PABLO

MECH 161
INTRO. TO COMPUTER AIDED DESIGN I

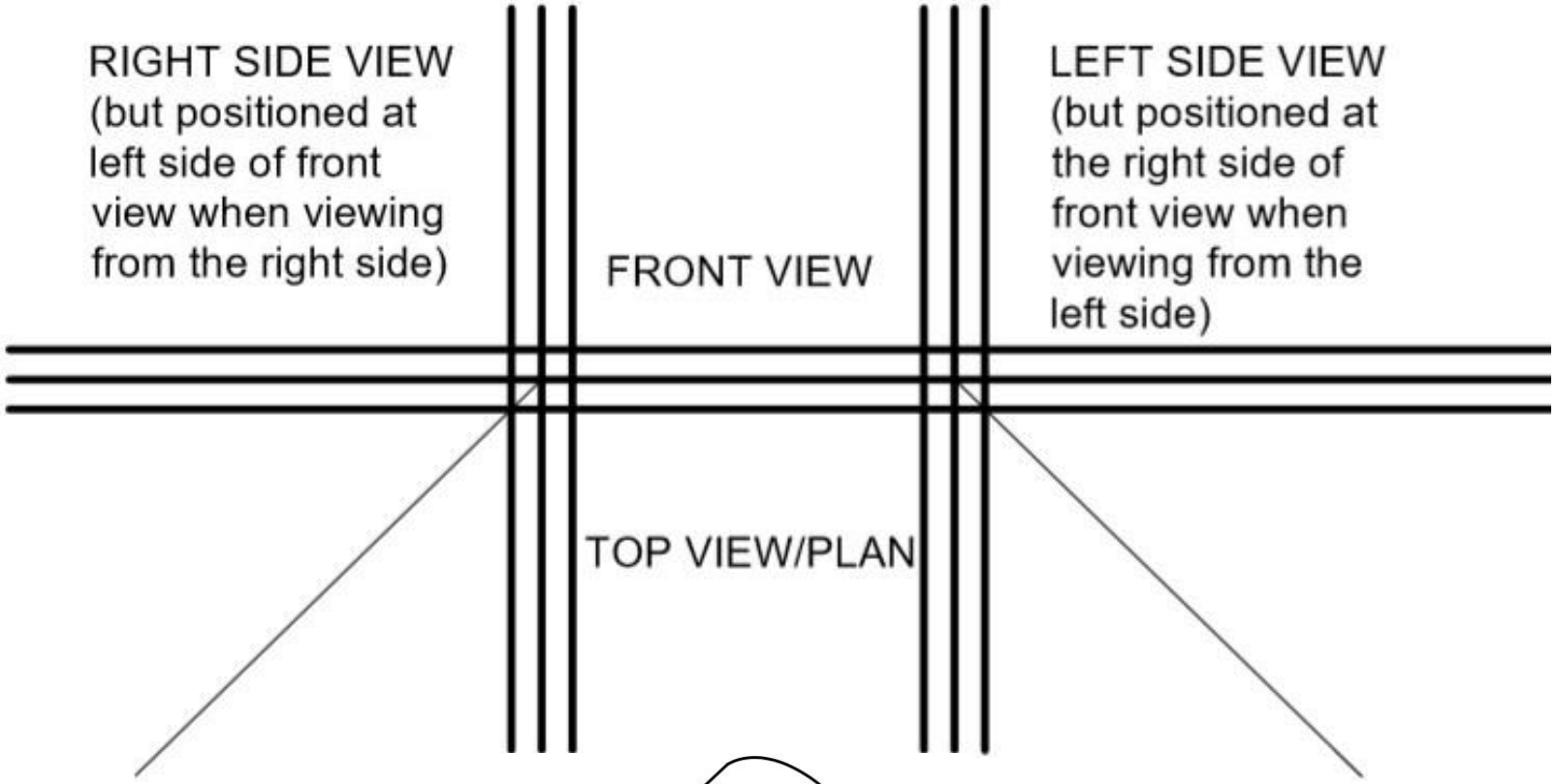
INTRO. TO AUTOCAD
(ORTHOGRAPHIC PROJECTIONS)

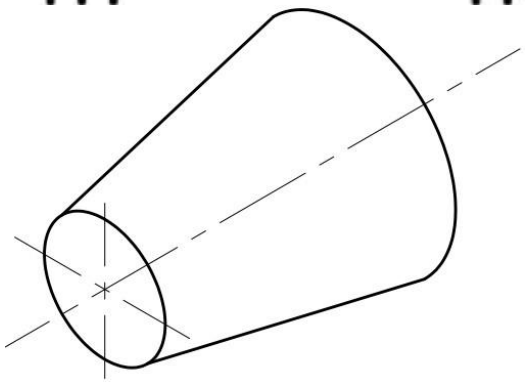
Orthographic Drawings

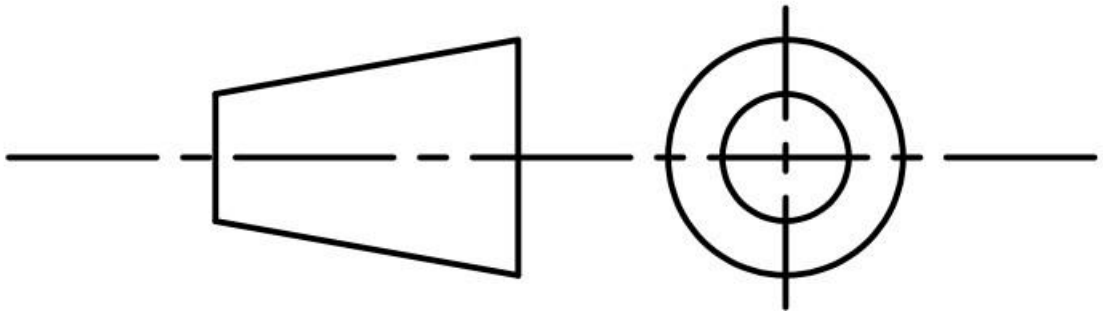
- Orthographic Projections is a technical drawing in which different views of an object are projected on different reference planes observing perpendicular to respective reference plane.

- **Orthographic drawing** is a way of drawing a 3D object from different directions in 2D.

- Usually a front, side and plan views are drawn so that a person looking at the drawing can see all the important sides.

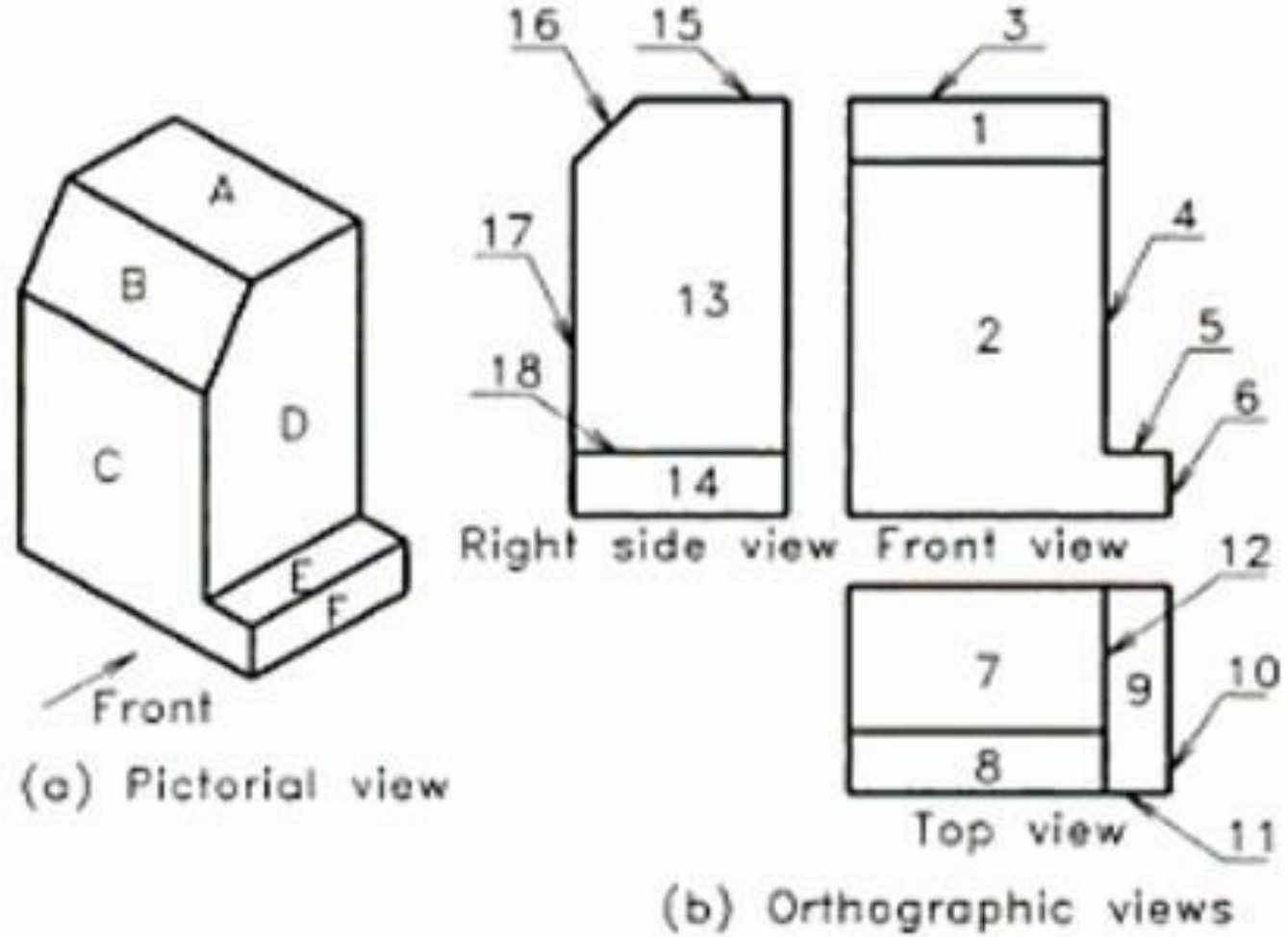

RIGHT SIDE VIEW
(but positioned at
left side of front
view when viewing
from the right side)
FRONT VIEW
LEFT SIDE VIEW
(but positioned at
the right side of
front view when
viewing from the
left side)
TOP VIEW/PLAN



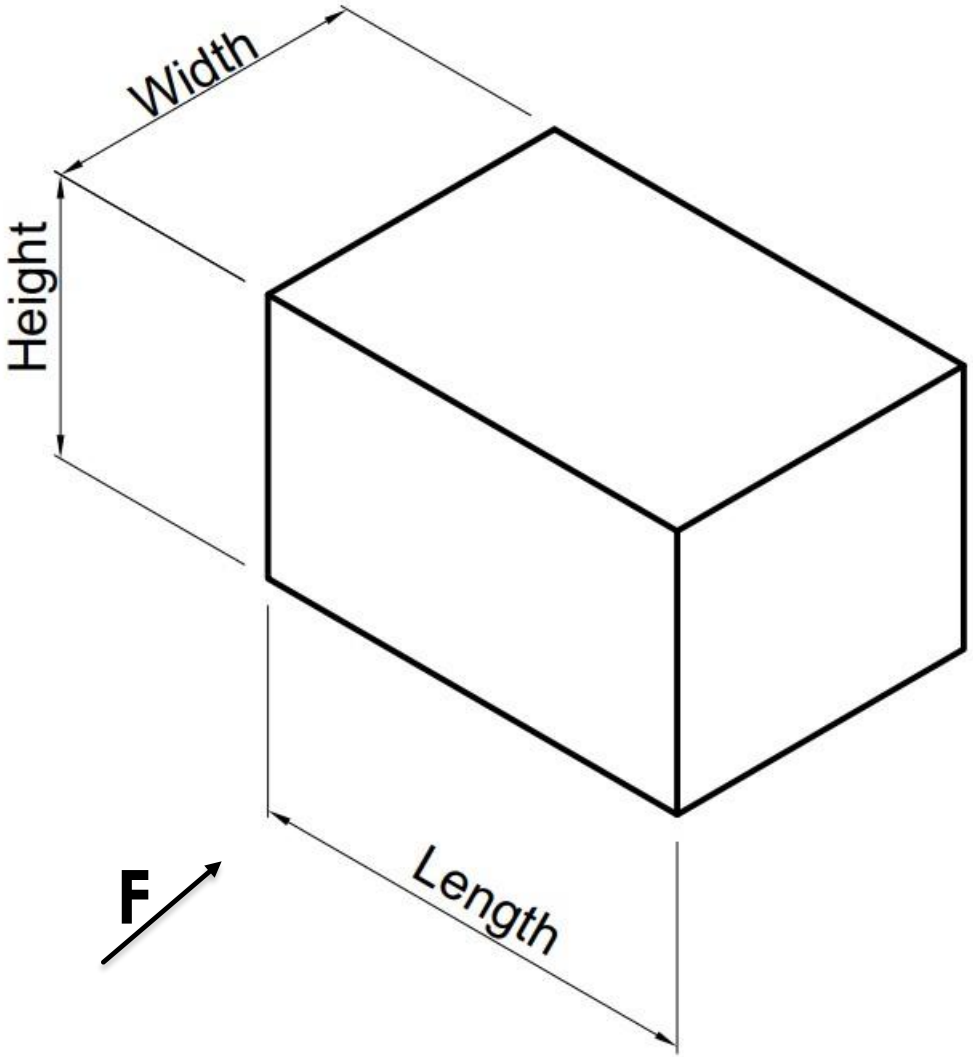


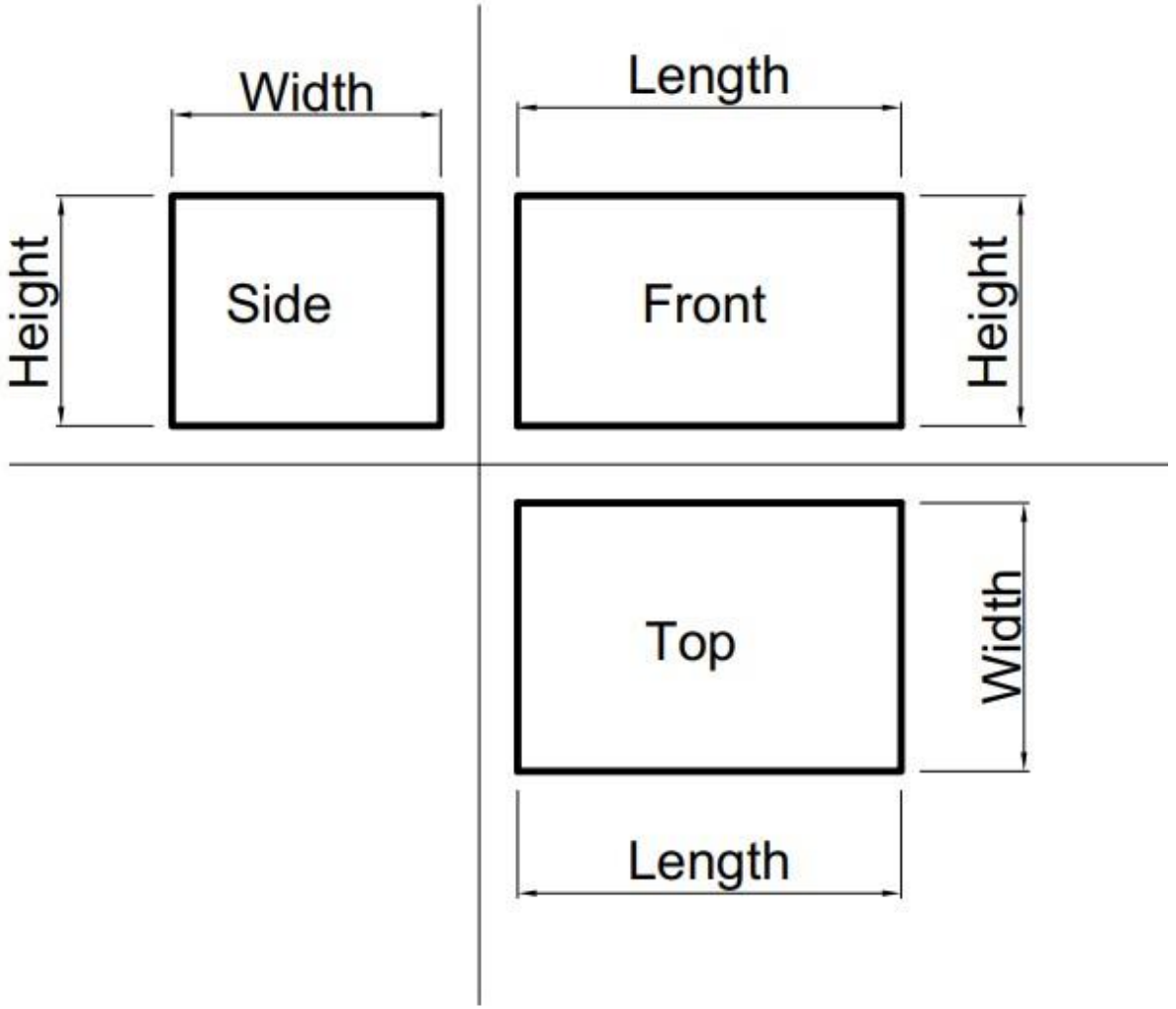
Third Angle Projection

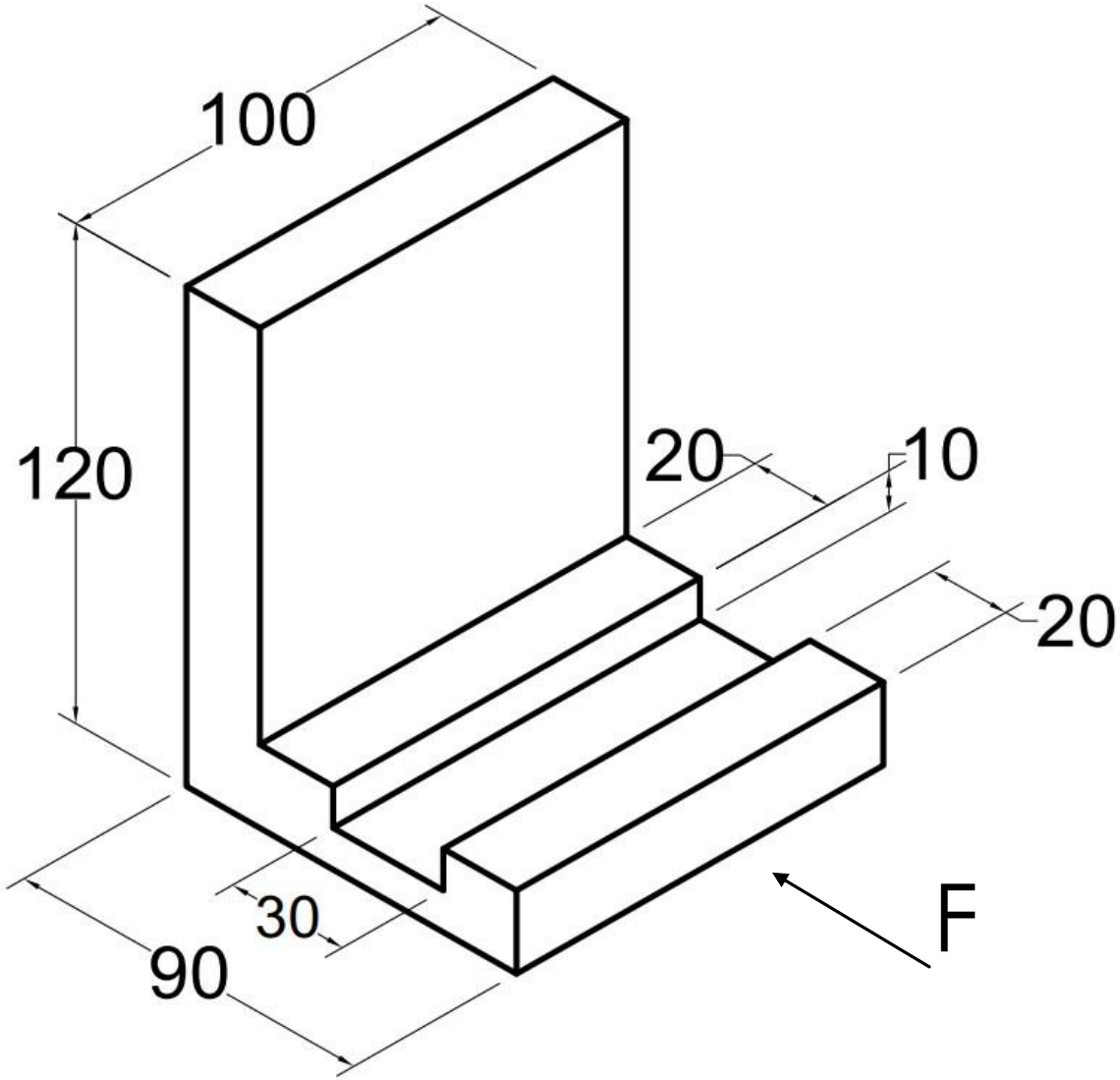
Principal Parts Observed



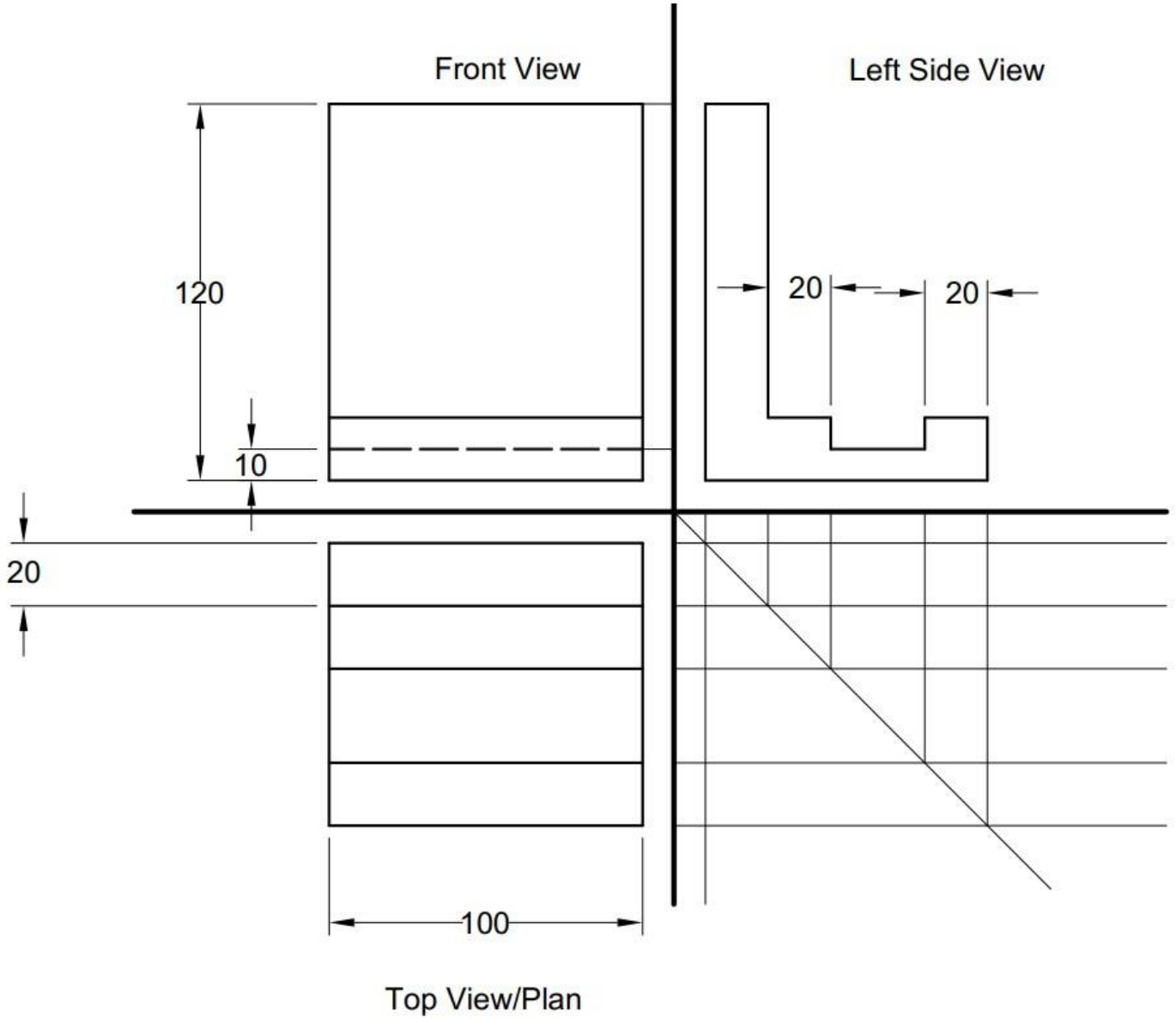
Producing the Orthographic Views





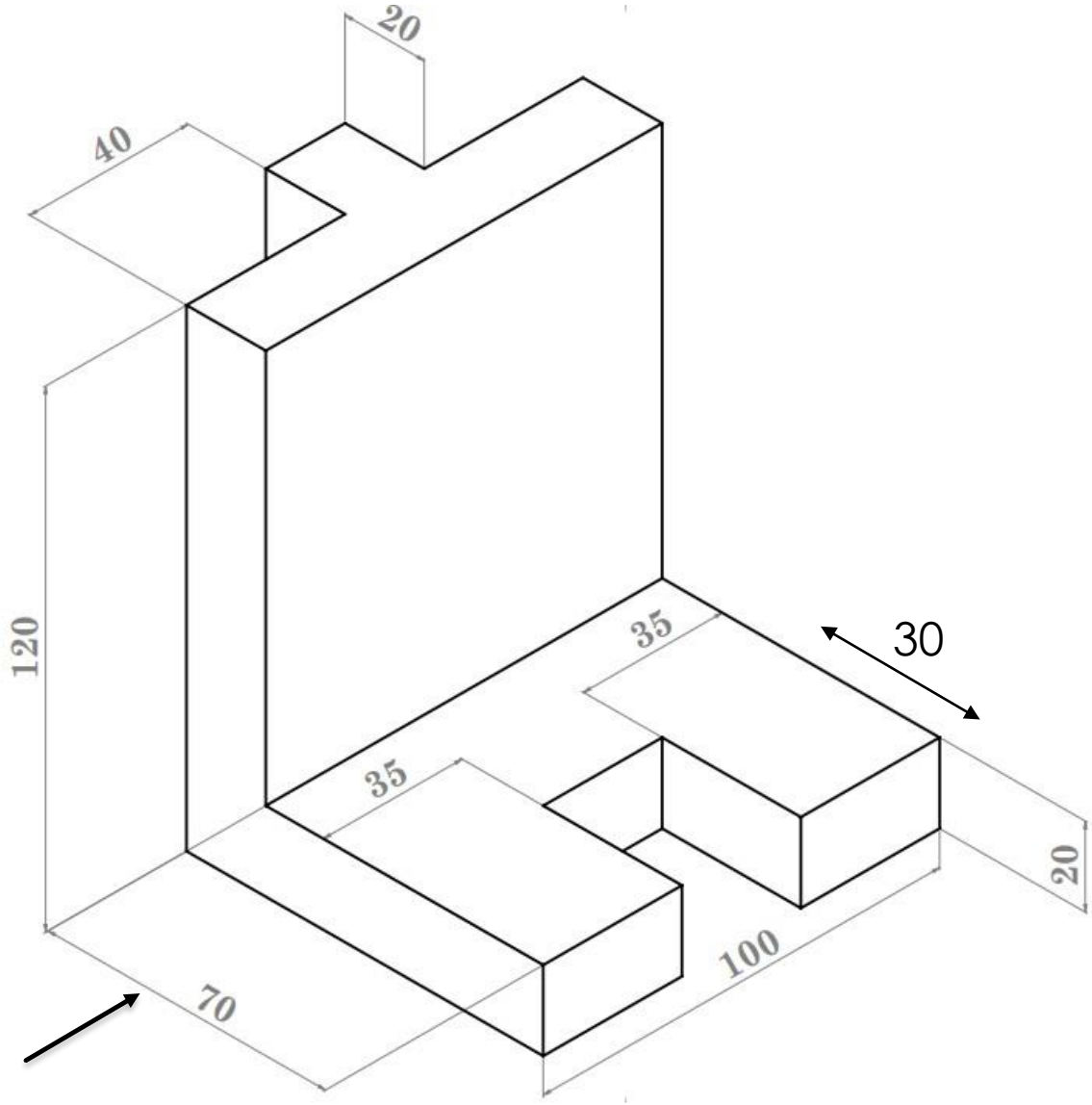

100
120
20
10
20
30
90
F

the block in 1st angle projection


Front View
Left Side View
120
10
20
20
20
20
100
Top View/Plan

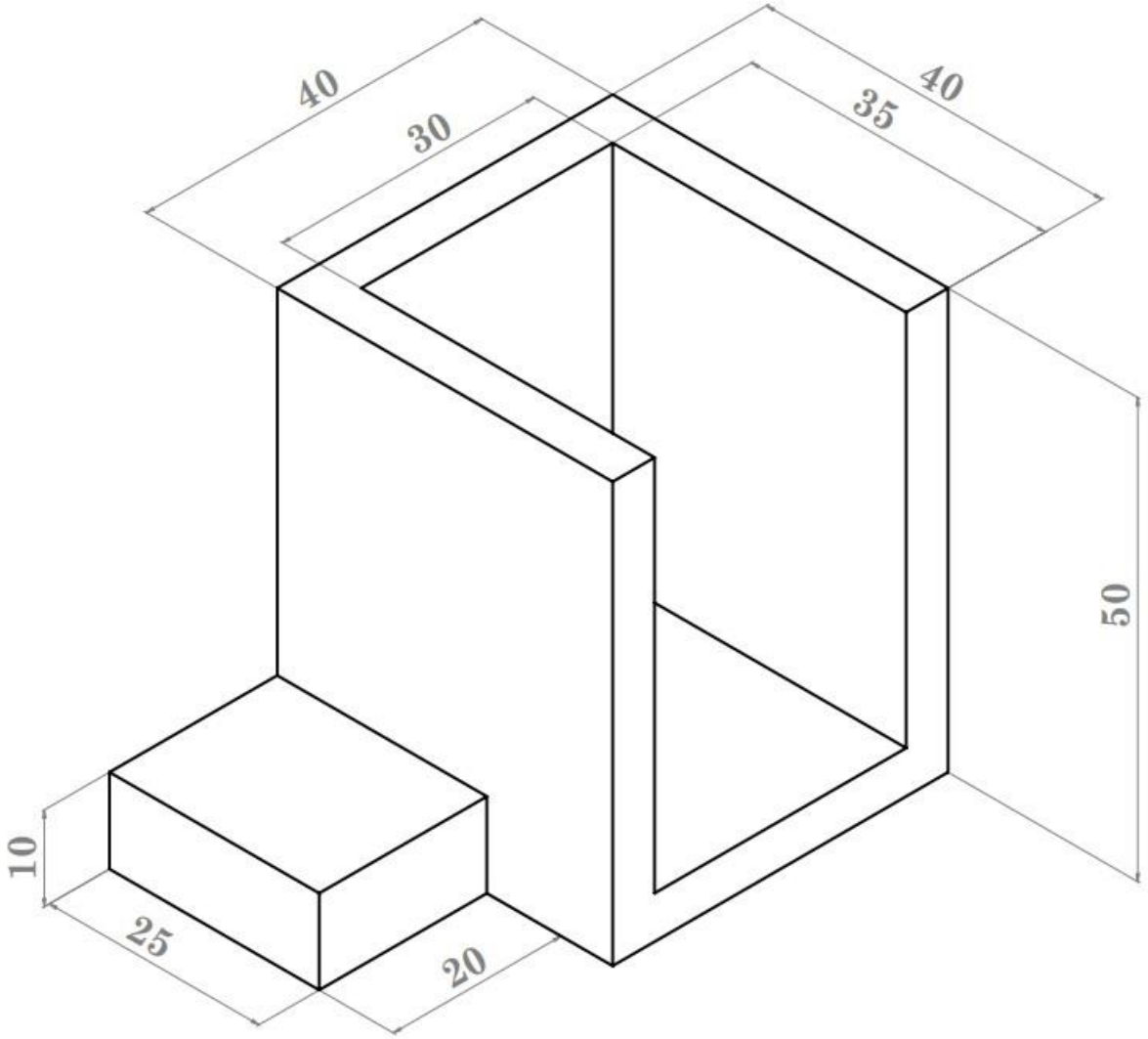
Block 3rd

F



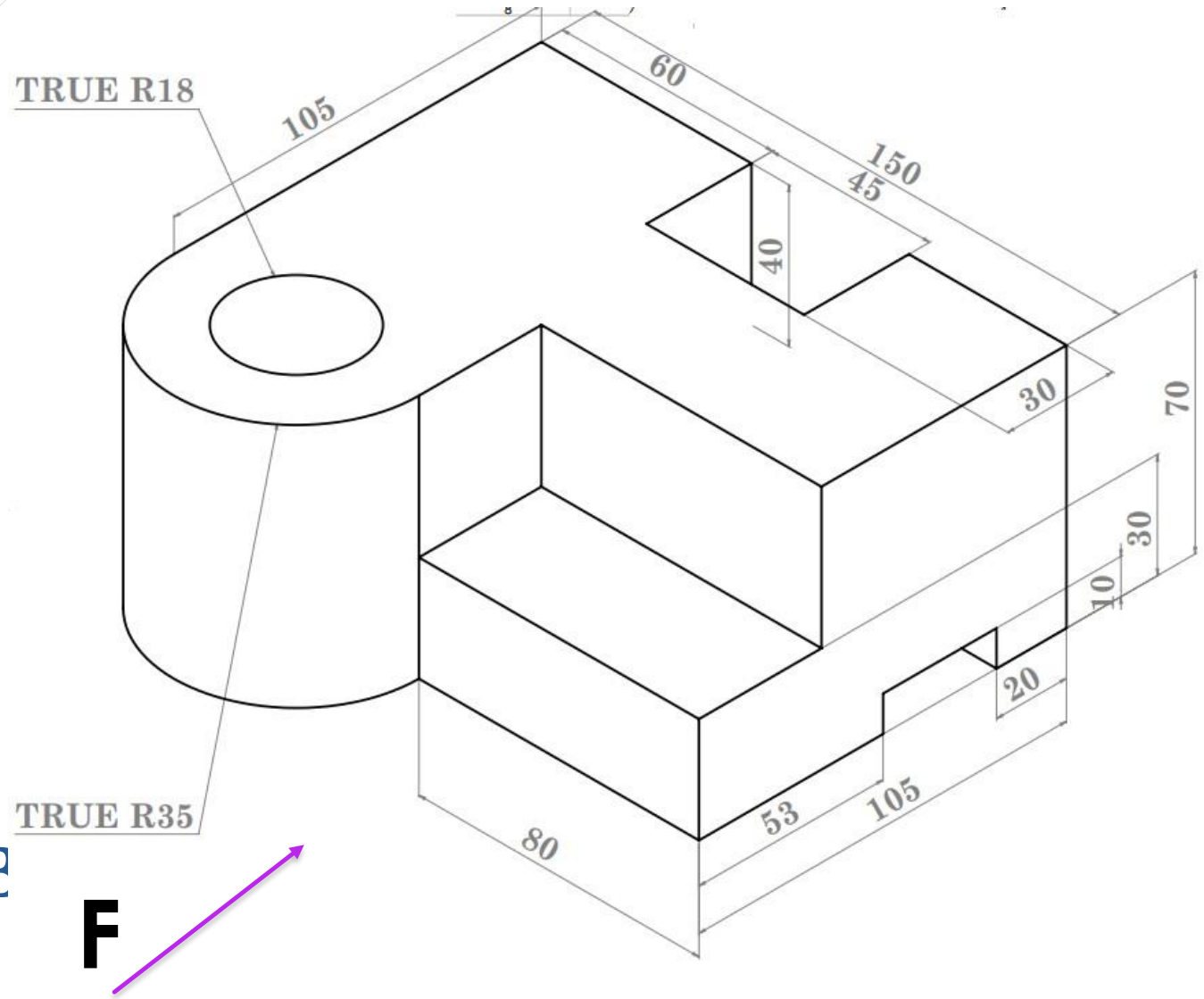
Produce the Orthographic Views of the Isometric

Produc

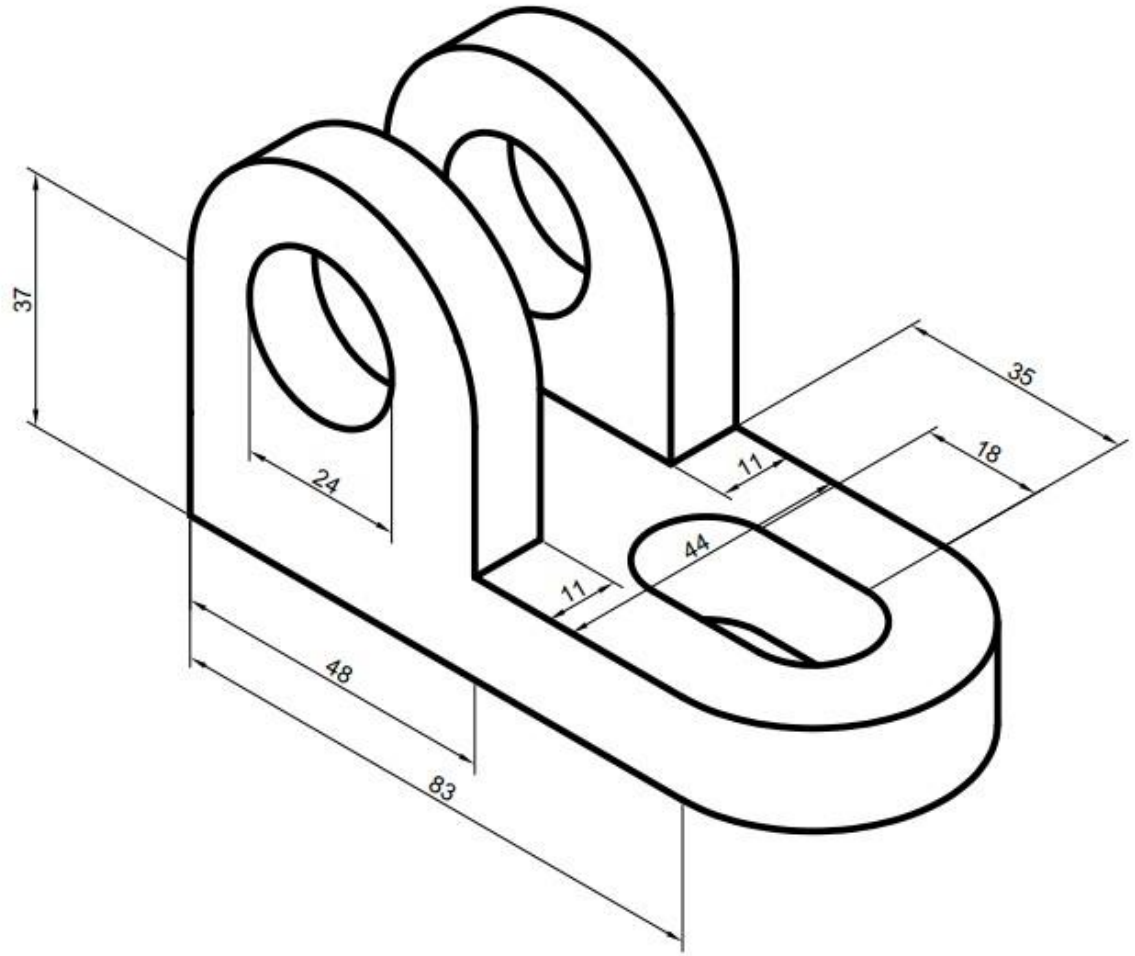


Isometric Block 1st Angle Projection

Produce the Orthographic Views of the Isometric



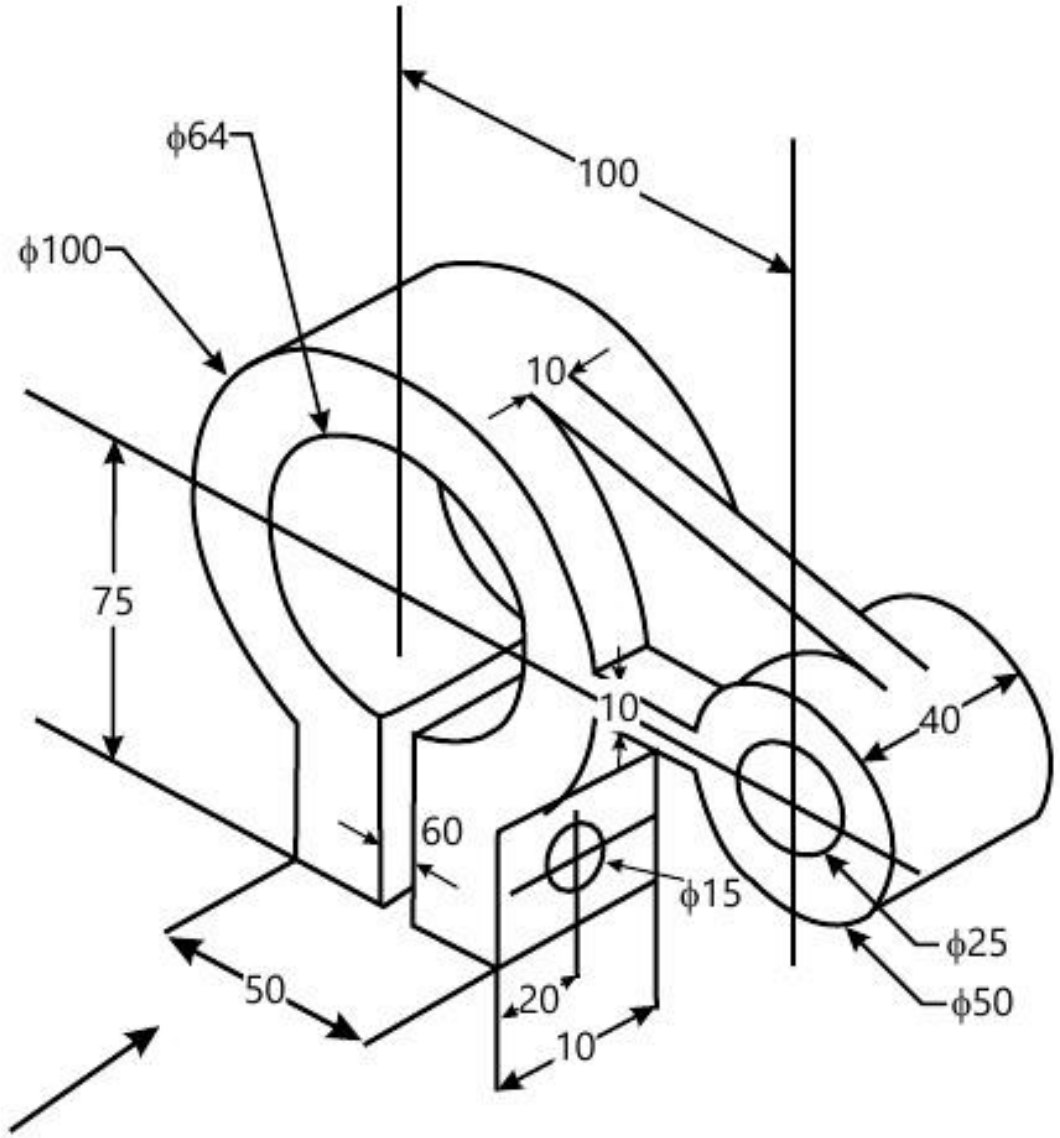
Produce the Orthographic Views of the



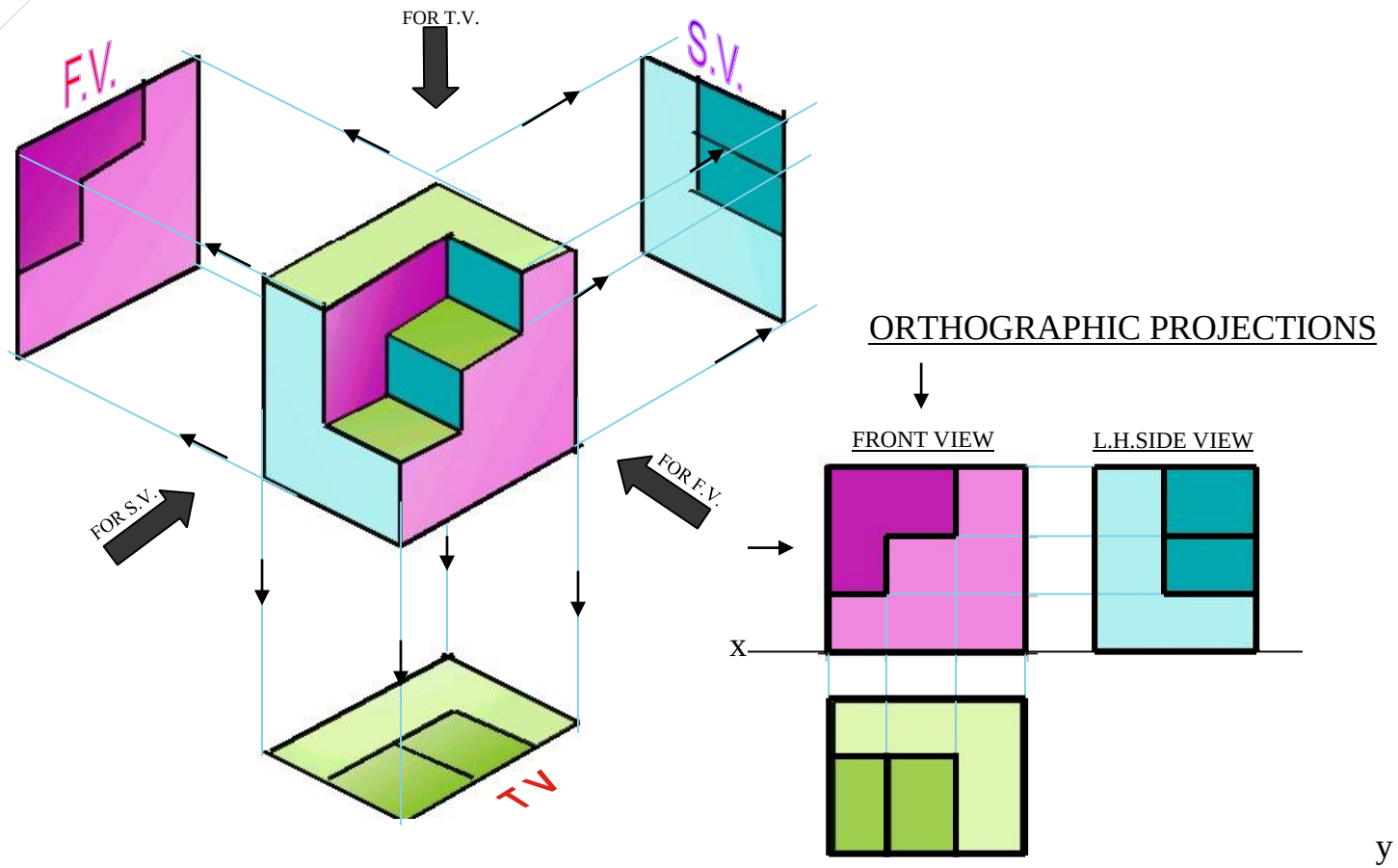
Produce the Orthographic Views of the Isometric

Isometric Block in 1st Angle Projections

Block in 3

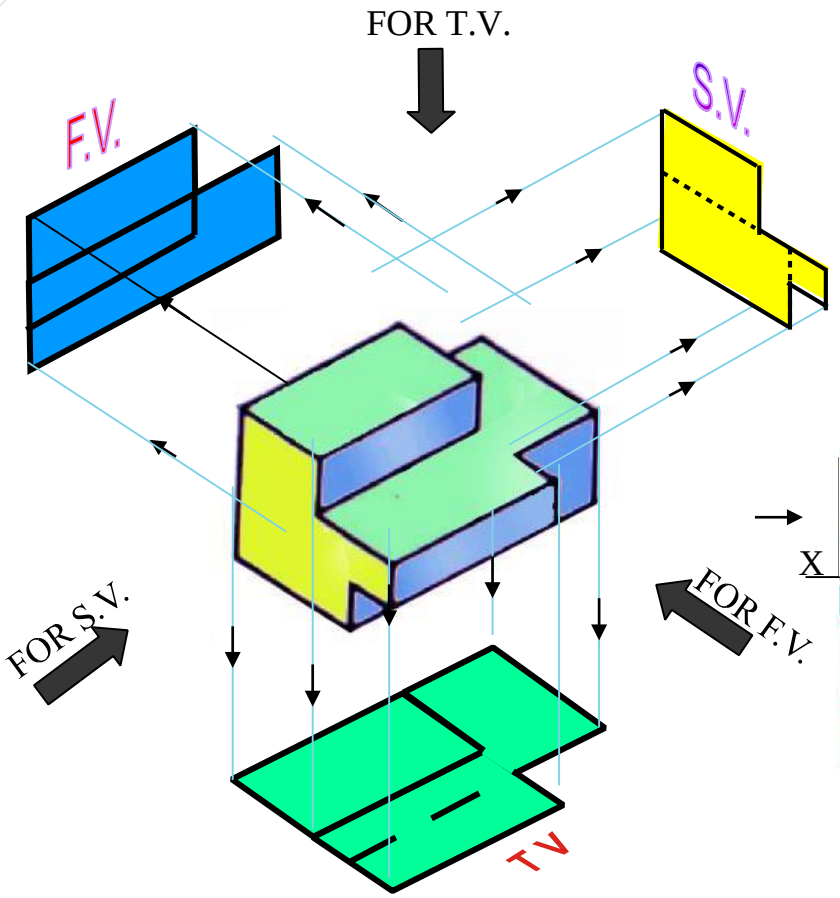


Produce the Orthographic Views of the Isometric

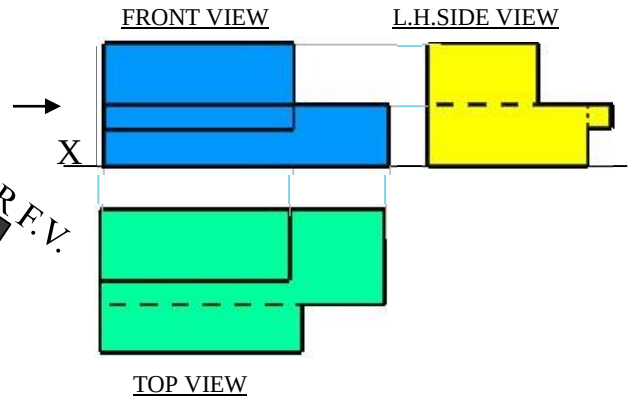


PICTORIAL PRESENTATION IS GIVEN TOP VIEW

DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

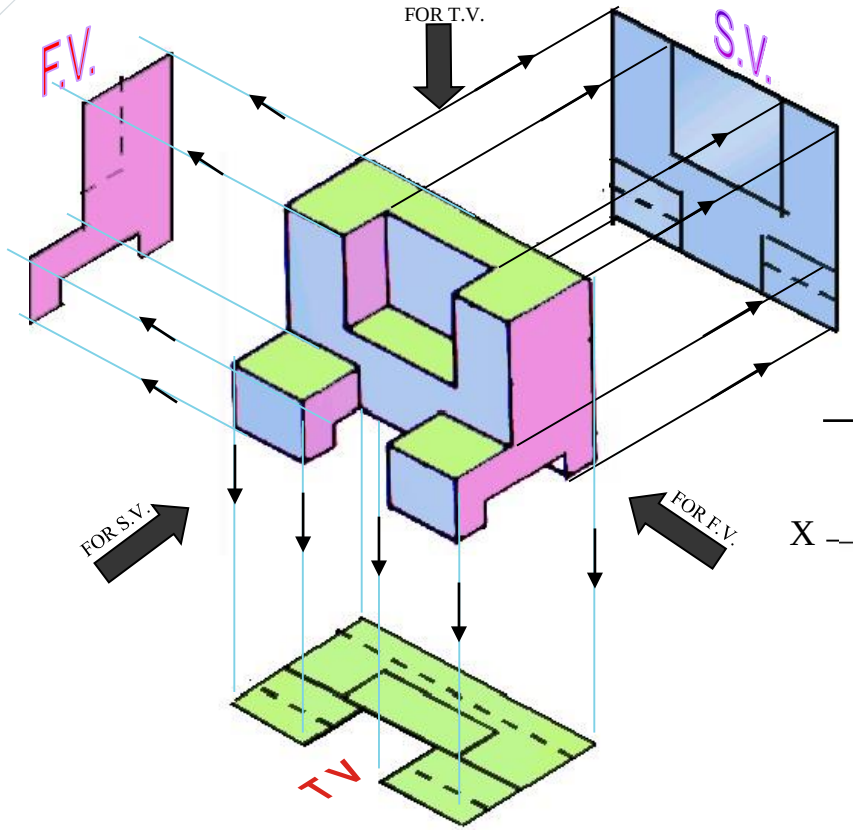


ORTHOGRAPHIC PROJECTIONS

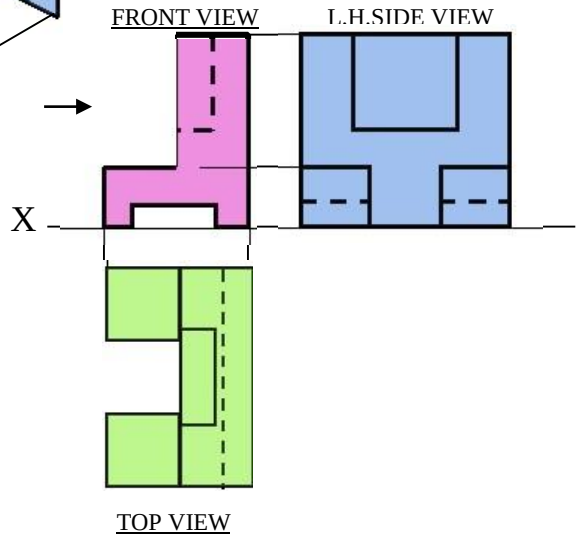


PICTORIAL PRESENTATION IS GIVEN

DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

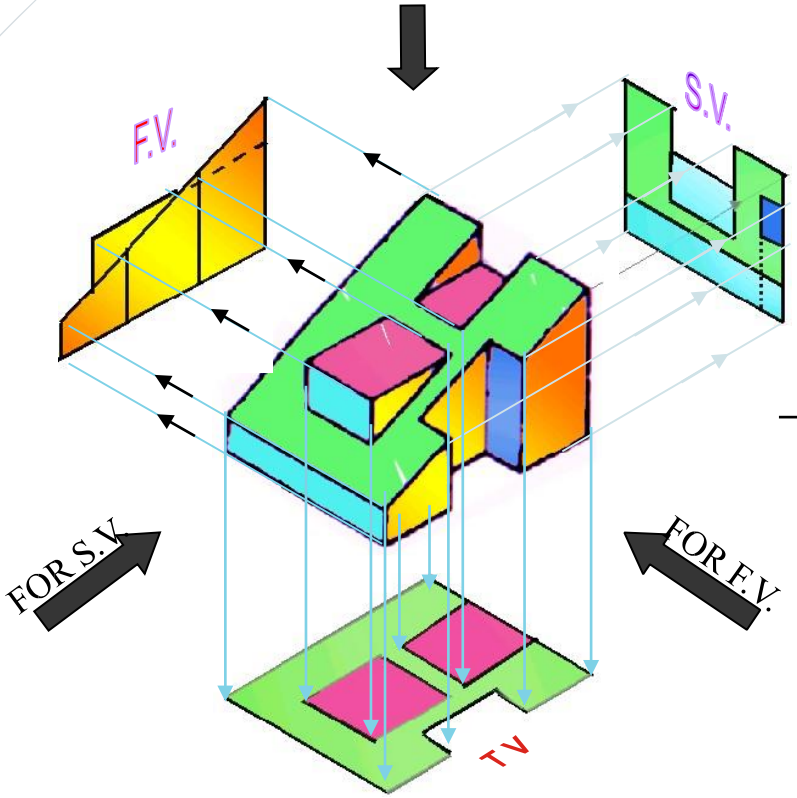


ORTHOGRAPHIC PROJECTIONS



PICTORIAL PRESENTATION IS GIVEN

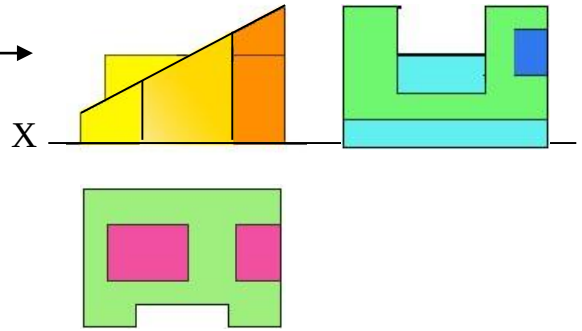
DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD
FOR T.V.



ORTHOGRAPHIC PROJECTIONS

FRONT VIEW

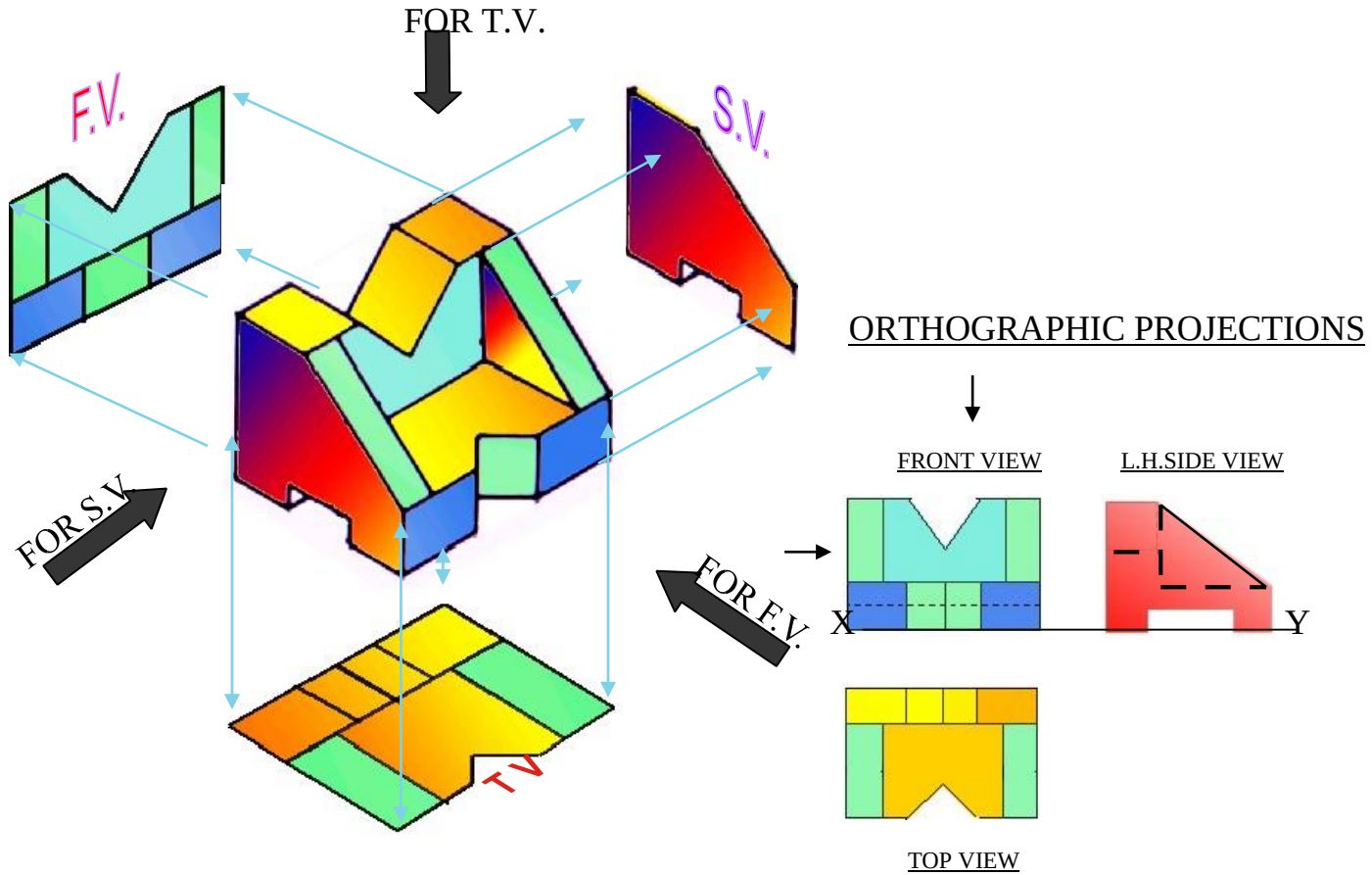
L.H.SIDE VIEW



TOP VIEW

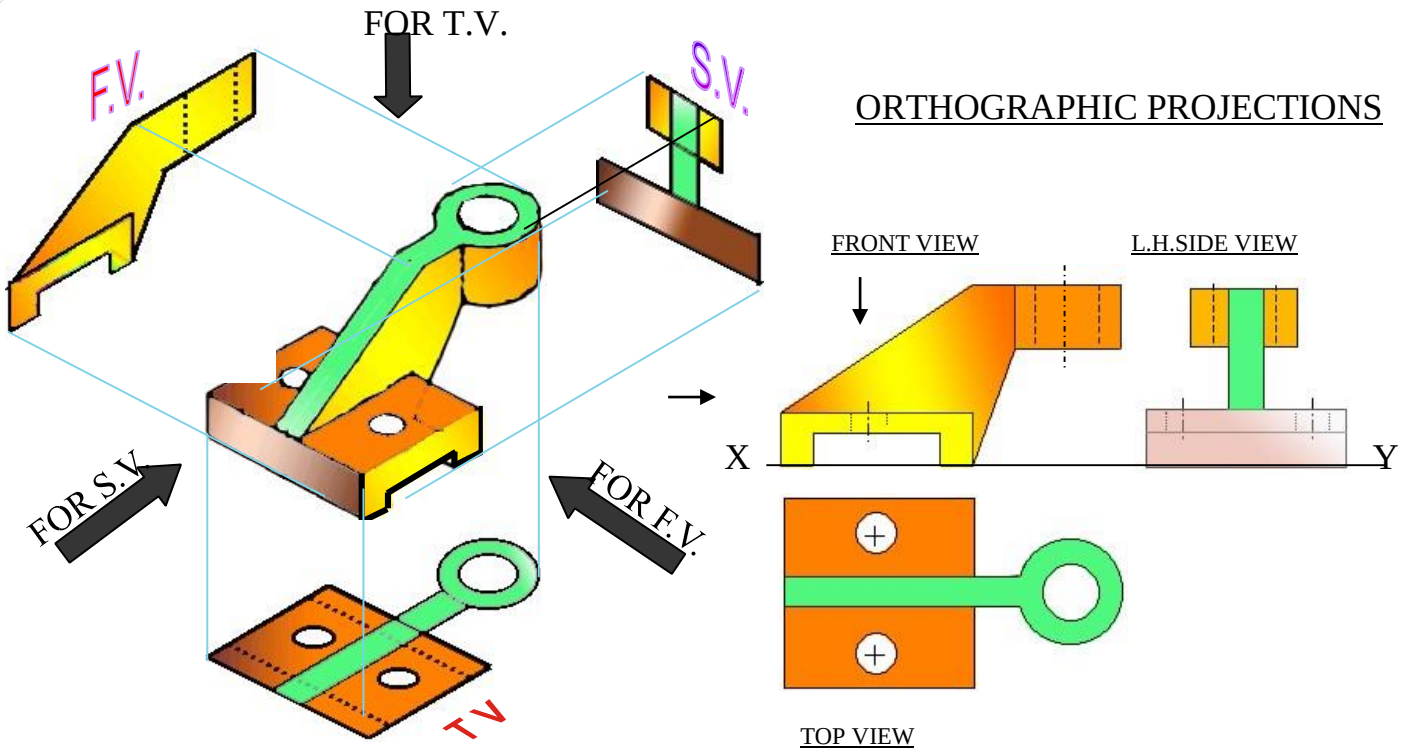
PICTORIAL PRESENTATION IS GIVEN

DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



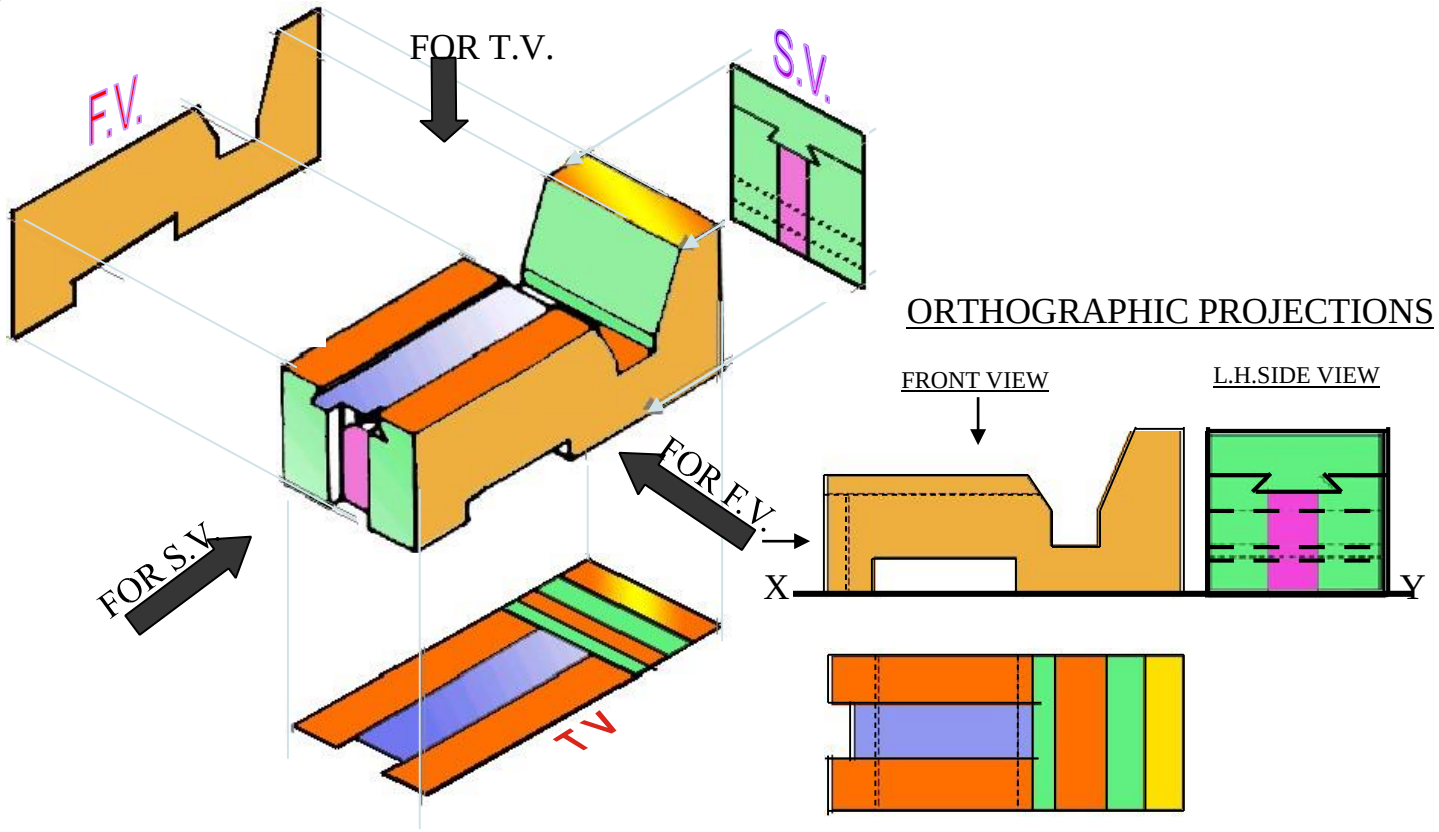
PICTORIAL PRESENTATION IS GIVEN

DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



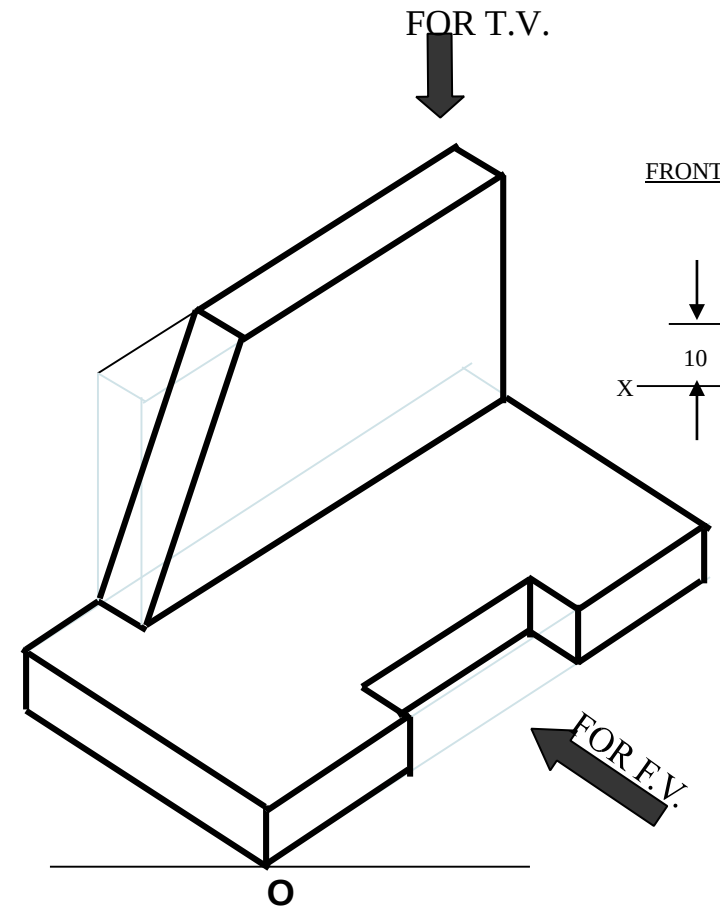
PICTORIAL PRESENTATION IS GIVEN

DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD

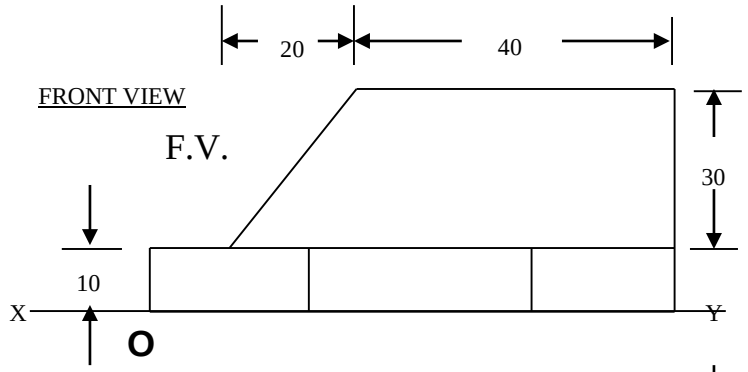


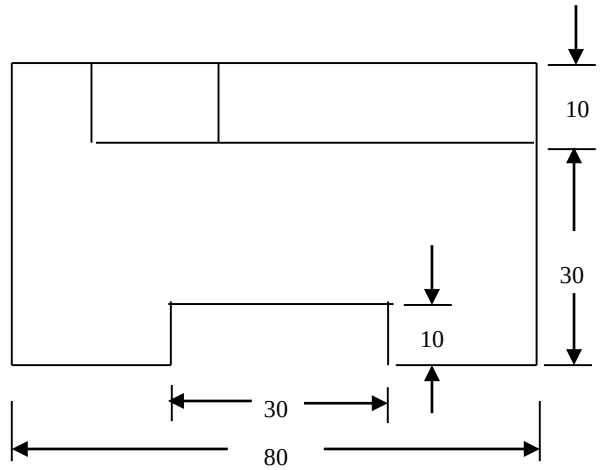
PICTORIAL PRESENTATION IS GIVEN

DRAW THREE VIEWS OF THIS OBJECT
BY FIRST ANGLE PROJECTION METHOD



ORTHOGRAPHIC PROJECTIONS





T.V. TOP VIEW

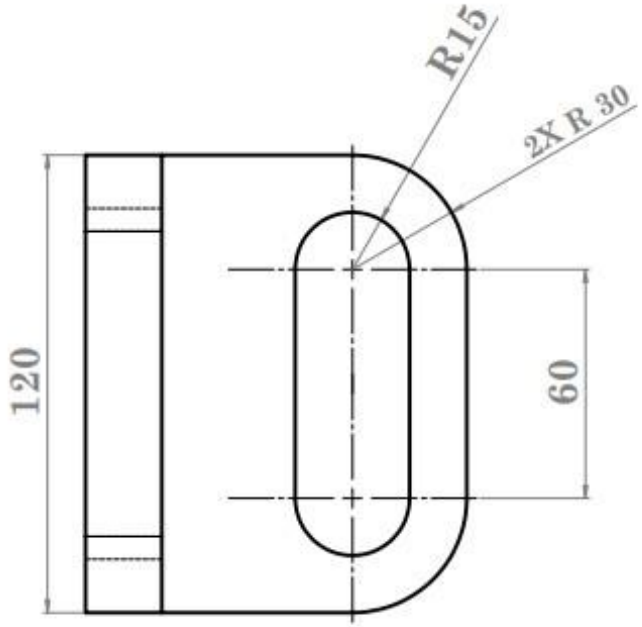
PICTORIAL PRESENTATION IS GIVEN

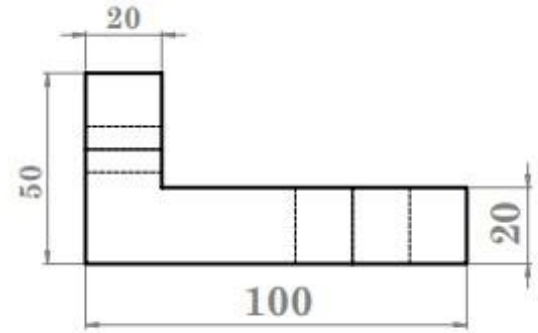
DRAW FV AND TV OF THIS OBJECT

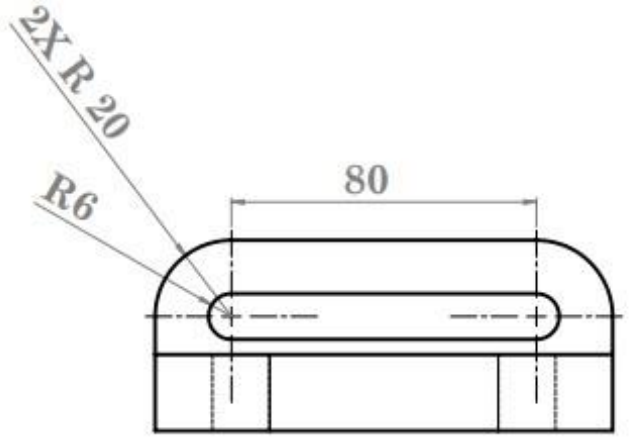
BY FIRST ANGLE PROJECTION METHOD

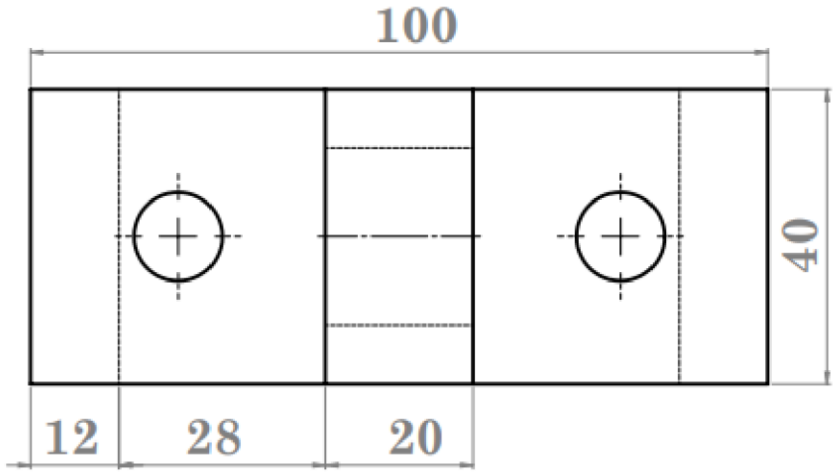
Produce the Isometric Block

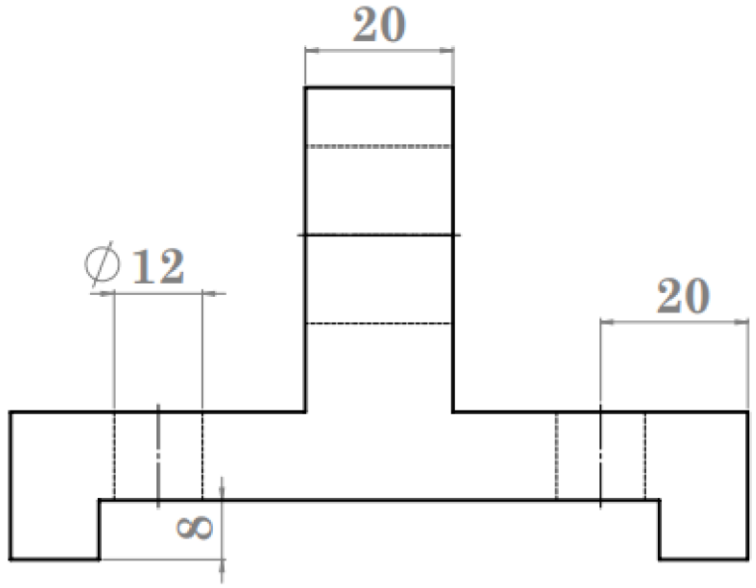
20
12

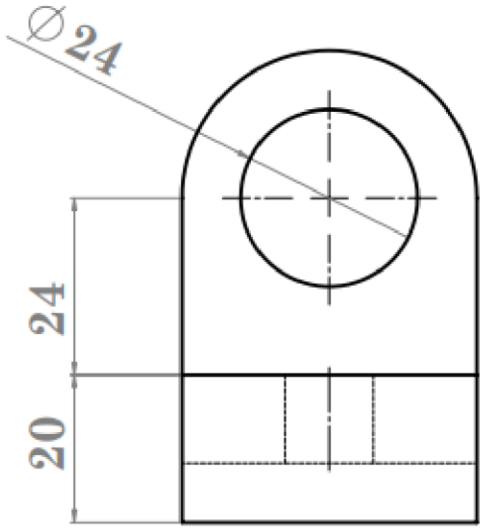

R15
2X R 30
120
60


20
50
20
100


2X R 20
R6
80


100
40
12
28
20


20
∅12
20
8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24
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