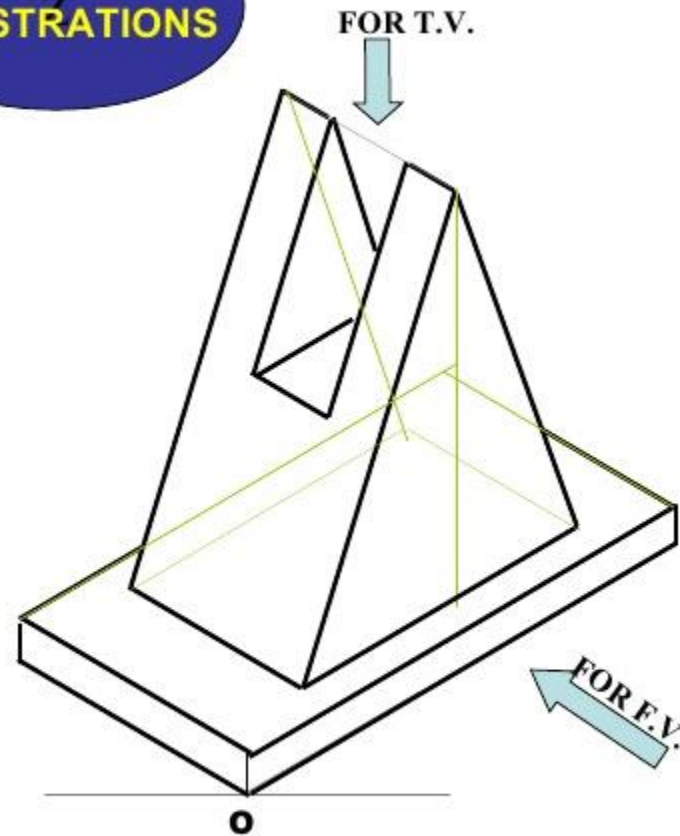
PICTORIAL PRESENTATION IS GIVEN
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

ORTHOGRAPHIC PROJECTIONS



PICTORIAL PRESENTATION IS GIVEN
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

**STUDY
ILLUSTRATIONS**

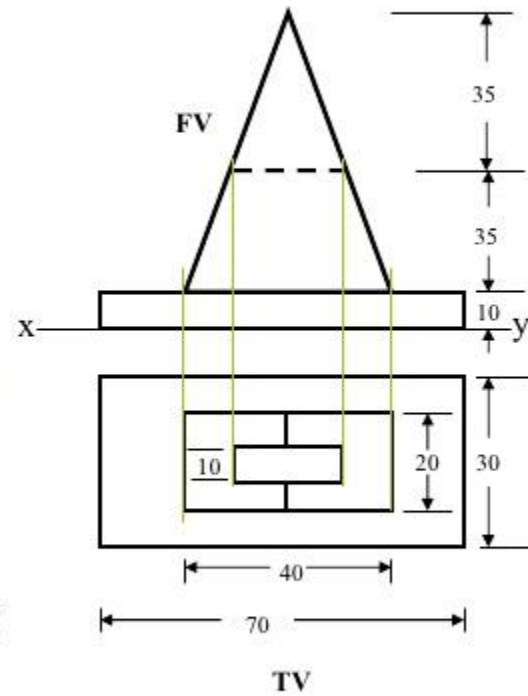


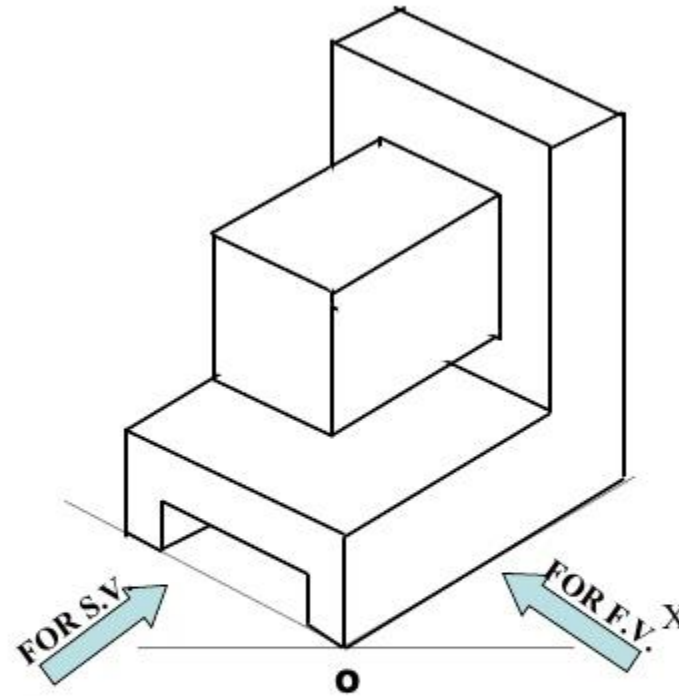
PICTORIAL PRESENTATION IS GIVEN
DRAW FV AND TV OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



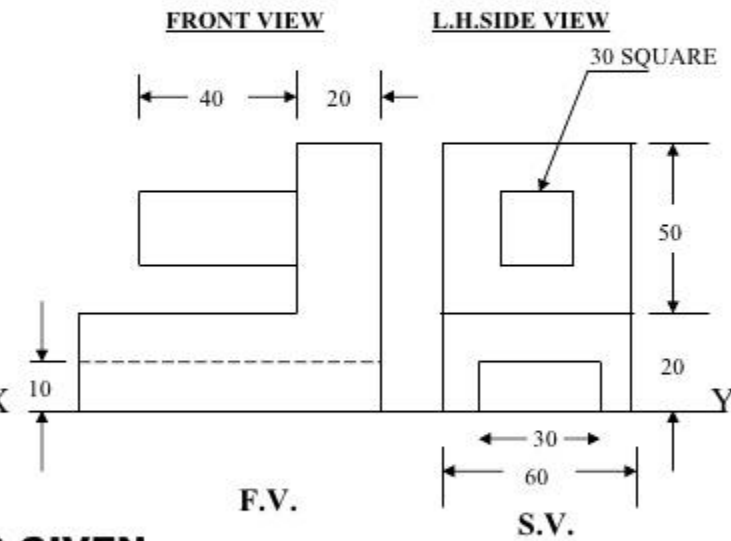
13

ORTHOGRAPHIC PROJECTIONS





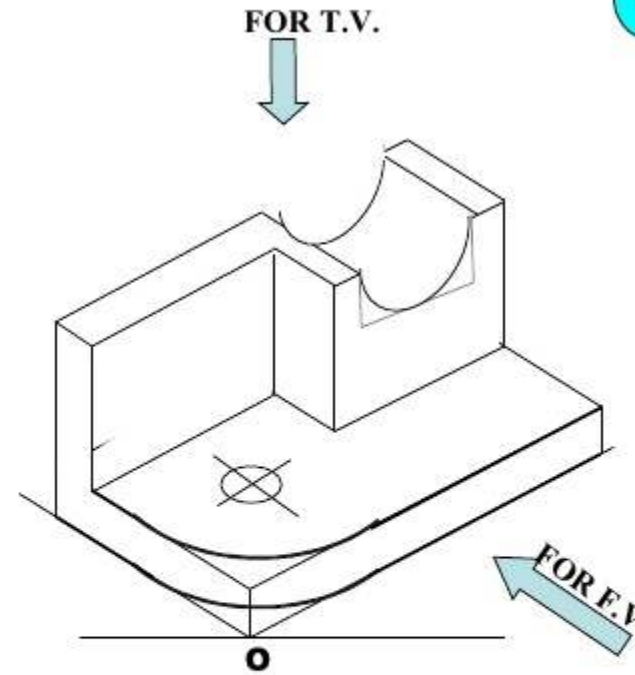
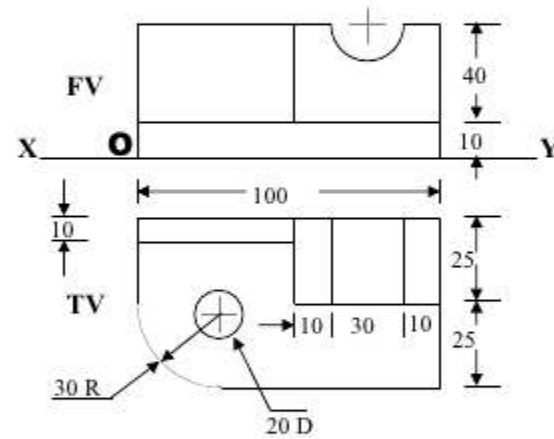
ORTHOGRAPHIC PROJECTIONS



PICTORIAL PRESENTATION IS GIVEN

**DRAW FV AND SV OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD**

ORTHOGRAPHIC PROJECTIONS

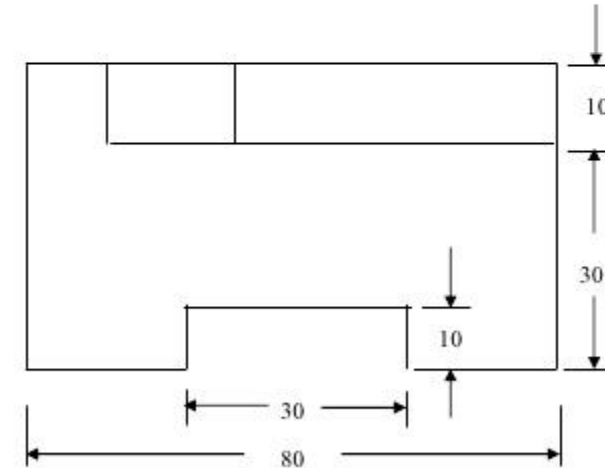
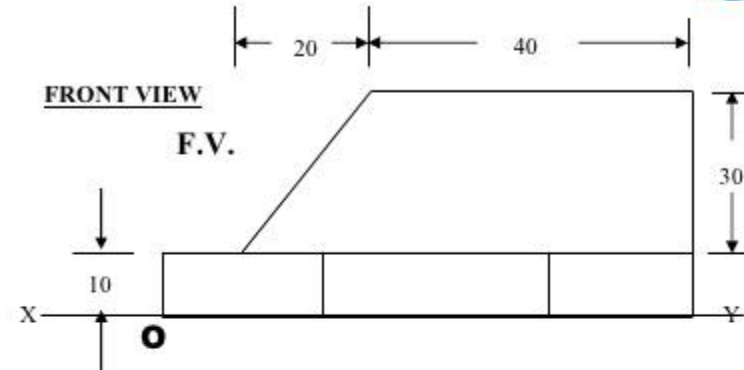
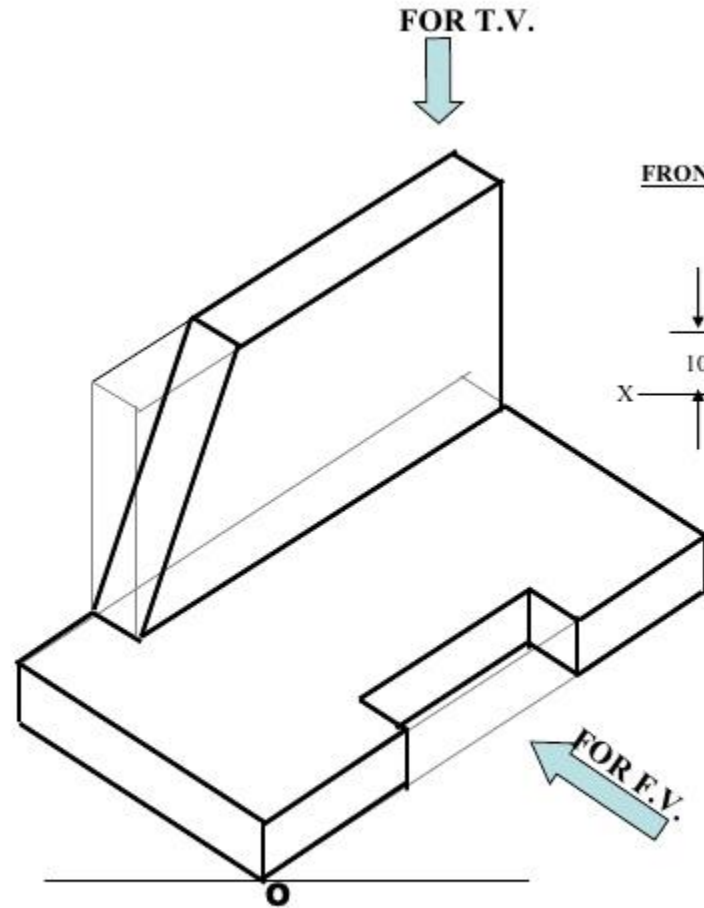


PICTORIAL PRESENTATION IS GIVEN
DRAW FV AND TV OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



24

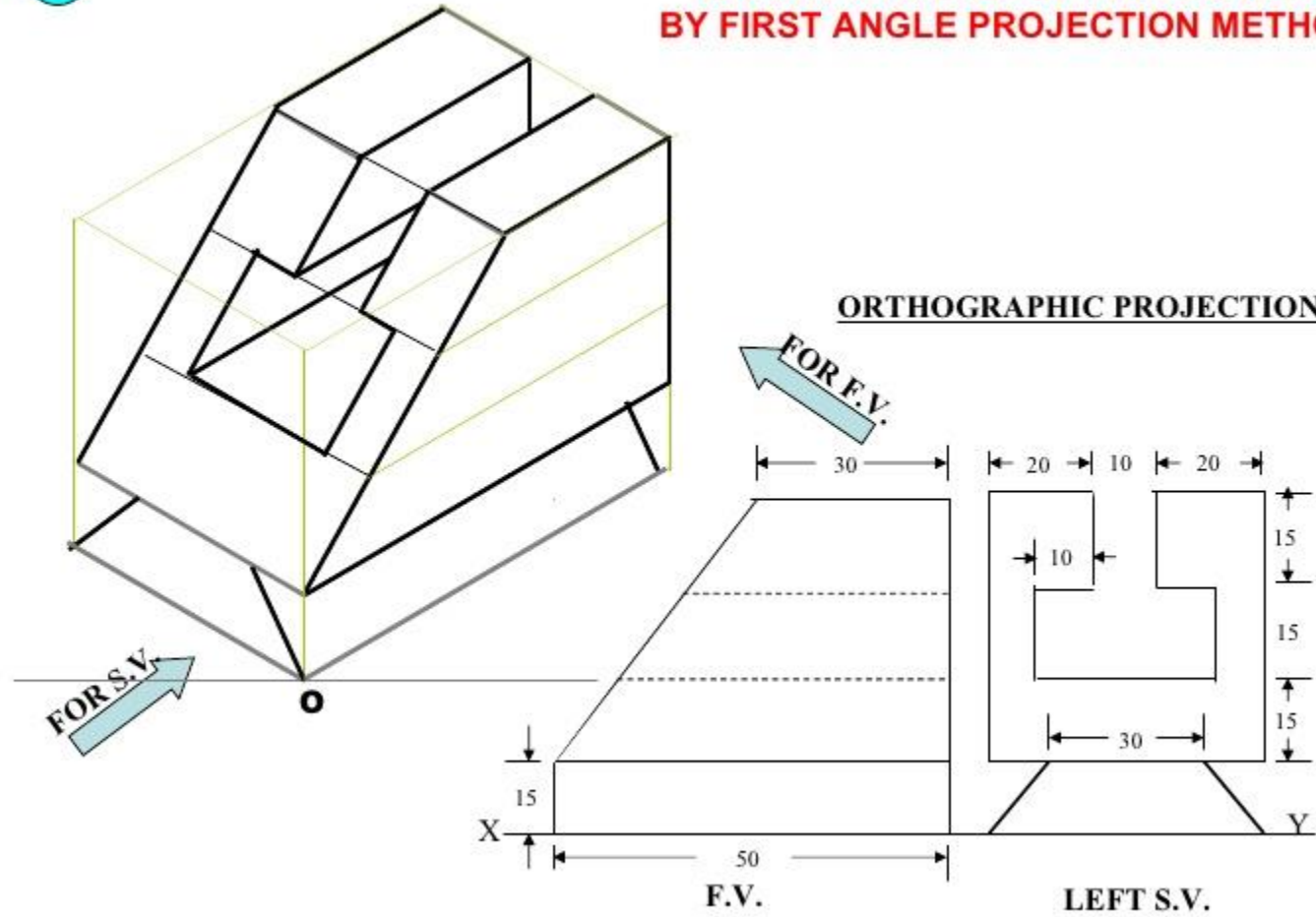
ORTHOGRAPHIC PROJECTIONS



T.V. TOP VIEW

PICTORIAL PRESENTATION IS GIVEN
DRAW FV AND TV OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

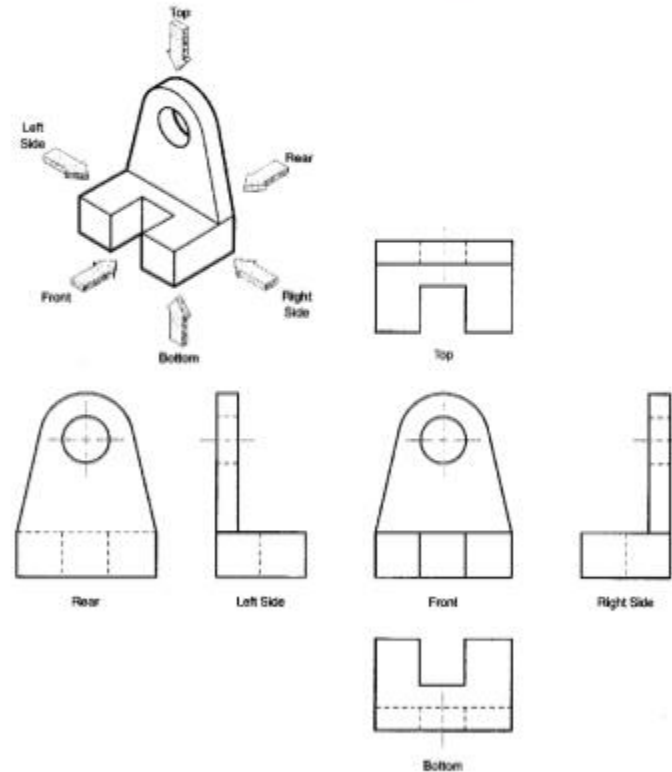
PICTORIAL PRESENTATION IS GIVEN
DRAW FV AND SV OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



Six Principle Views

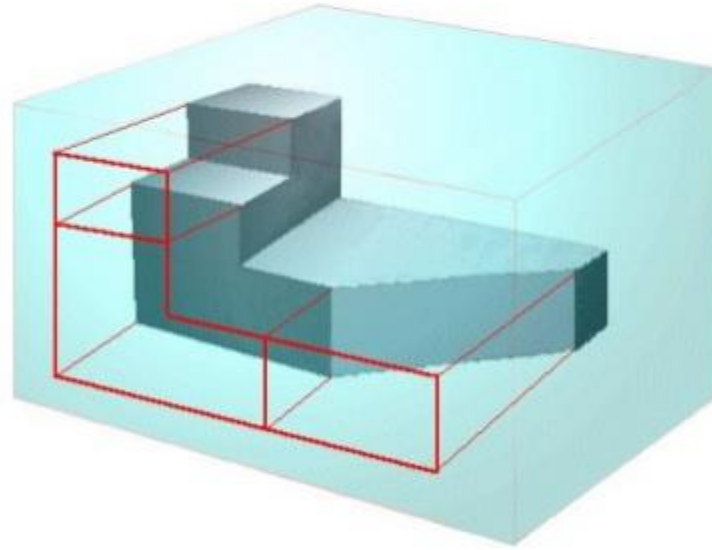
The 6 views of projection include:

- FRONT
- RIGHT SIDE
- TOP
- BOTTOM
- LEFT SIDE
- REAR



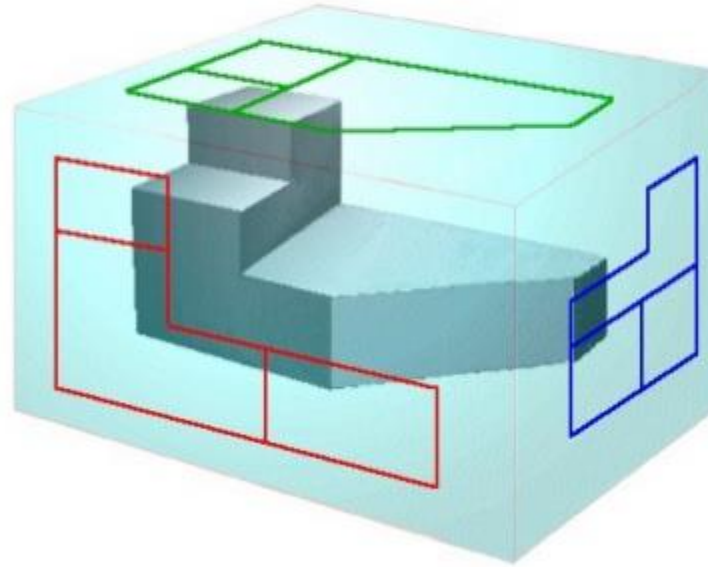
Glass Box

Projection of points to FRONT VIEW



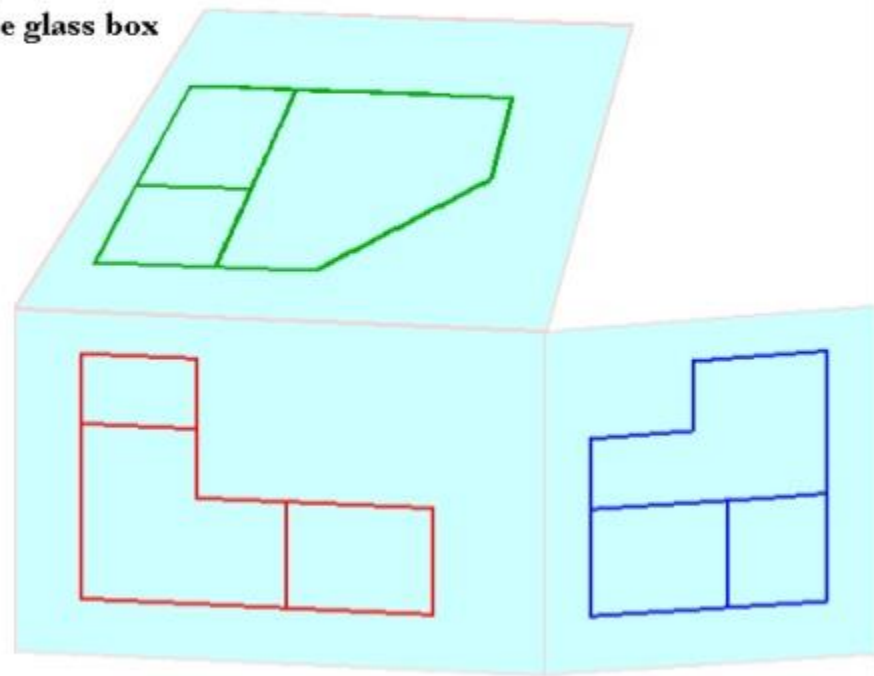
Glass Box

Projection of points to RIGHT SIDE VIEW

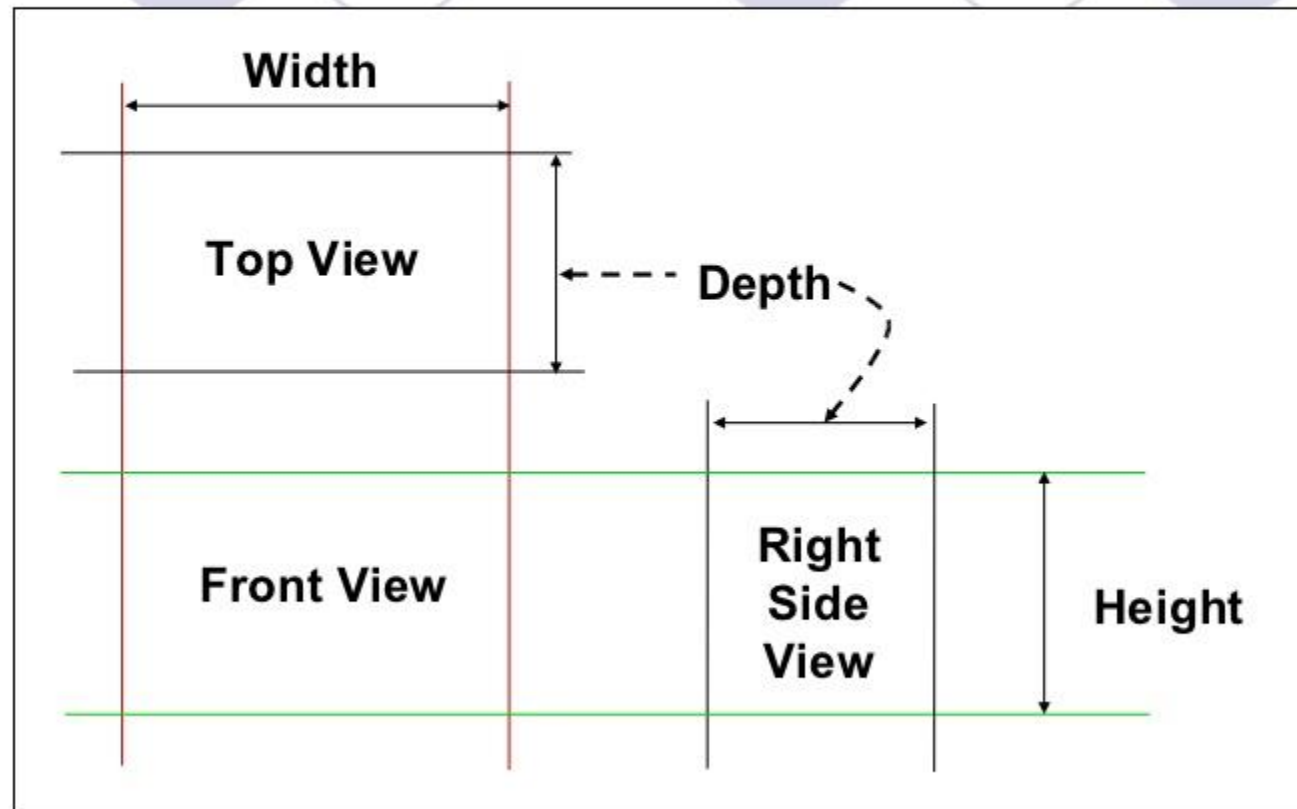


Glass Box

Unfold the glass box



Front, Side and Top Views



Line Types

Visible Lines – used to represent features that are seen in the current view



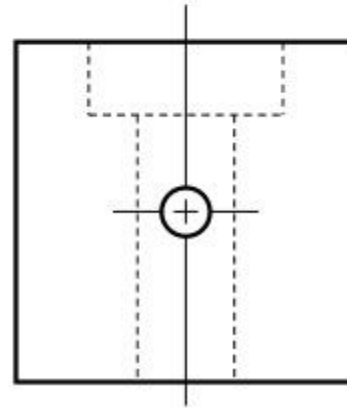
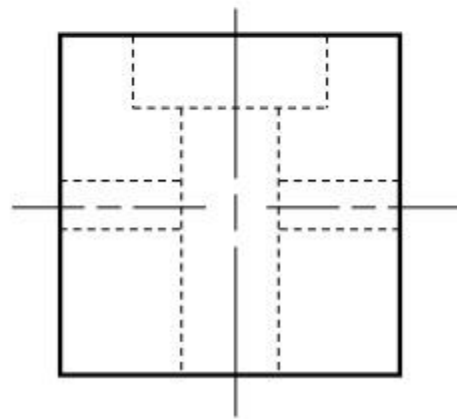
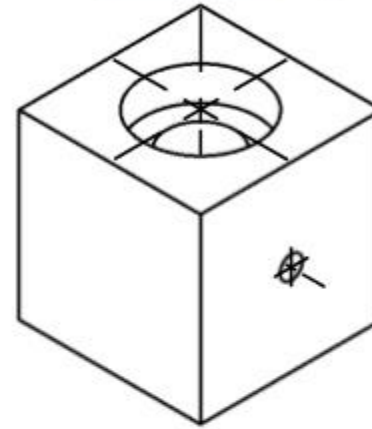
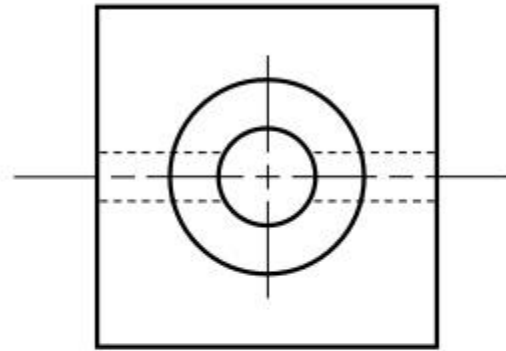
Hidden Lines – used to represent features that cannot be seen in the current view



Centerlines – used to represent symmetry and to mark the center of circles and the axes of cylinders, and the axes of symmetrical parts, such as cylinders and bolts



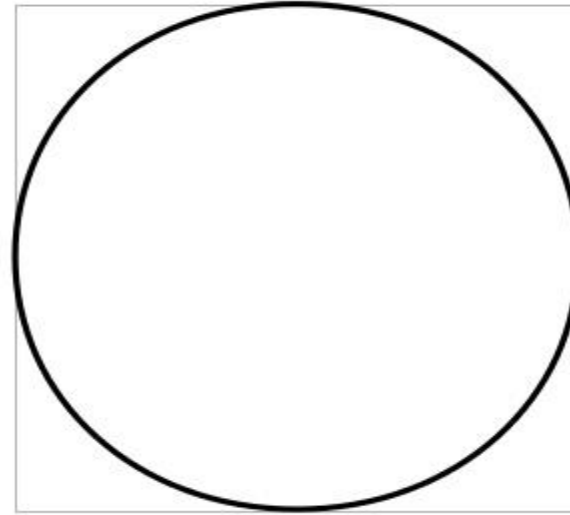
Example



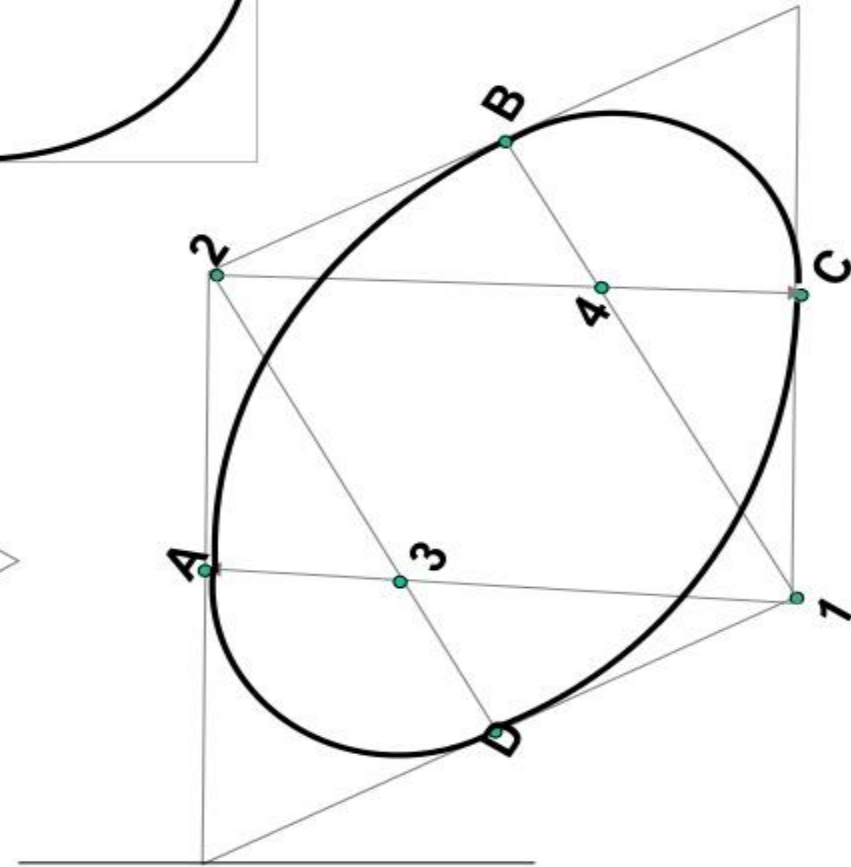
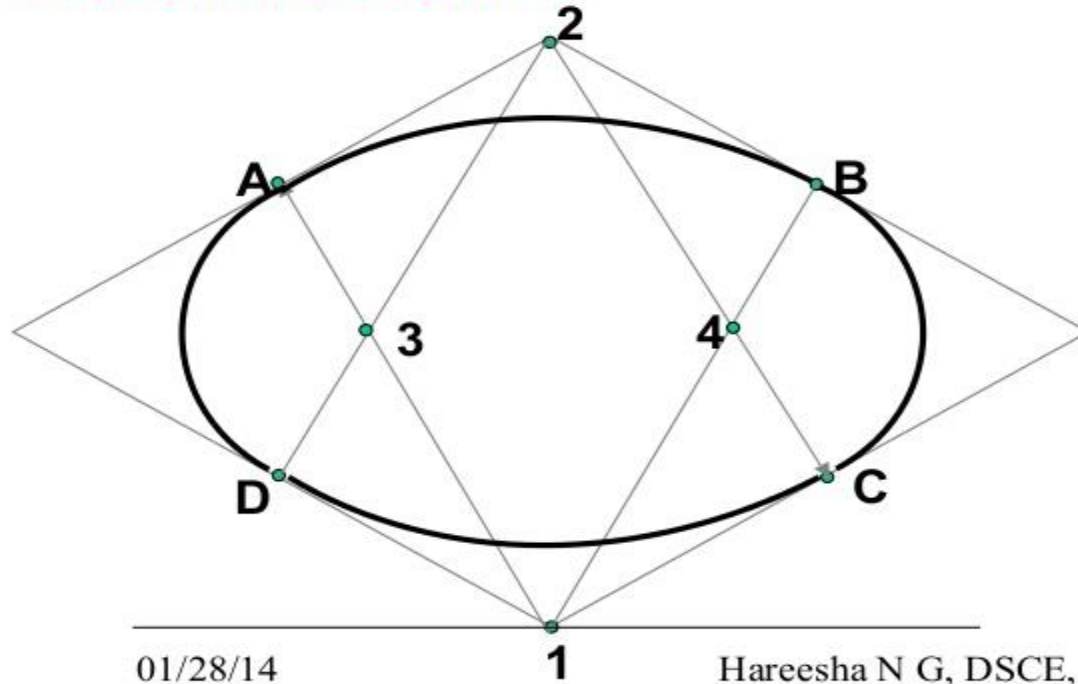
1. Visible
2. Hidden
3. Center

STUDY ILLUSTRATIONS

DRAW ISOMETRIC VIEW OF A CIRCLE IF IT IS A TV OR FV.



FIRST ENCLOSE IT IN A SQUARE.
IT'S ISOMETRIC IS A RHOMBUS WITH D & L AXES FOR TOP VIEW.
THEN USE H & L AXES FOR ISOMETRIC WHEN IT IS FRONT VIEW.
FOR CONSTRUCTION USE RHOMBUS METHOD SHOWN HERE. STUDY IT.



Drawing the Views

Step 4:

Where the horizontal projection lines of the top view intersect with the mitre line, draw vertical projection lines to the side view.

