



GURUKUL 
Pvt. Industrial Training Institute

Making Youth Employable Through Skill Development

Manglam City, Govindpura, Kalwar Road, Jhotwara, JAIPUR

9887442244

www.gurukulitjaipur.in

Line, Lettering & Polygons

- Engineering drawing
- Every language has its own rules of grammar.
- Engineering drawing also has certain rules
- Rules of grammar : Lines, lettering, and Polygons.



Line Conventions

- ❖ Out lines: Lines drawn to represent visible edges and surface boundaries of objects are called outlines. These are continuous thick lines.

Visible Object - Thick

- ❖ Dimension Lines - These are continuous thin lines. They are terminated at the outer ends by pointed arrowheads touching the extension lines.
- ❖ Extension Lines - solid thin lines showing point or line to which dimension applies. They extend by about 3 mm beyond the dimension lines.
- ❖ Hidden or dotted line- Interior or hidden edges and surfaces are shown by hidden lines.



GURUKUL 
Pvt. Industrial Training Institute

Making Youth Employable Through Skill Development

Manglam City, Govindpura, Kalwar Road, Jhotwara, JAIPUR

9887442244 www.gurukulitjaipur.in

- ❖ **Centre line:** Centre lines are drawn to indicate the axes of cylindrical, conical object and also show the centre of circles and arcs.

- ❖ **Cutting:** Plane and Viewing-Plane Lines – indicate location of cutting planes for sectional views and the viewing position for removed partial views



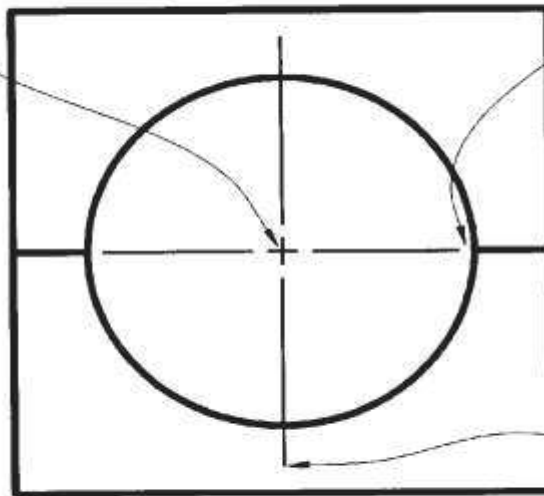
Sketching Line types

VISIBLE OBJECT LINES	THICK	THICK LINE APPROXIMATE WIDTH: 0.6mm
HIDDEN LINE	THIN	THIN LINE APPROXIMATE WIDTH: 0.3mm
SECTION LINE	THIN	
CENTERLINE	THIN	
SYMMETRY LINE	THIN	THICK
DIMENSION LINE EXTENSION LINE AND LEADER LINE	LEADER EXTENSION LINE DIMENSION LINE THIN	
CUTTING-PLANE LINE OR VIEWING-PLANE LINE	THICK THICK THICK	
BREAK LINE	THICK THIN	SHORT BREAKS LONG BREAKS
PHANTOM LINE	THIN	
STITCH LINE	THIN DOTS	
CHAIN LINE	THICK	



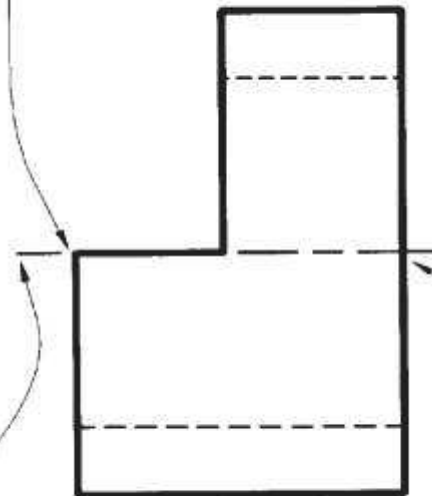
Centerline Conventions

"+" MARKS CENTER

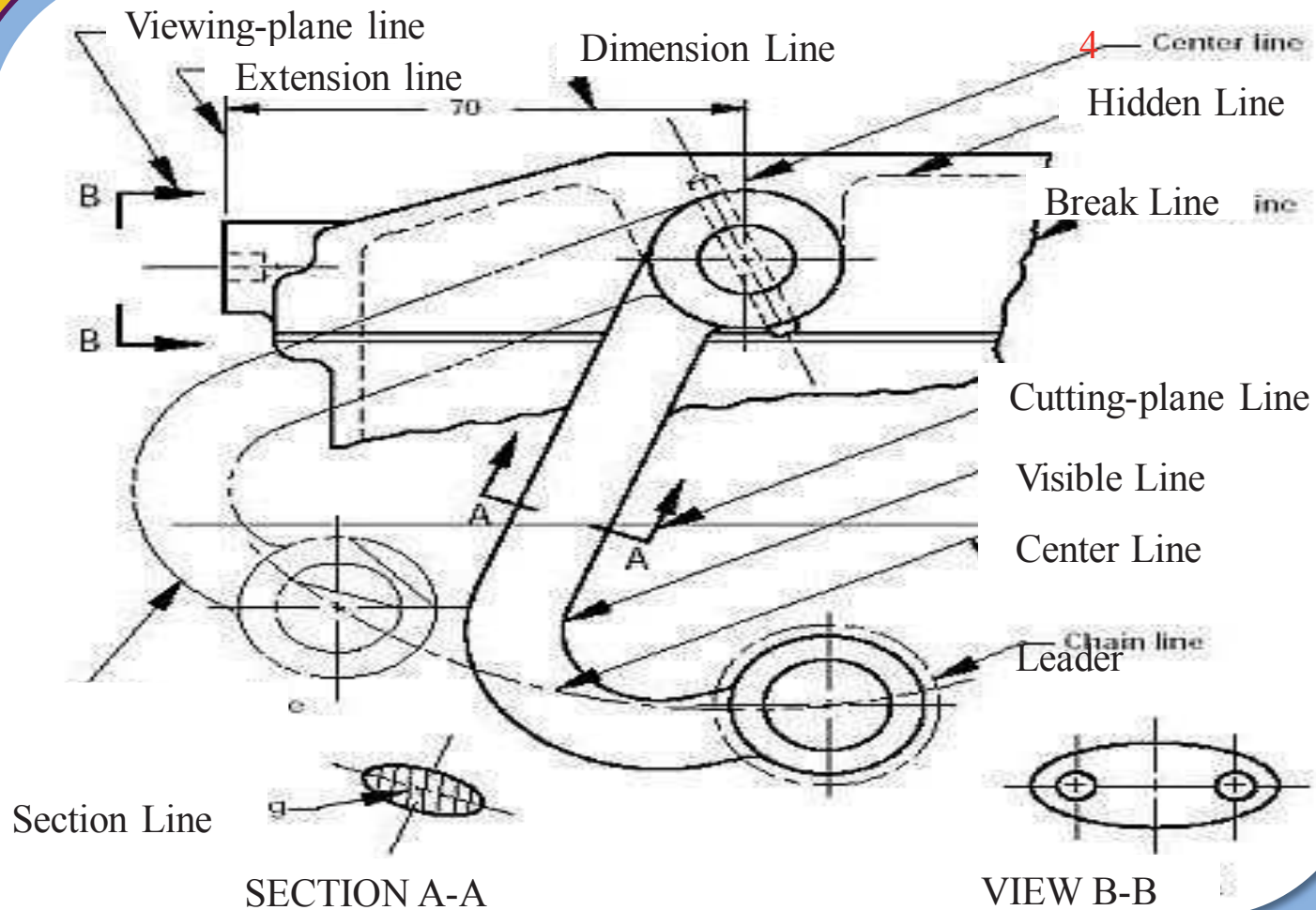


EXTEND APPROX. 9mm (.375")

LEAVE GAP WHEN EXTENDING
VISIBLE LINE



CROSS VISIBLE LINE
WITH LONG DASH





PRECEDENCE OF LINE

Order of importance

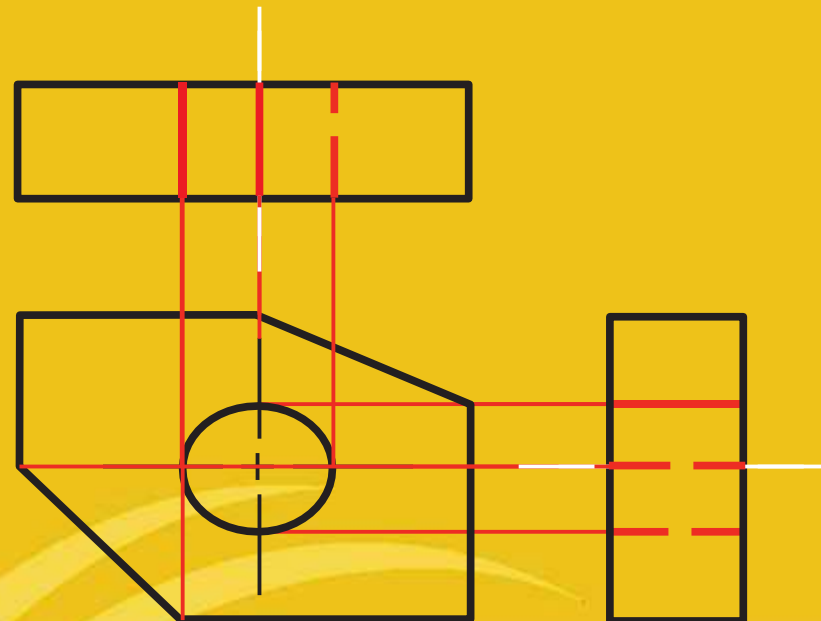
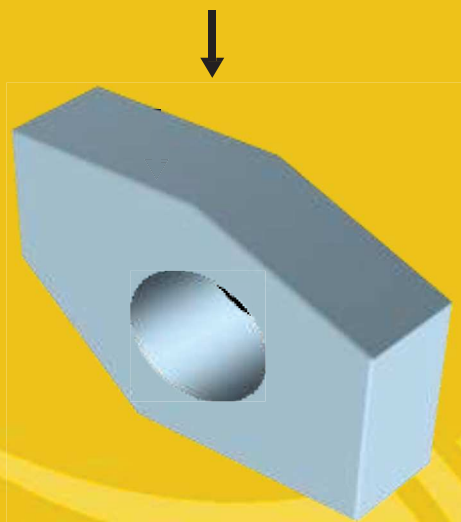
Visible line



Hidden line



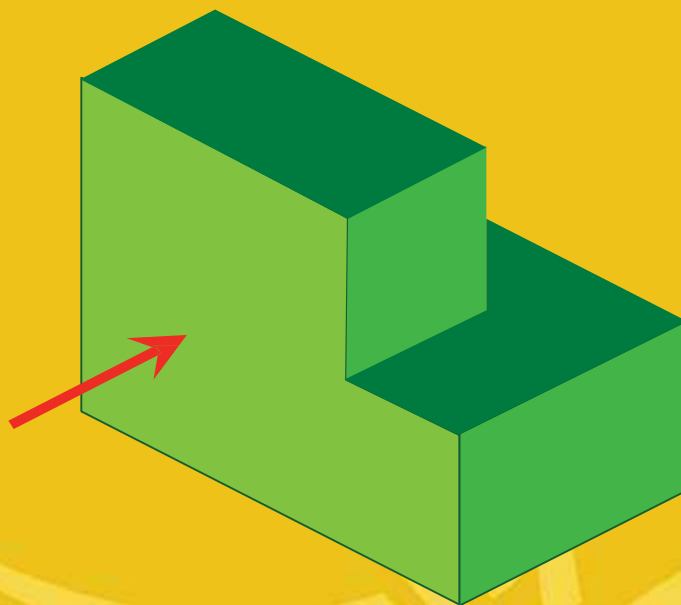
Center line



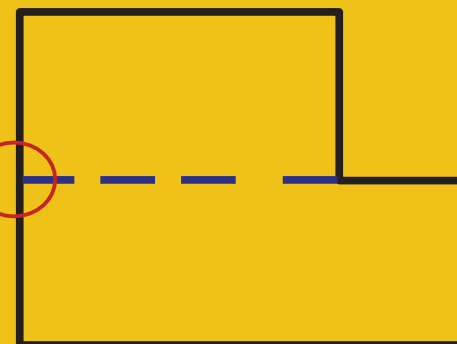


HIDDEN LINE PRACTICE

- Hidden line should join a visible line, **except** it extended from the visible line.



Join

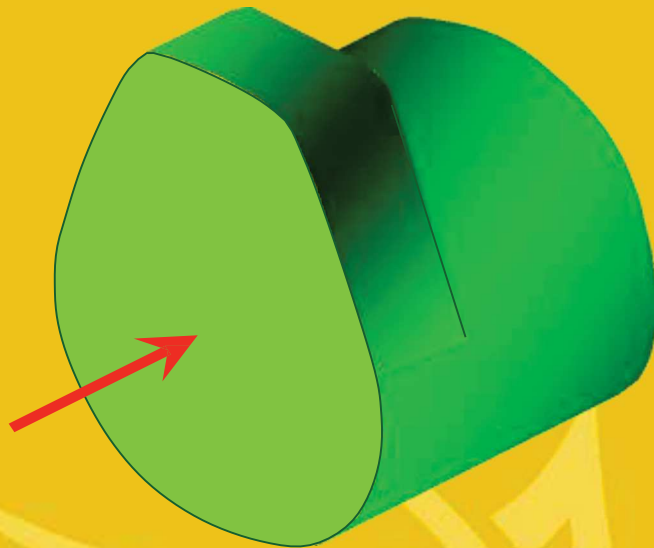


Correct



HIDDEN LINE PRACTICE

- Hidden line should join a visible line.

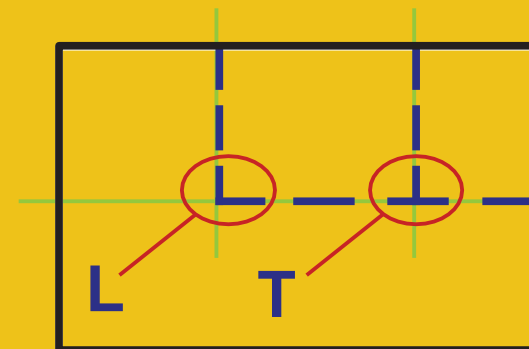
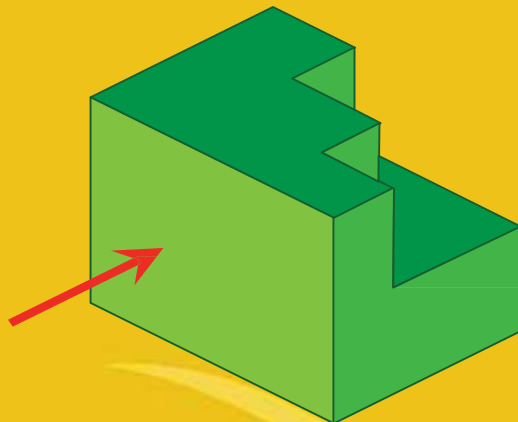


Correct

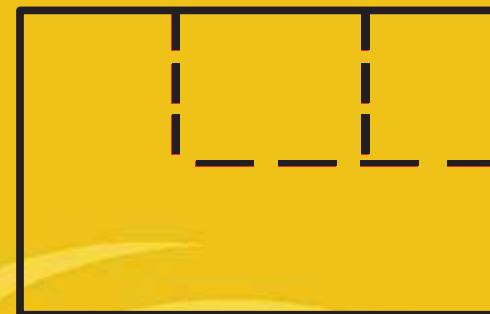


HIDDEN LINE PRACTICE

- Hidden line should intersect to form L and T corners.



Correct



No !