Engineering Drawing

Two types of view

↓

2D, 3D

* Isometric View – 3D
* Orthographic projection – 2D

→ 3D র 6 View আছে যায়,

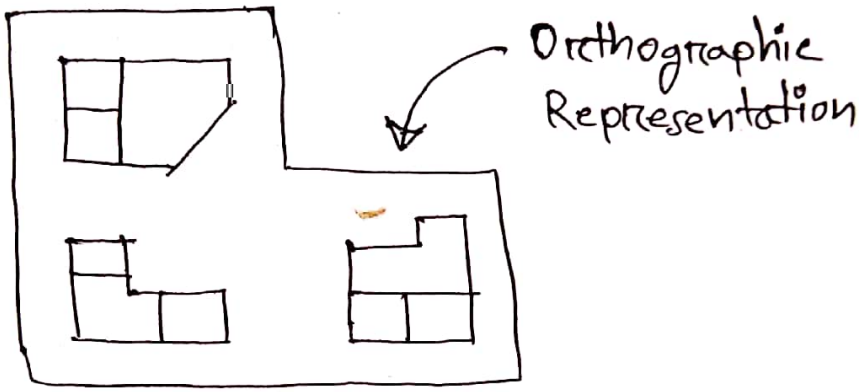
01 Feb

Isometric view - 3D তে 6 view আঁকতে হবে,
কিন্তু Exam এ 3 view দিতে হবে,

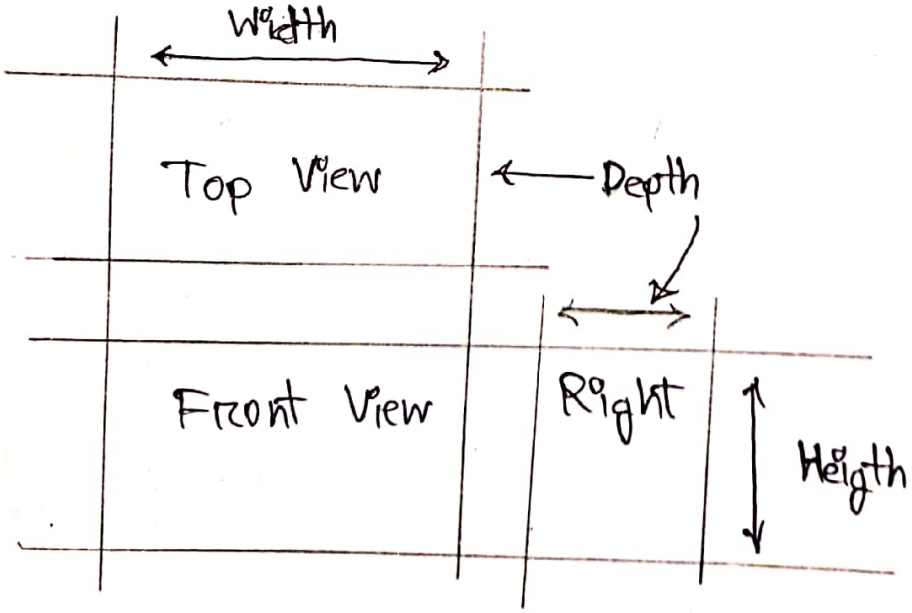
1st angle → FV, TV, RV

3rd angle → FV, TV, LV

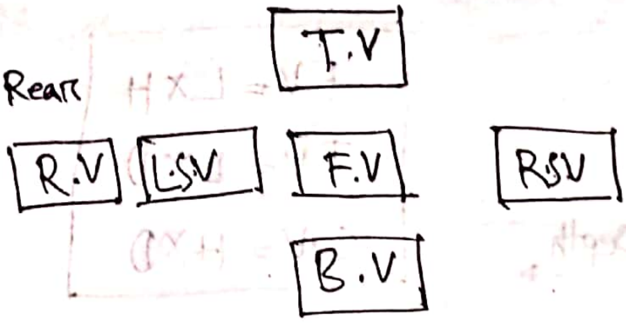
→ Glass box unfold করে 20টি নিয়ে আসি



Front, Side and Top views



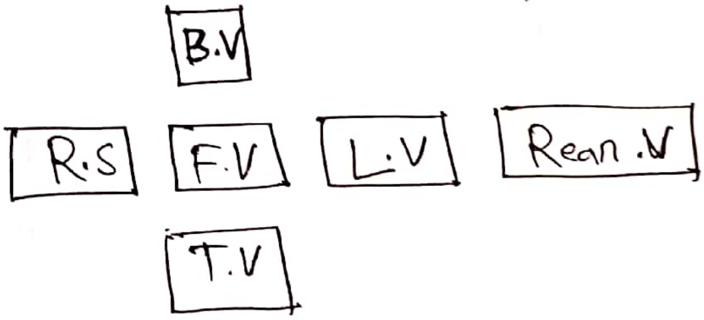
3rd Angle



Rear View → Opposite of F.V

⇒ কোন angle View যদি না থাকলে 1st Angle হবে।

1st Angle



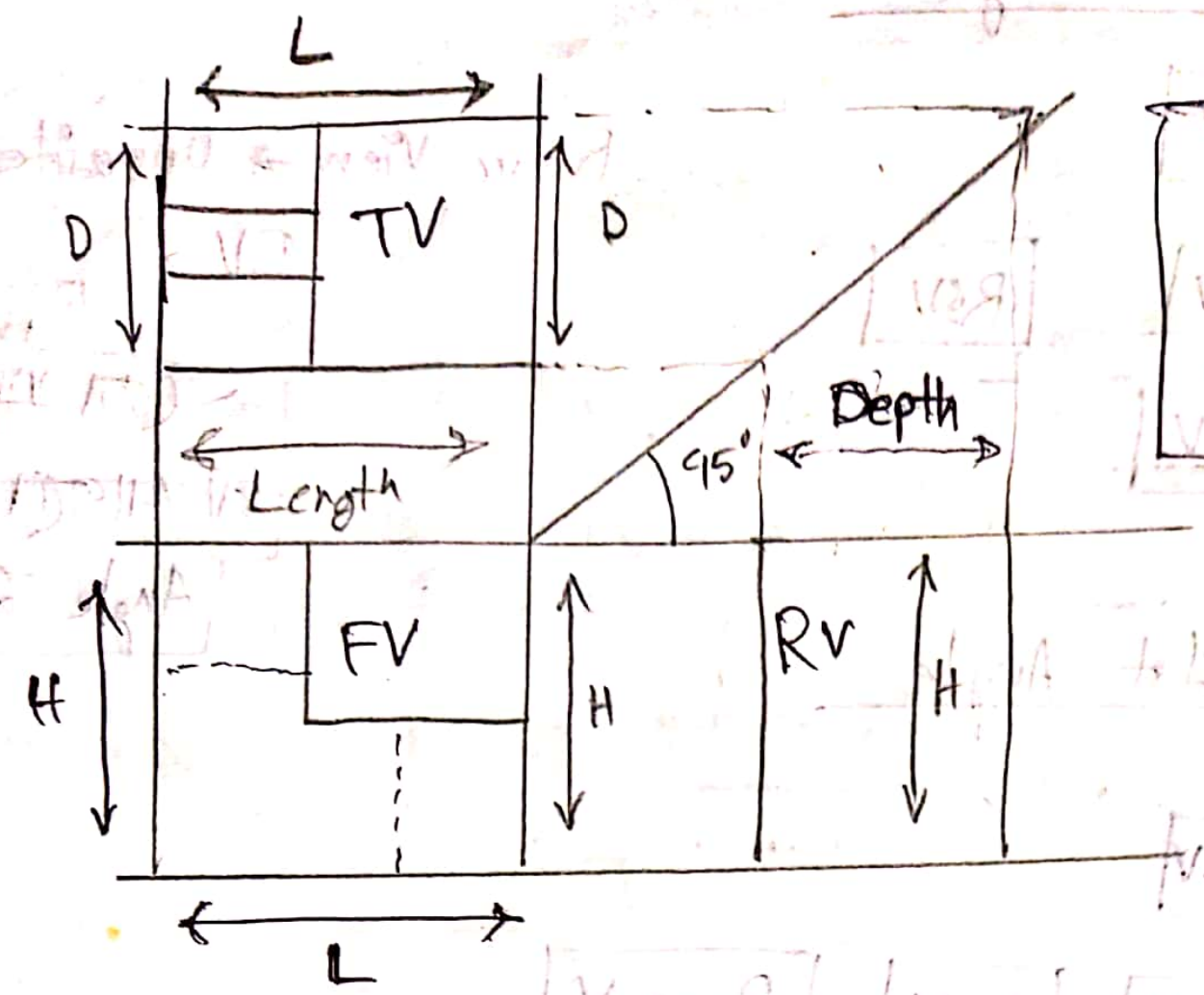
Line type

Visible Lines / Solid line → (————)

Hidden line / Broken → (- - - - - - - -)

Center line (· — · — · — · — ·)

Scanned with CamScanner



F.V = L X H

T.V = L X D

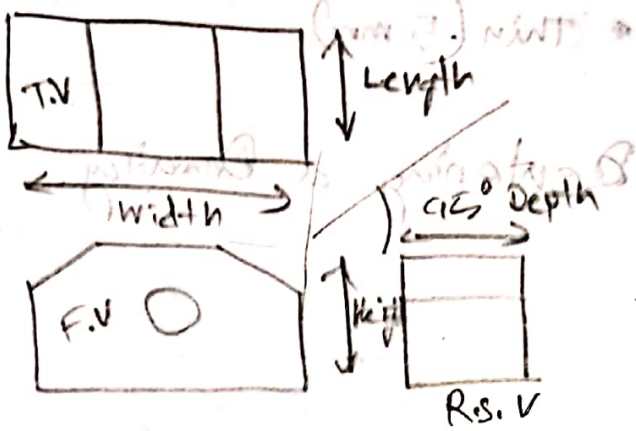
S.V = H X D

7 Feb

Multiview Drawing

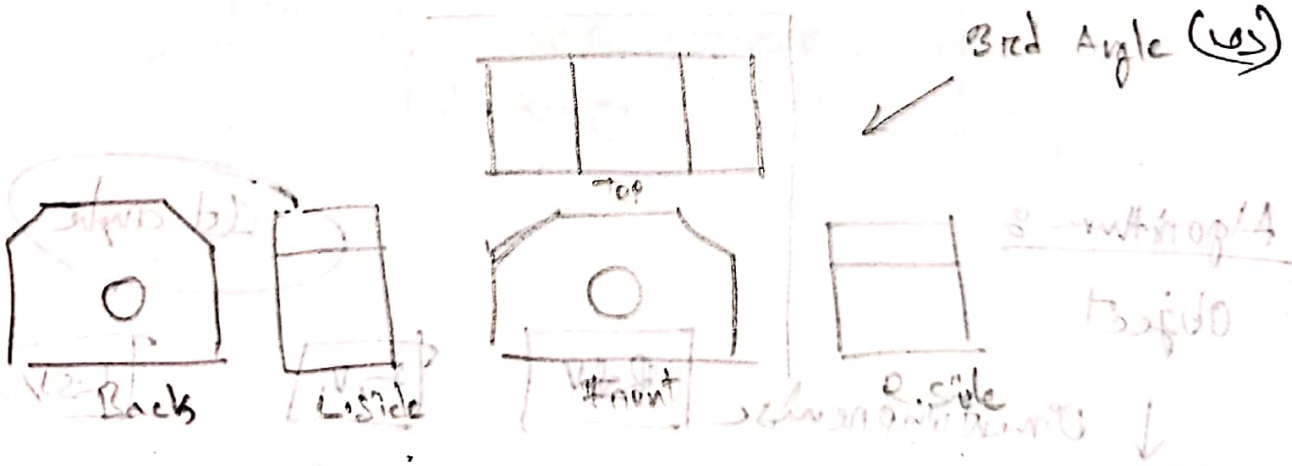
orientation

{3rd Angle}



যেকোন view
দেখলে না আসলে
1st angle

- Dimention important
- Scaling



(*) Most common views →

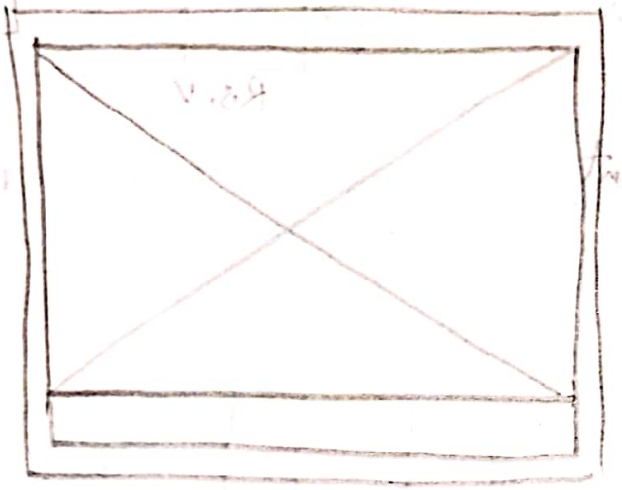
- Front view
- Right side view.
- Top

Hidden line * .125" (3mm) dashes

* 0.625" (1mm)

* Thin (.5 mm)

Steps of Dentening a Drawing.



Algorithm :

Object

↓ Dimentionpreuise → R.S.V | F.V. | L.S.V.

Scale

↓

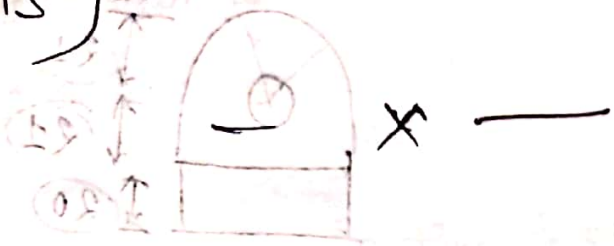
Area (FV, TV, RSV)

1st angle

T.V

* যদি L.S.V আলাদা দেখা লাগে তাহলে সেটি, আর R.S আলাদা দেখা লাগে সেটি অপ্রয়োজন হবে।

{NORMS} → Projection line, Direction, Hidden line



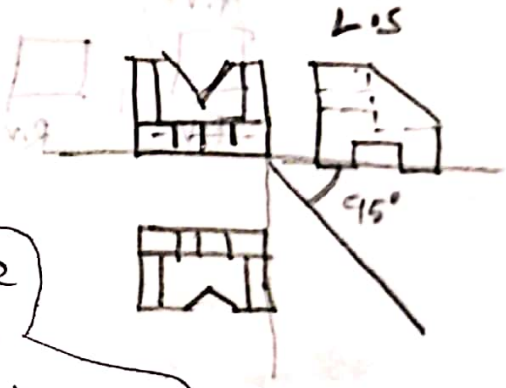
22/21 Feb

FV = 62 × 42

1st Angle

F.V L.S.V. TV

→ Left side থেকে দেখা যাকে



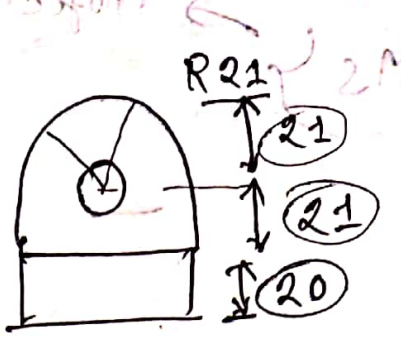
* যদি Right side থেকে দেখে প্রজেক্ট করলে R.S.V আসবে।

28 Feb

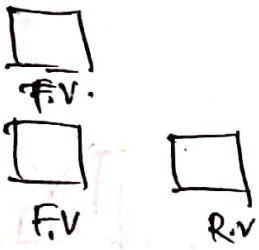
F.V = 98 X 62

T.V = 98 X 42

R.V = 42 X 62



3rd Angle



① R21 → Radius=21

② ϕ12 → diameter (12)

circular shape में center line देते हैं,

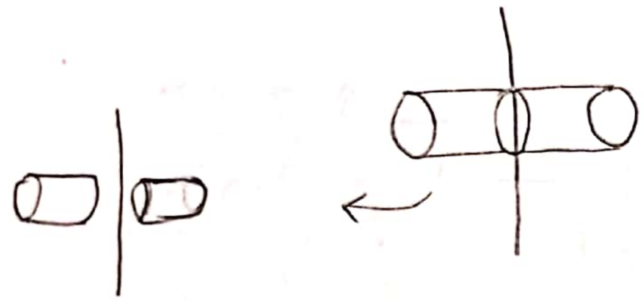
21 - Mar

Iso → Ortho → F.V, T.V, S.V

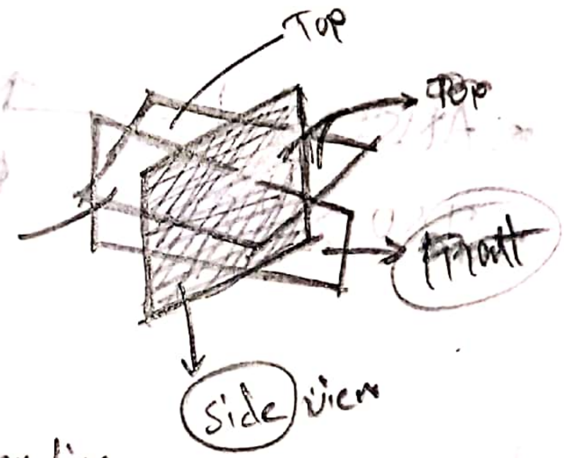
3D 2D

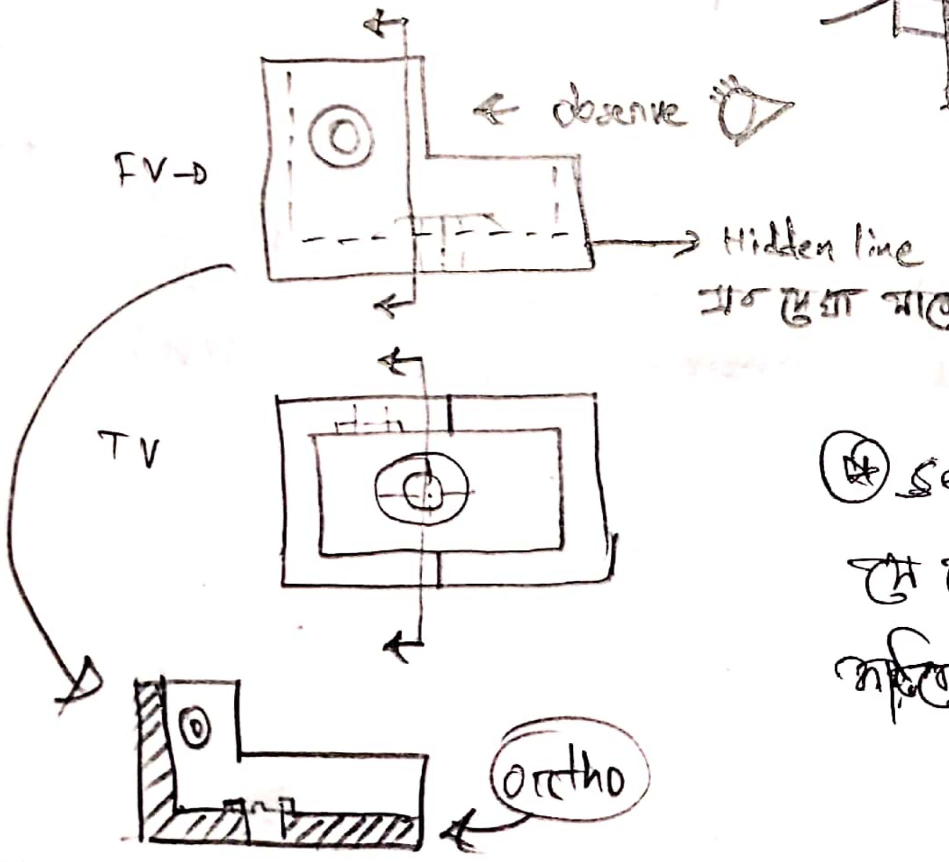
Section Views

Dissection

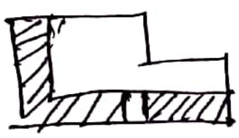


cross section = প্রস্থচ্ছেদ

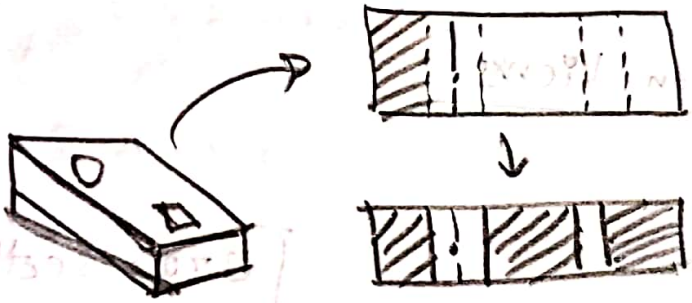




① section line এর মধ্যে যে যে surface এ কাটি দেখানো হবে,

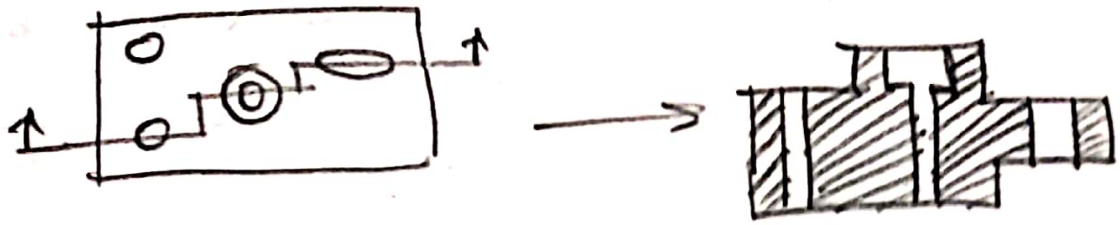


Cutting plane Line → edge view

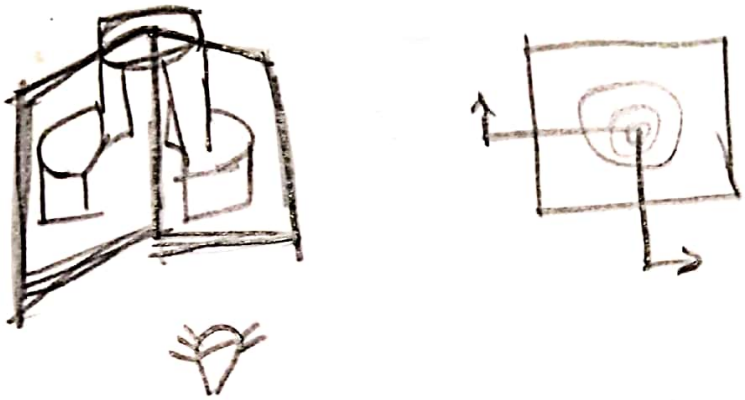


⇒ Circle এর center দিতে হয়,

- ANSI
- ISO & TS ve

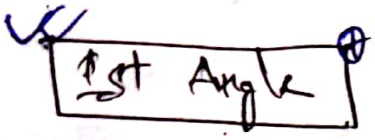


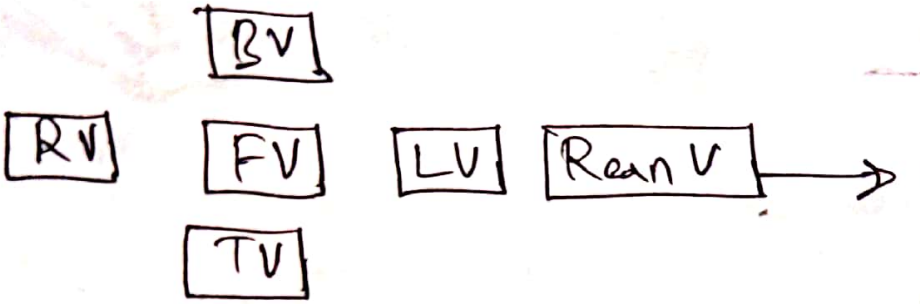
half-section view



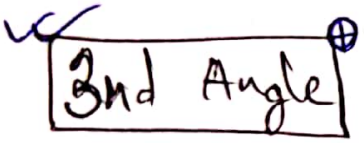
① Angle বলা বা আকলে 1st Angle.

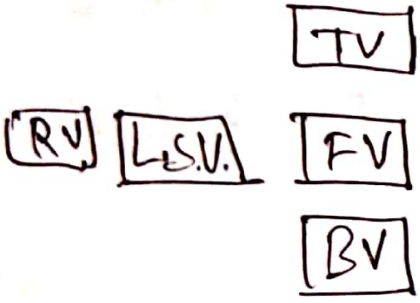
FV = L × H
TV = L × D
SV = H × D



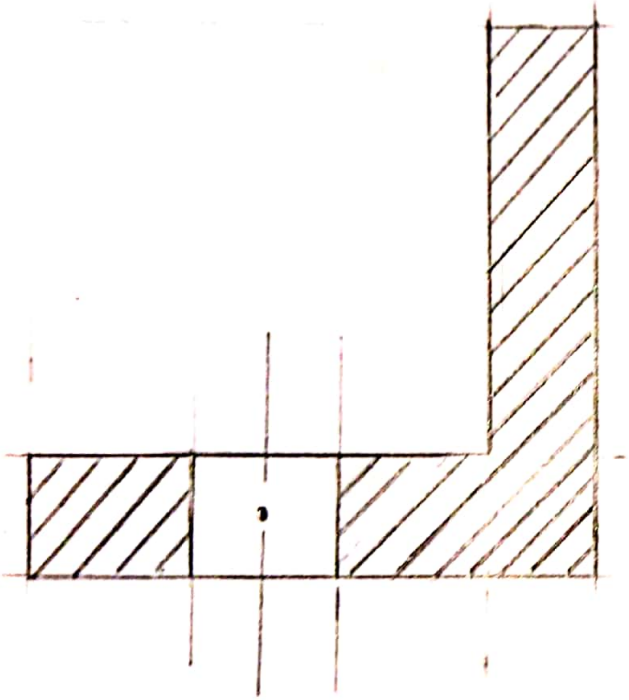


→ opposite of front view

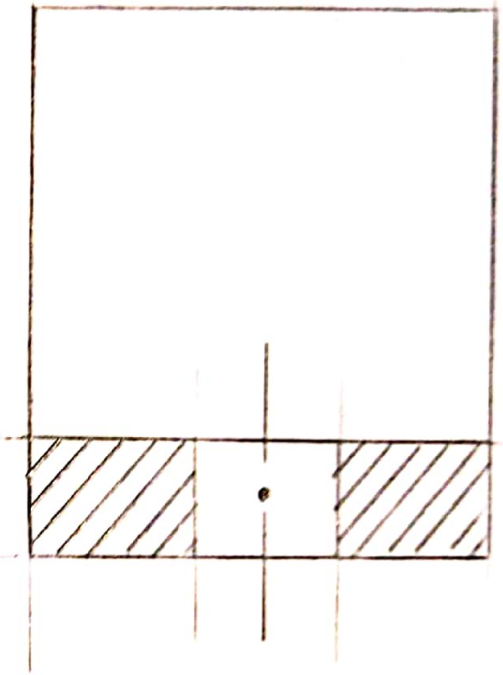




(*) R21 = Radius (21)
ϕ12 = Diameter (12)

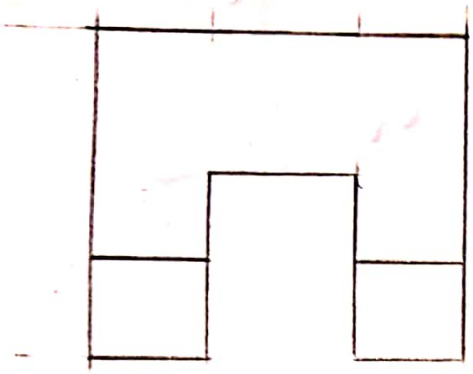


B.B

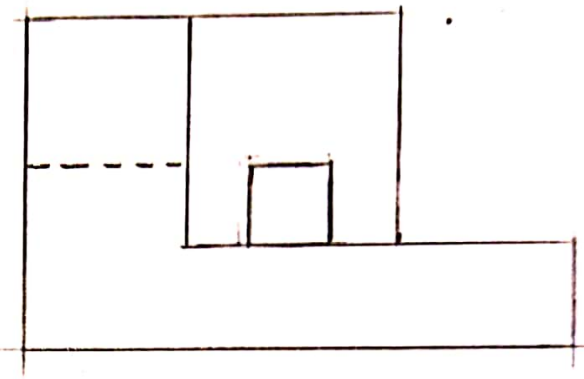


A.A

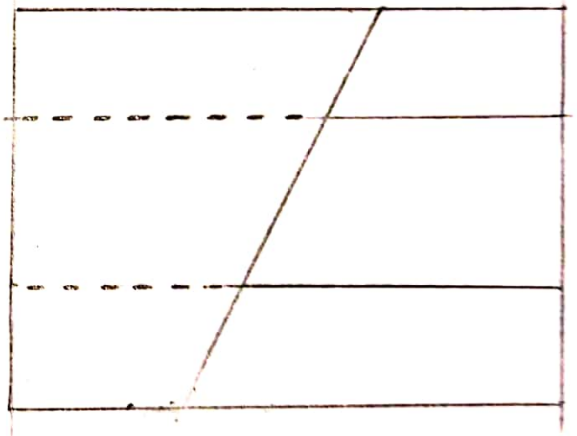
Practise:



Right side view



Front View



Top View