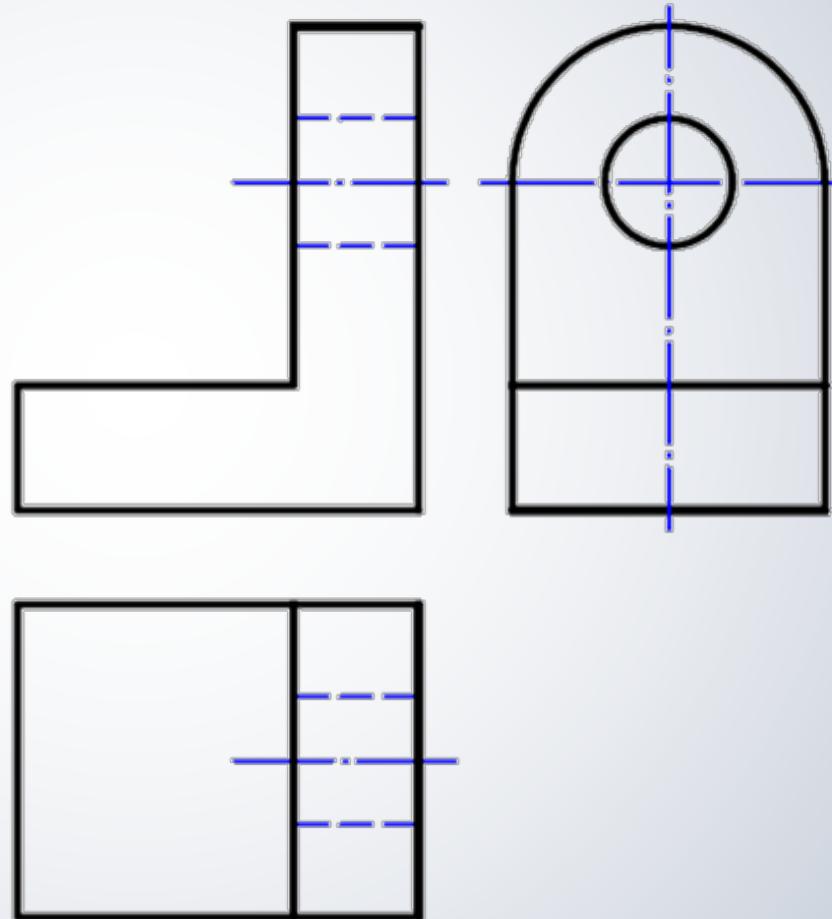
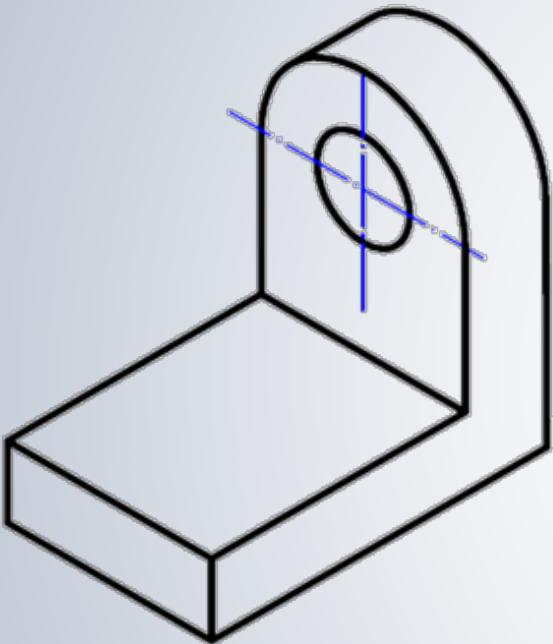


Computer-Aided Design

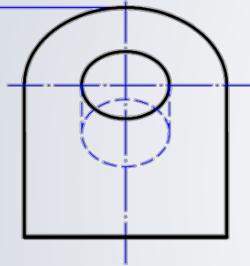
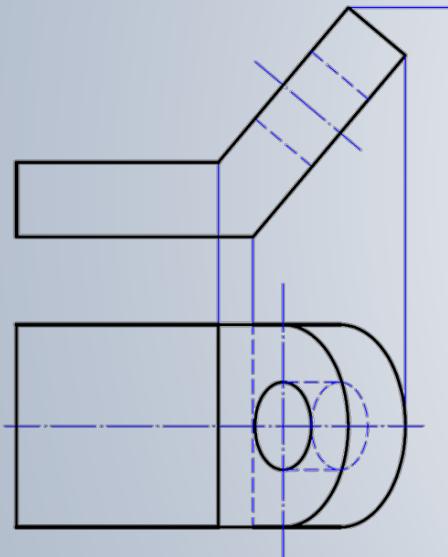
Auxiliary Views |

STANDARD VIEWS

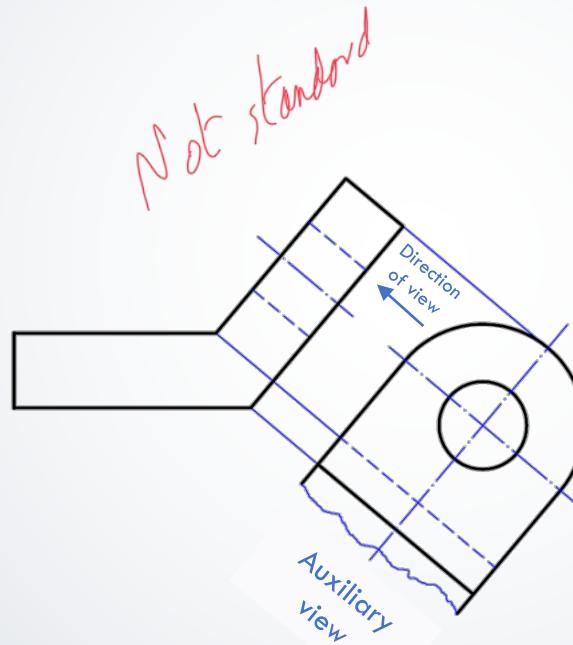


AUXILIARY VIEWS

- To draw in real dimensions when the surfaces are not perpendicular or parallel to each other.

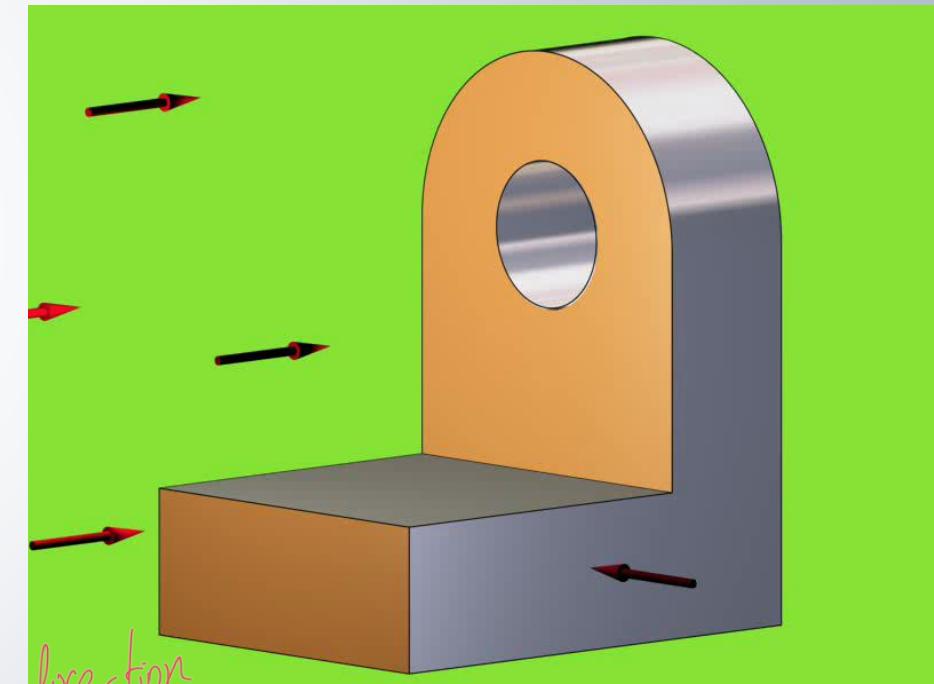


No

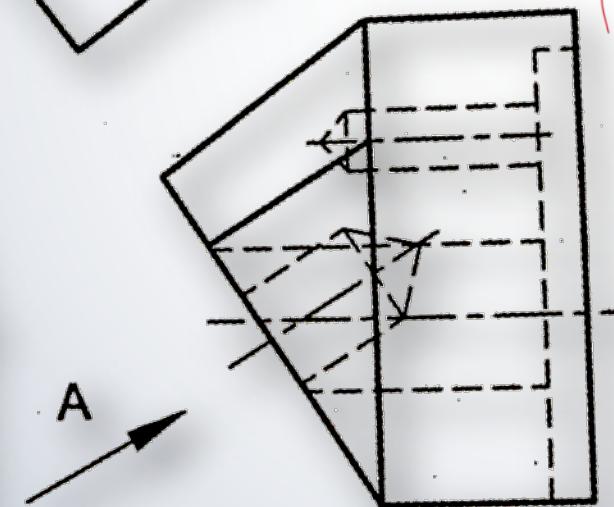
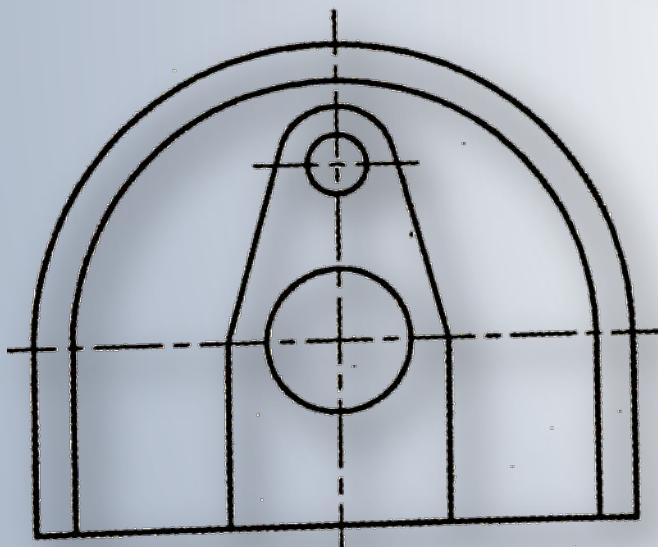


Auxiliary view

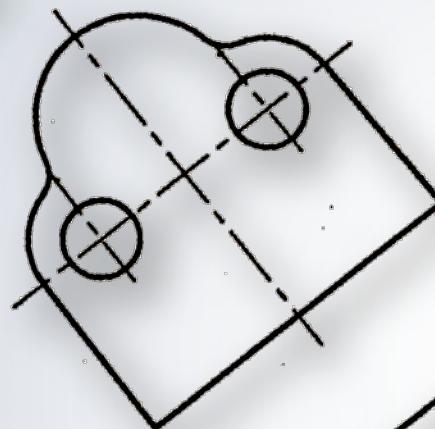
Correct manufacturing perpendicular direction



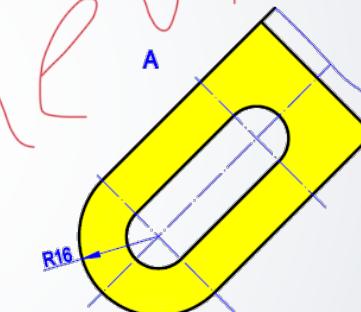
ARROW METHOD



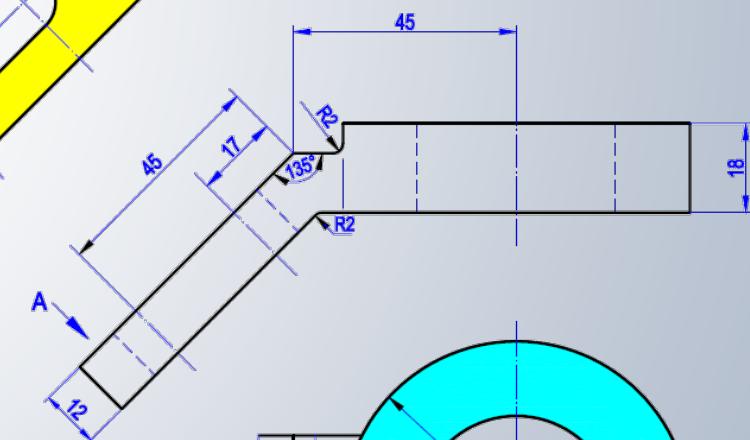
A



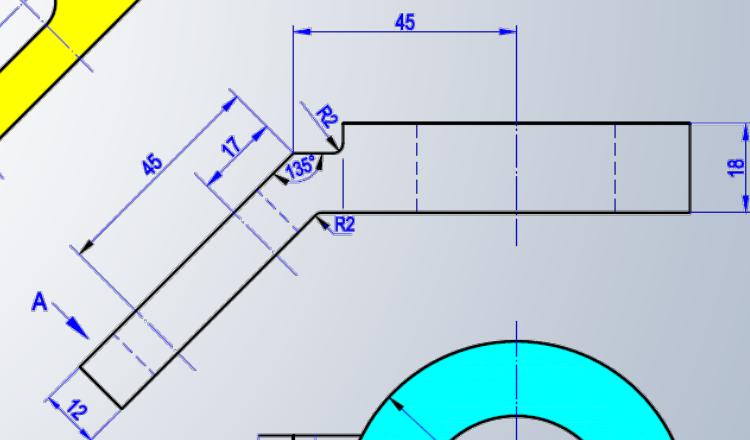
give
name
the view



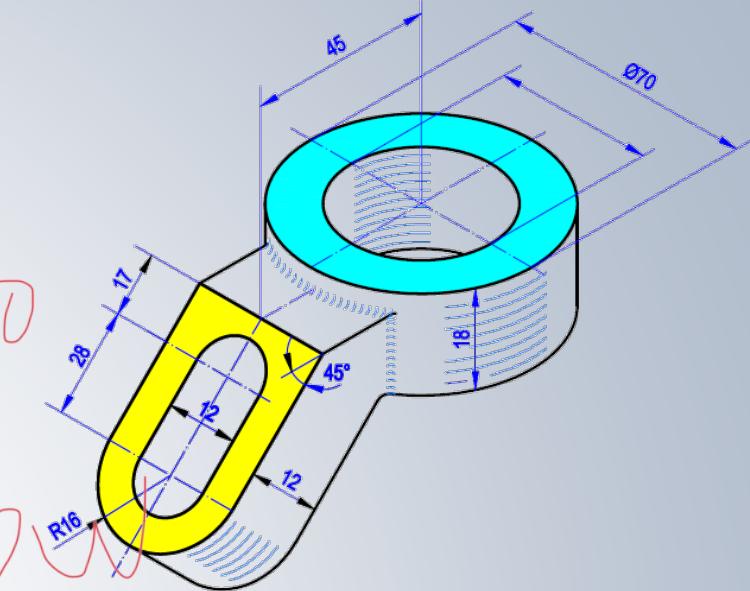
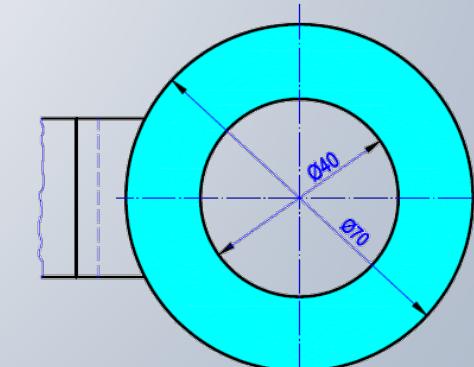
A



A



B



A



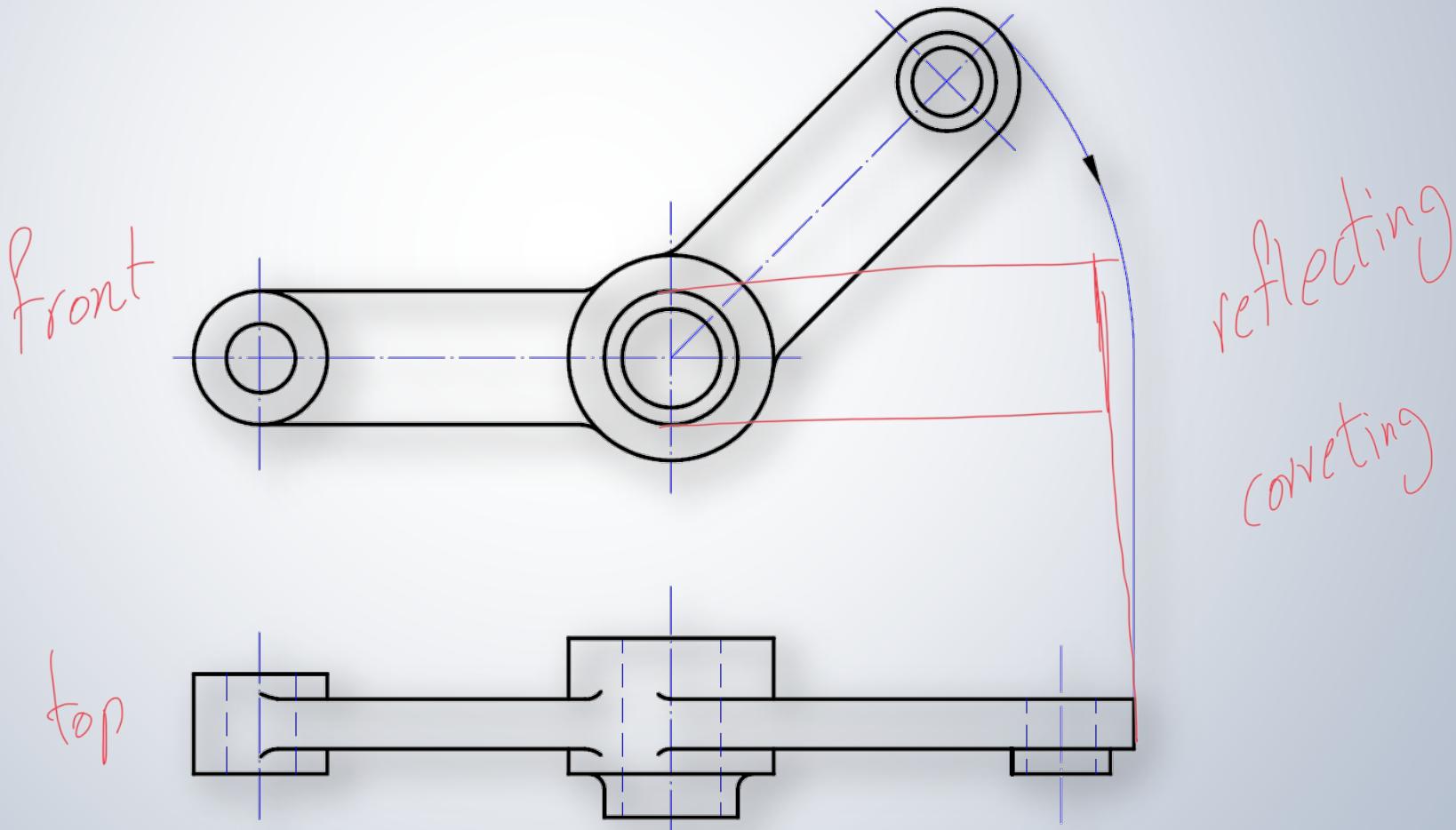
A

B

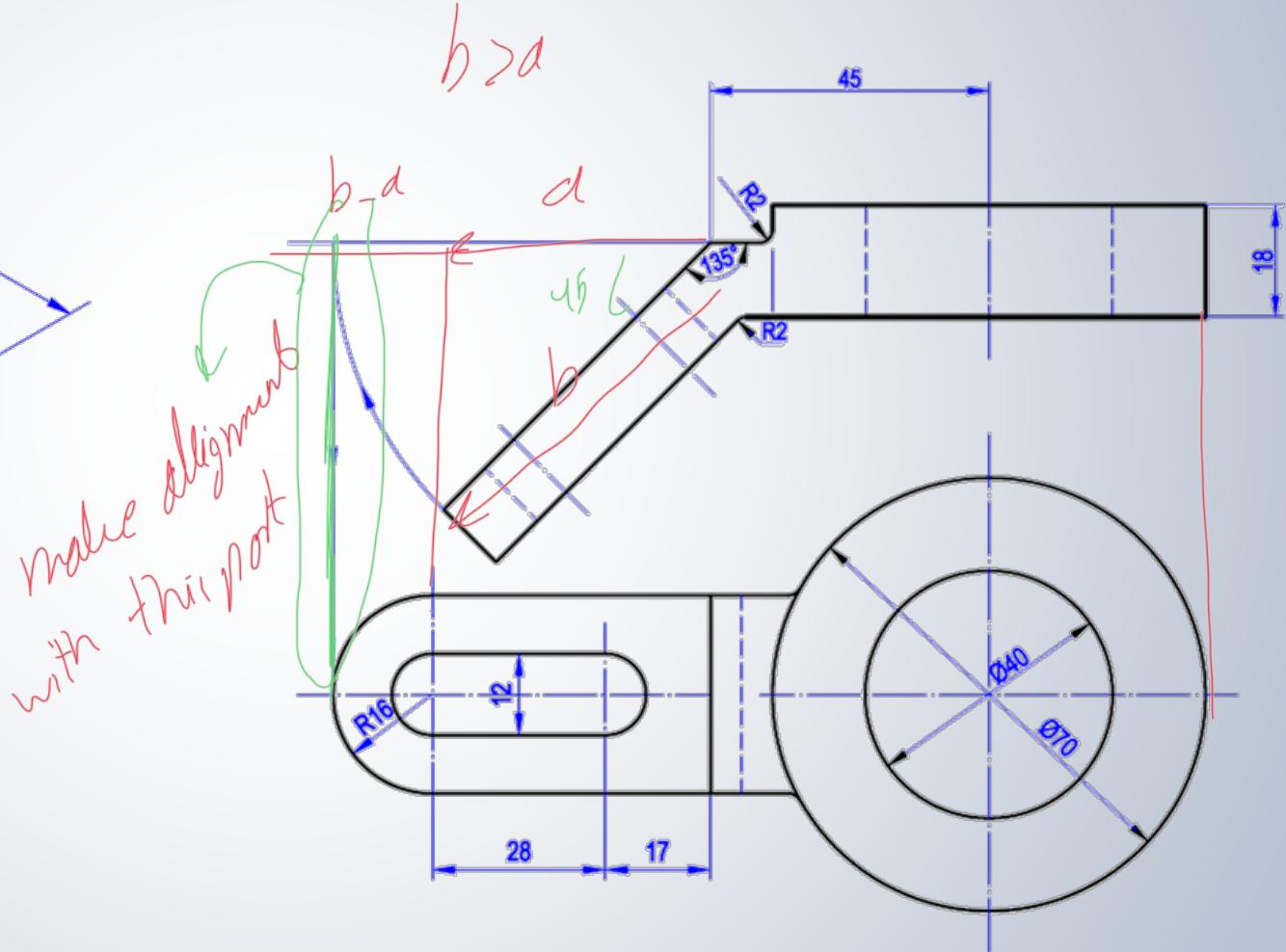
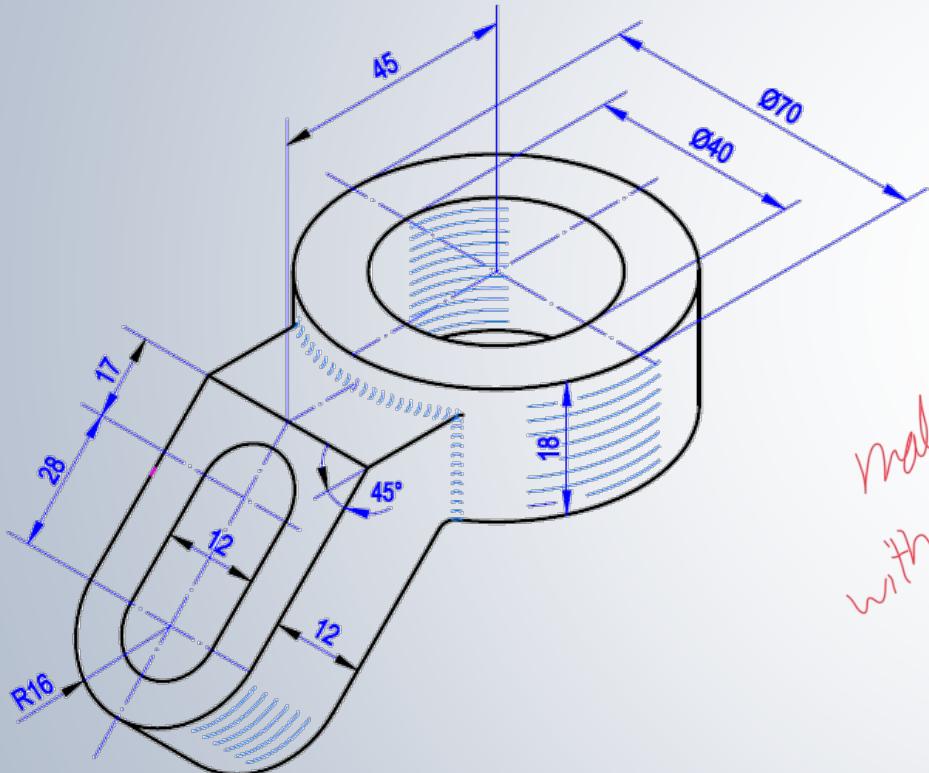
B

ROTATED VIEW

- Actual dimensions for manufacturing can only be given on rotated views.

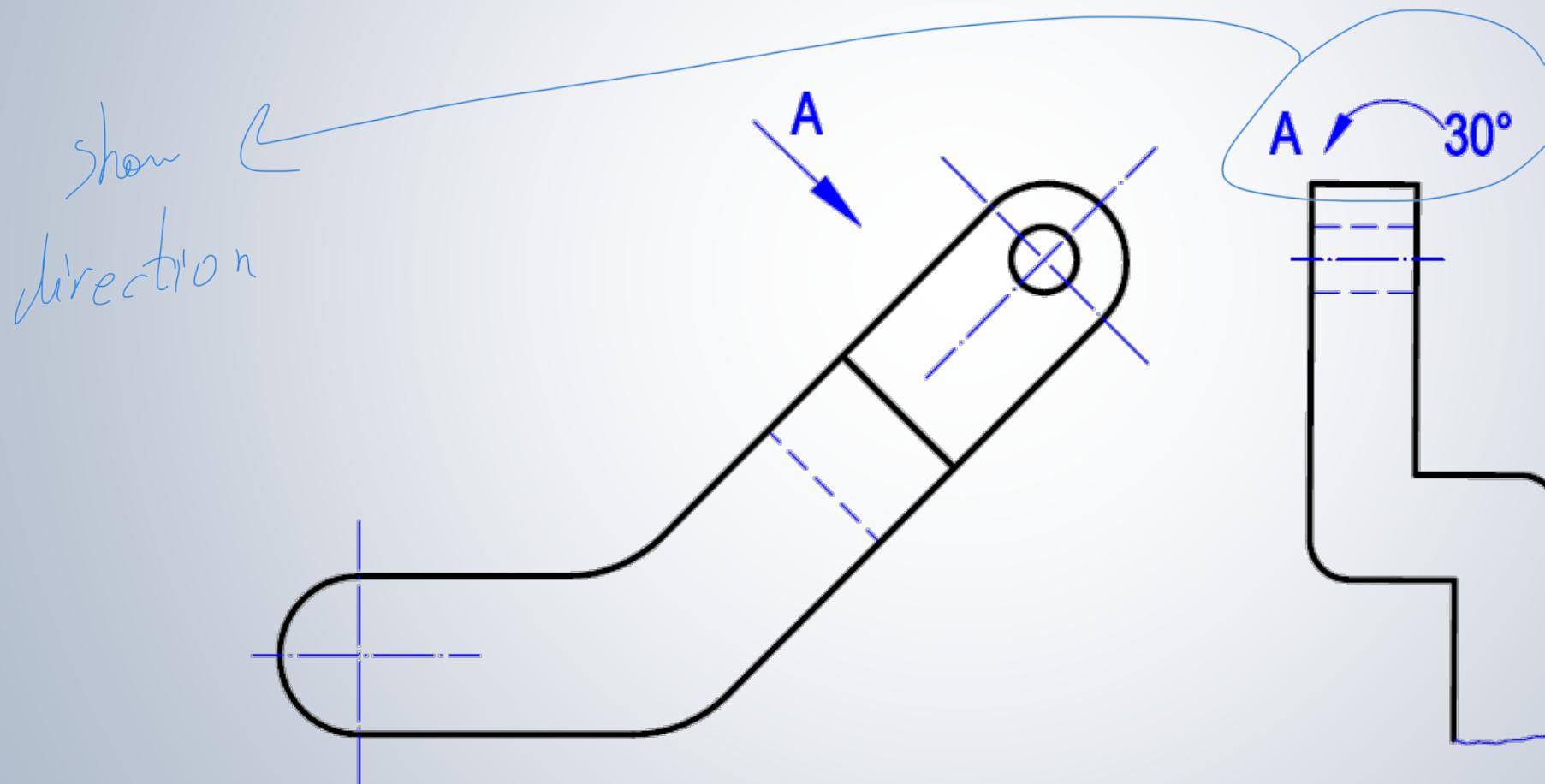


ROTATION METHOD

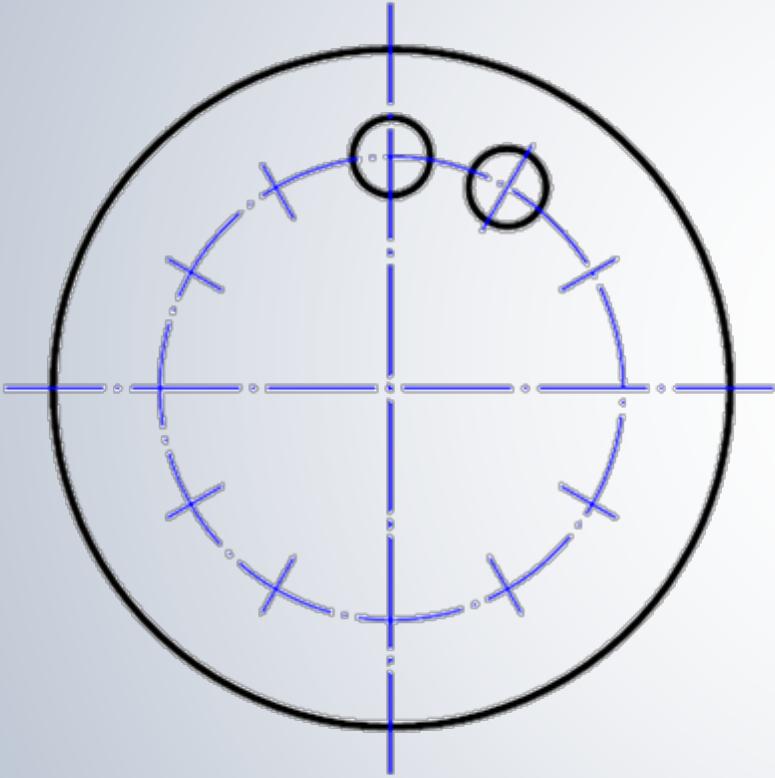


ROTATION METHOD

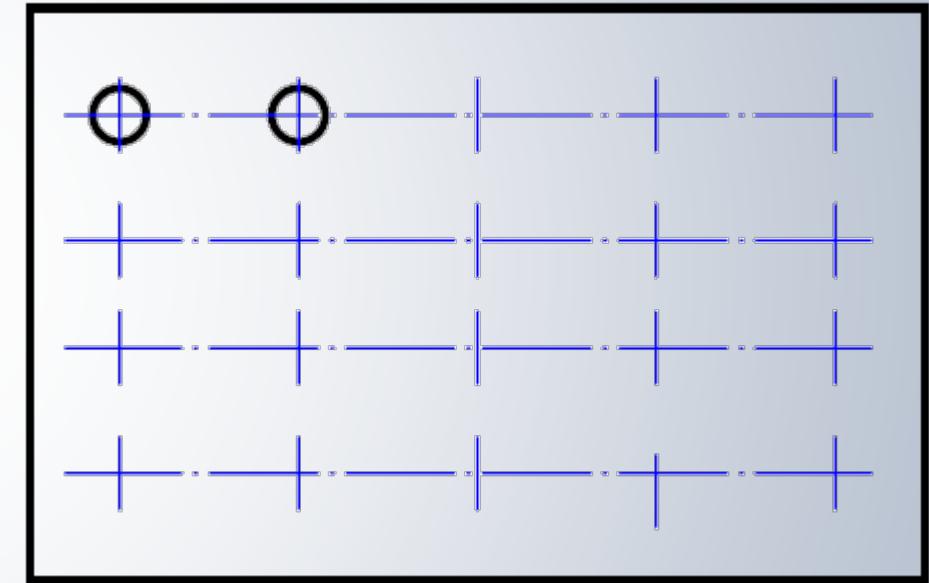
- The amount of rotation indicated by the thin line breakout



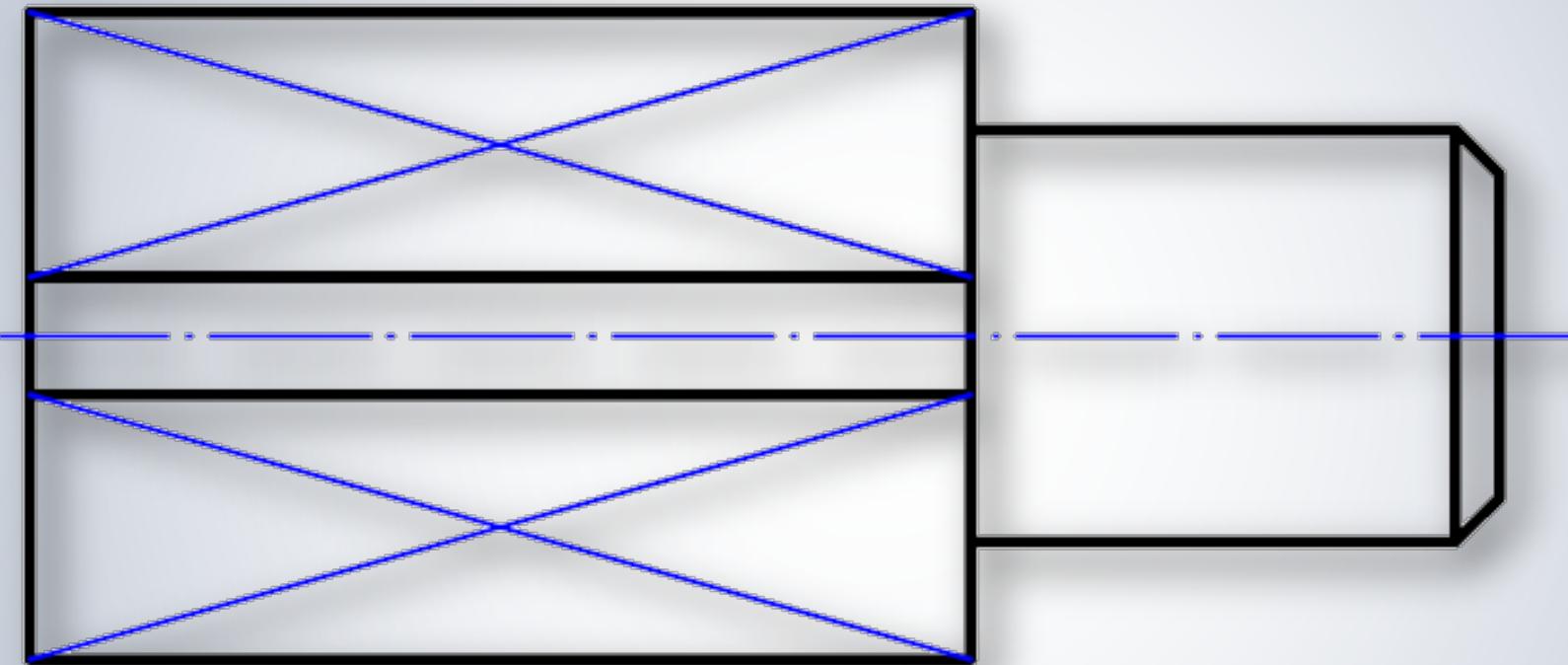
SIMPLE REPRESENTATION OF REPEATING ELEMENTS



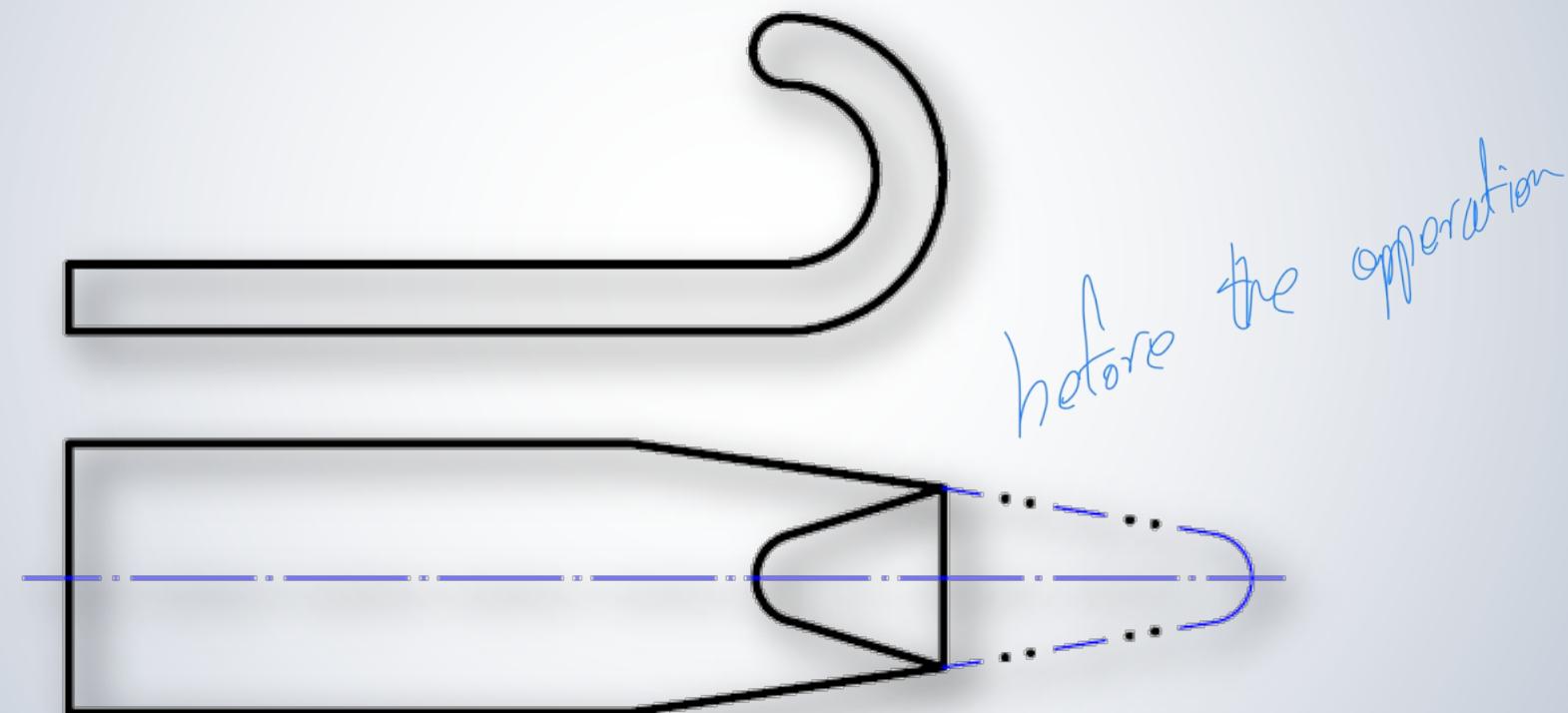
problematic for ram memory to repeat this element



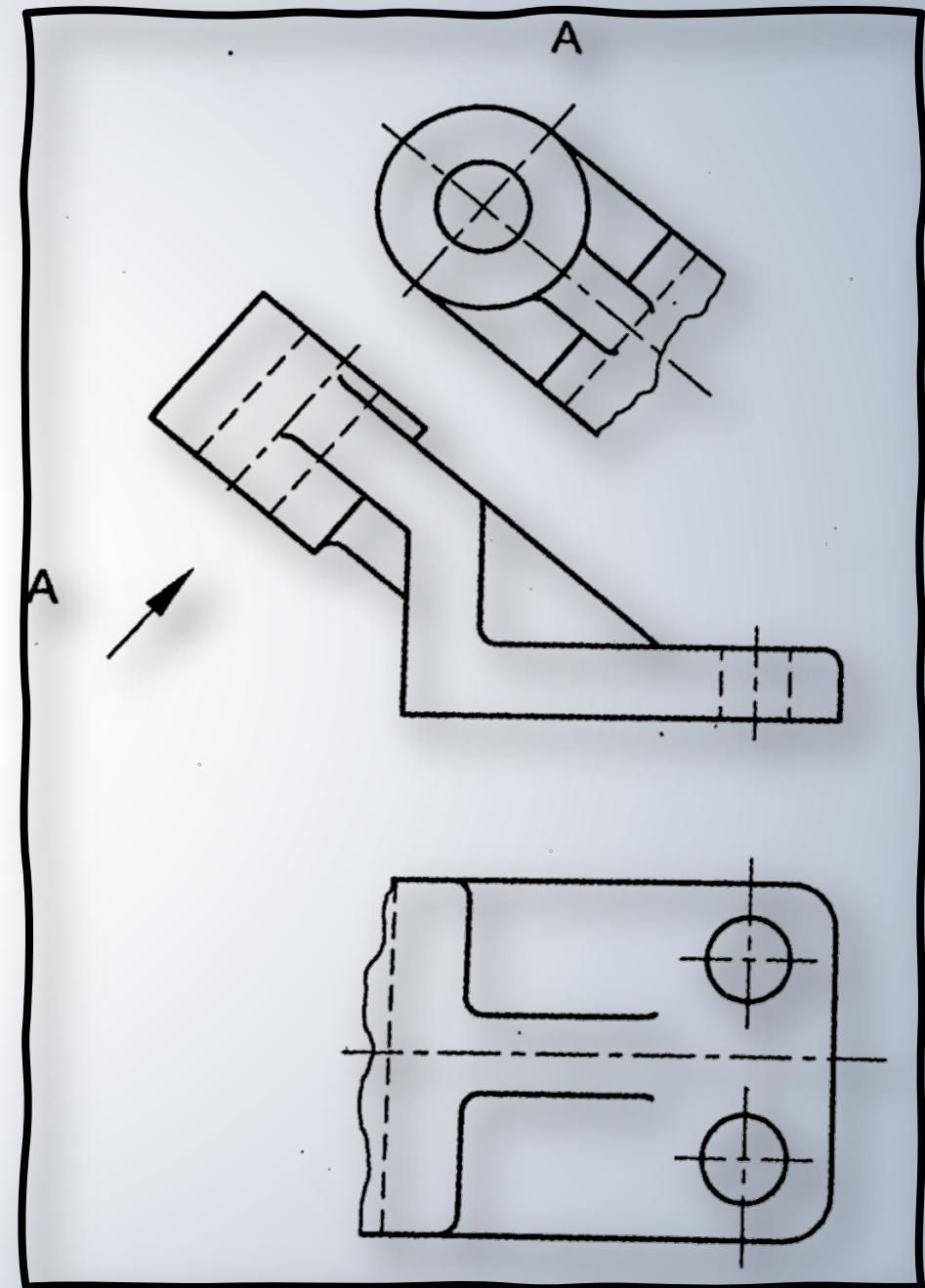
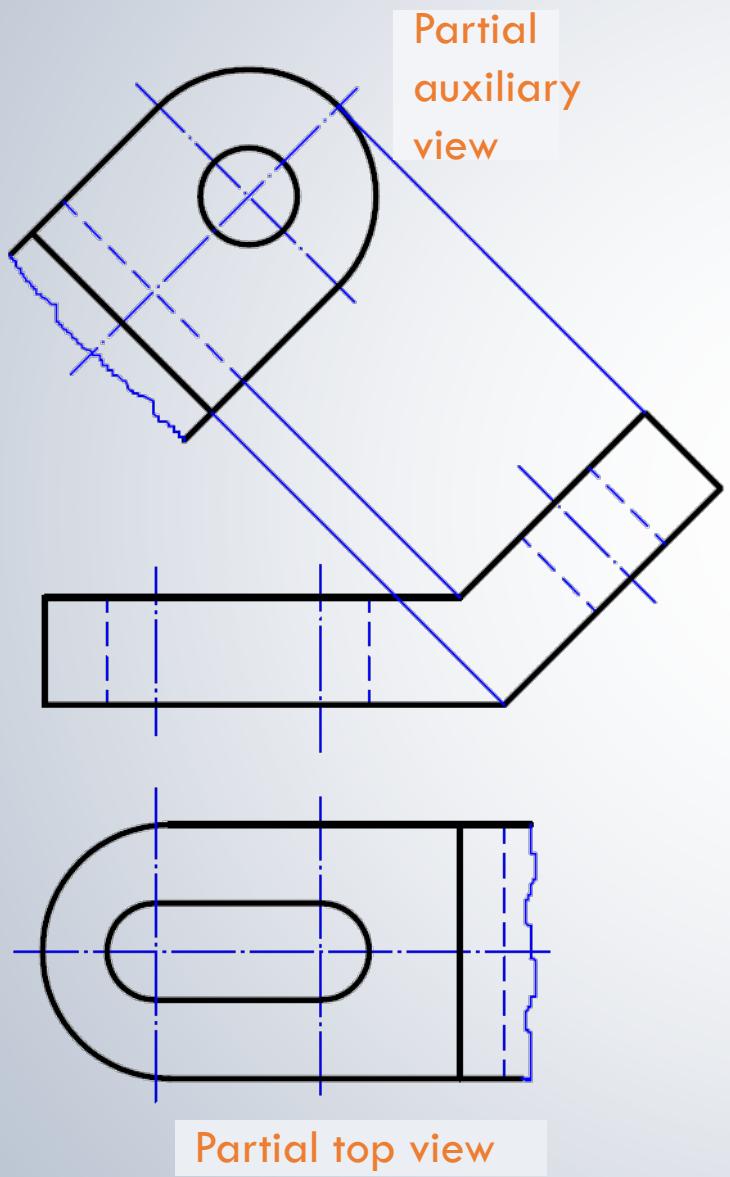
PLANE SURFACES



REPRESENTATION OF THE INITIAL FORM OF THE PART



PARTIAL AUXILIARY VIEW

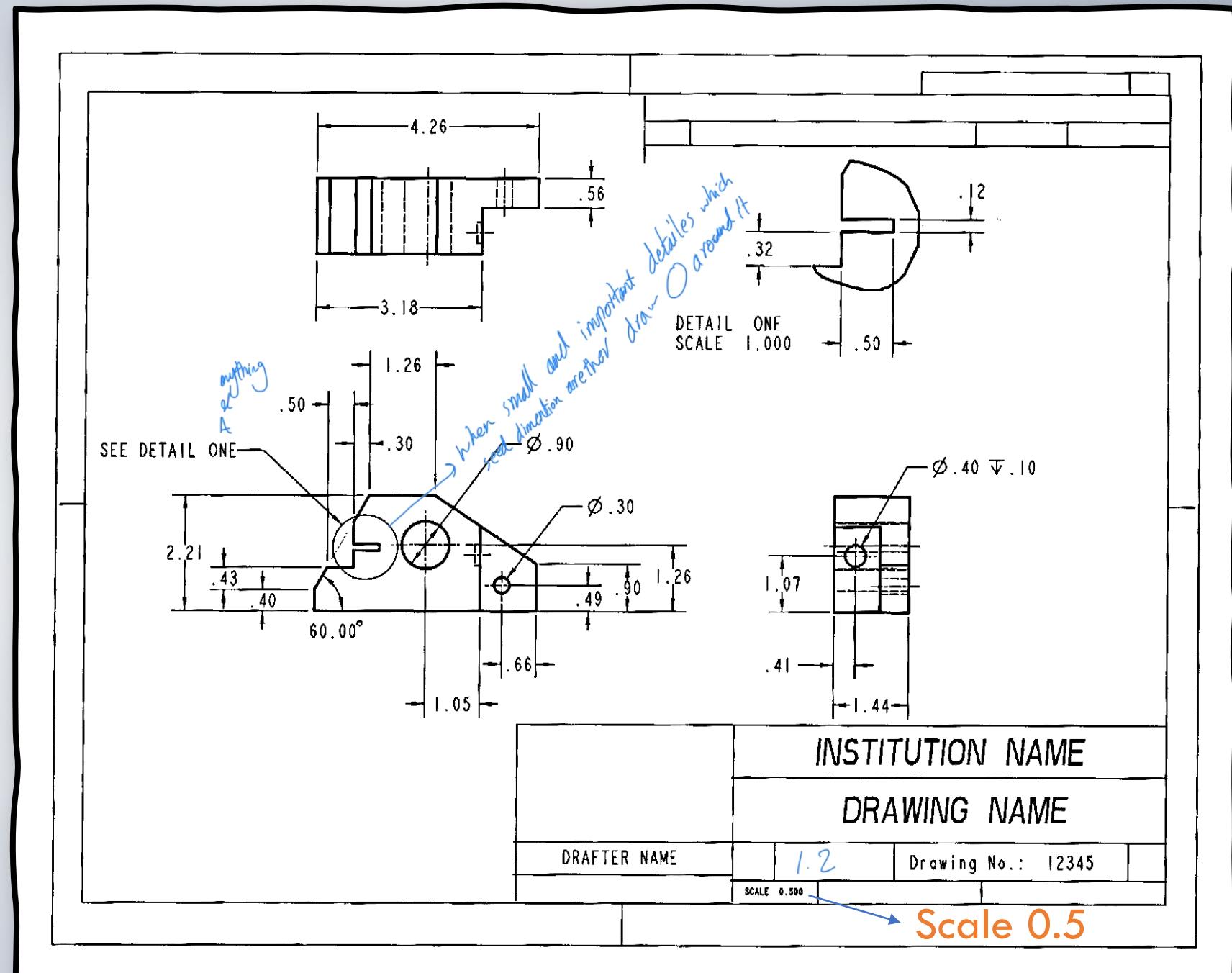


OTHER AUXILIARY VIEWS

- Detail view
- Rotated
- Broken-out section
- Break view
- Half view

Not following about them

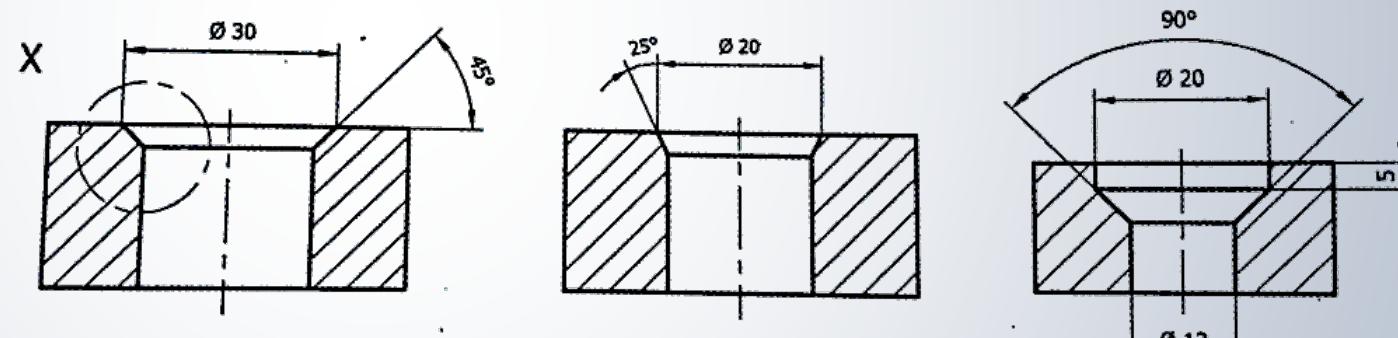
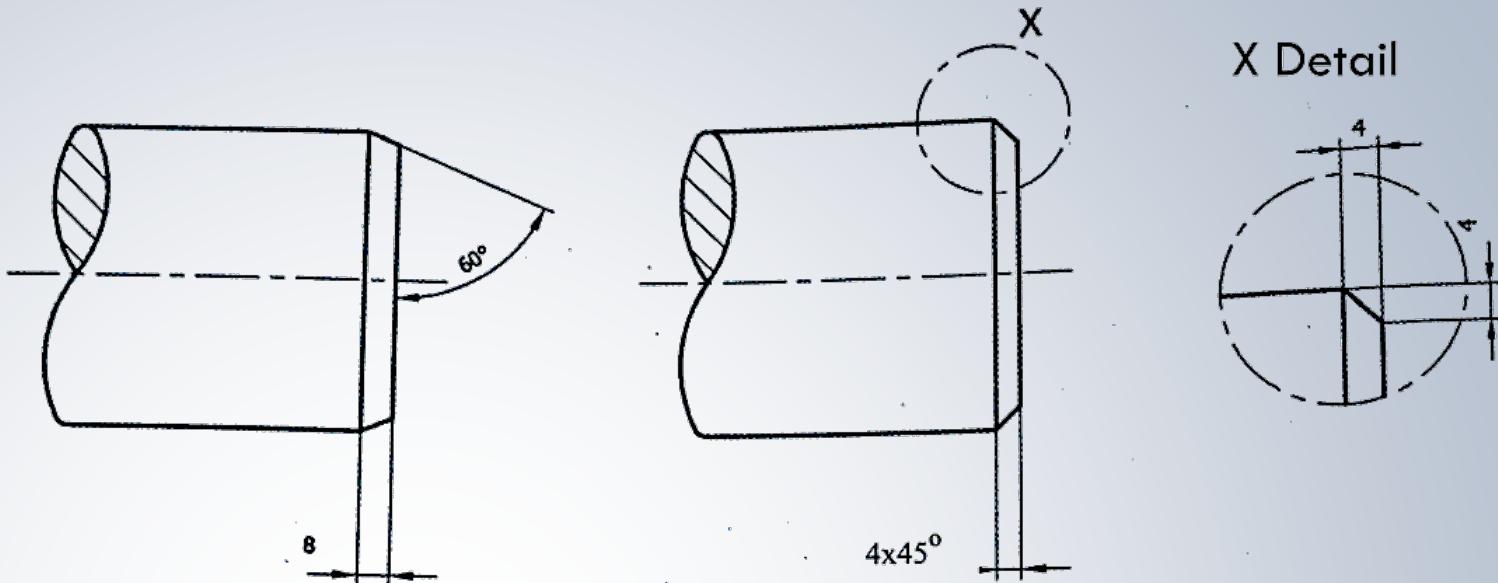
DETAIL VIEW



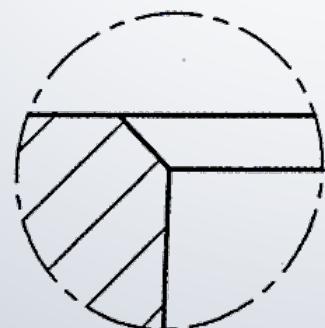
DETAIL VIEW

Chamfer & Counter Sink
dimensioning

~~adjust paper areas~~

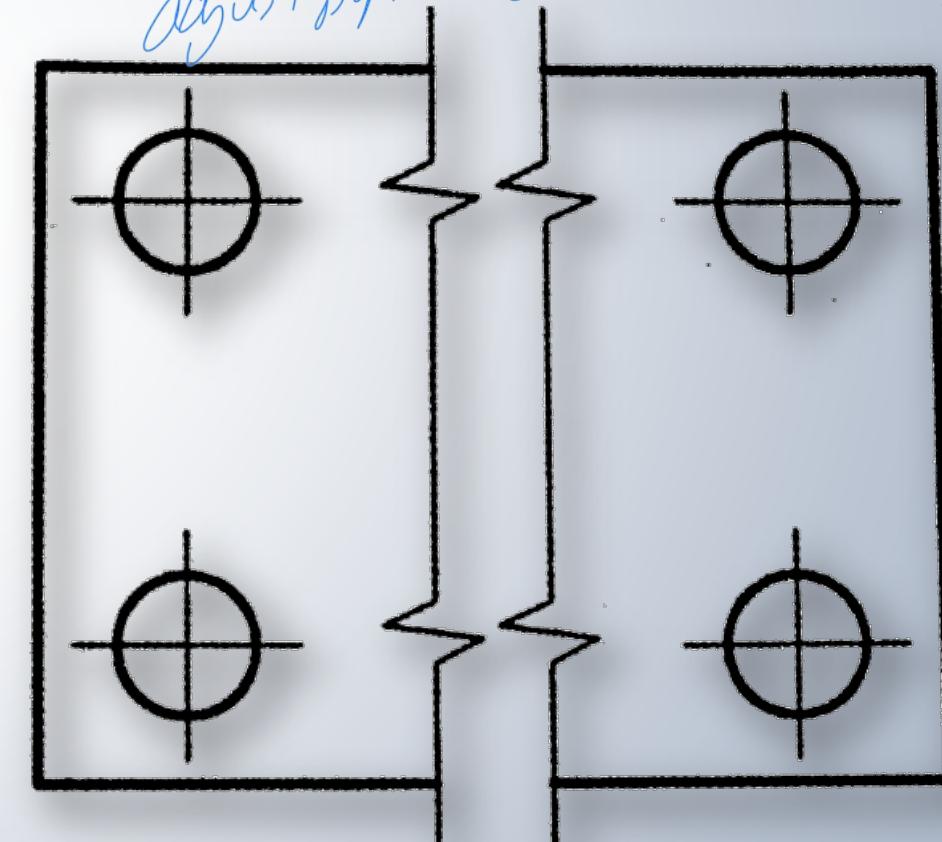
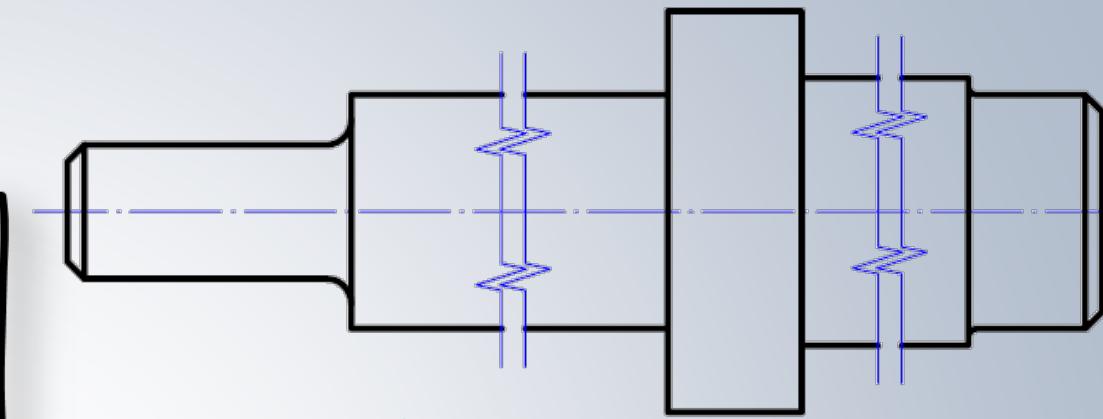
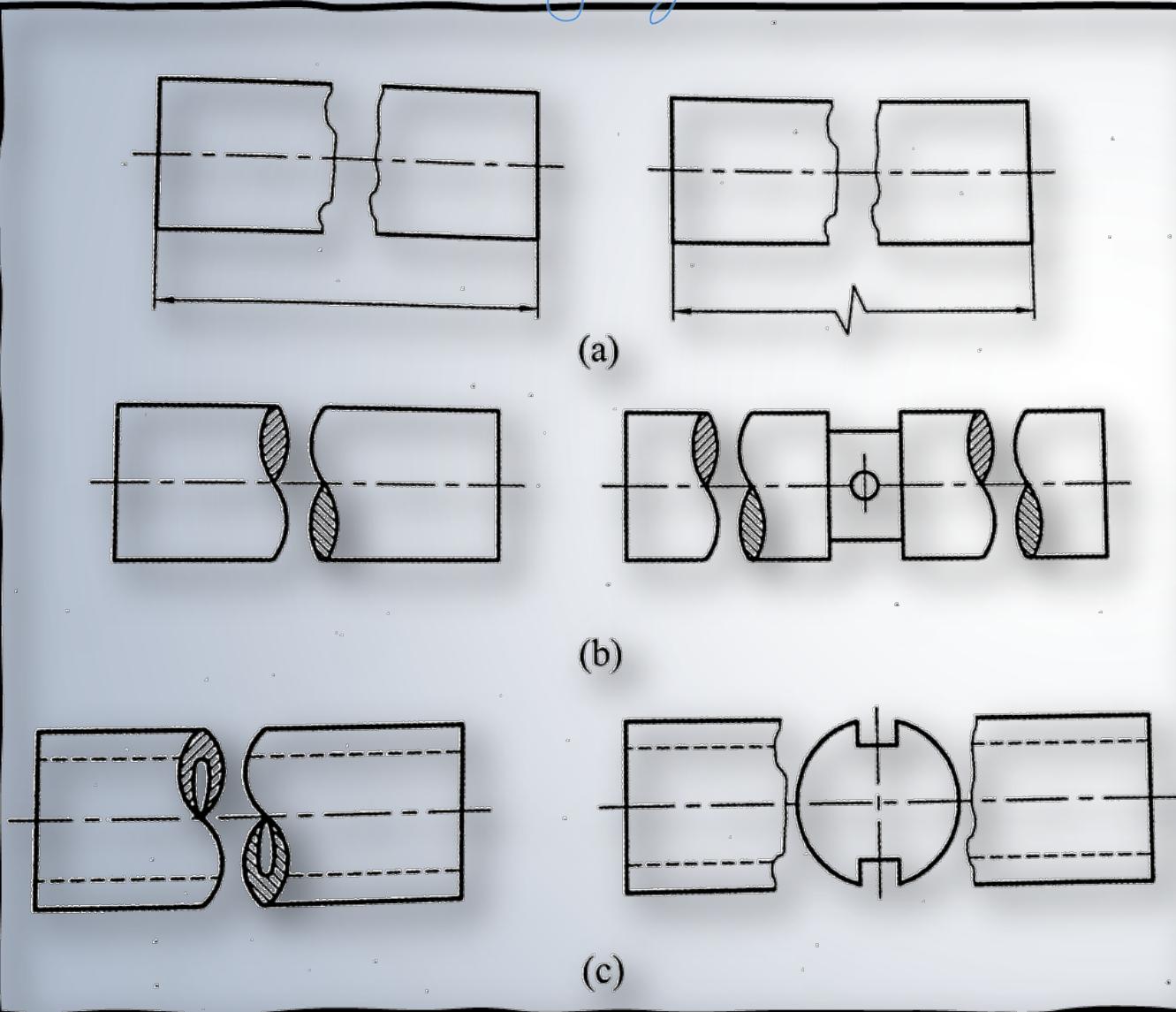


X Detail



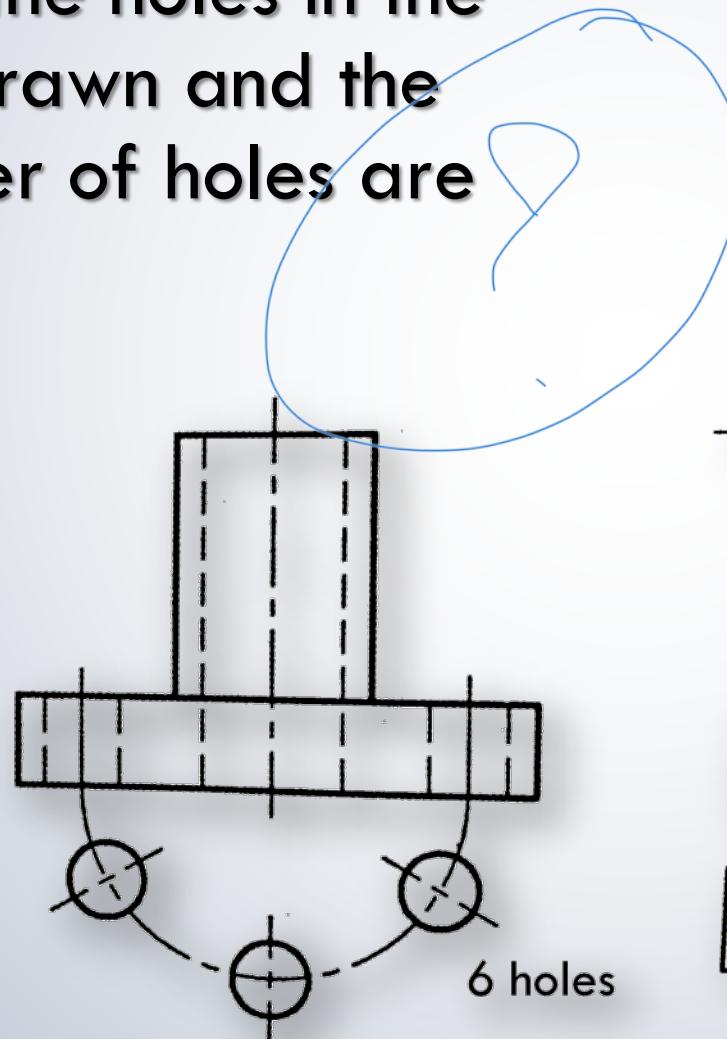
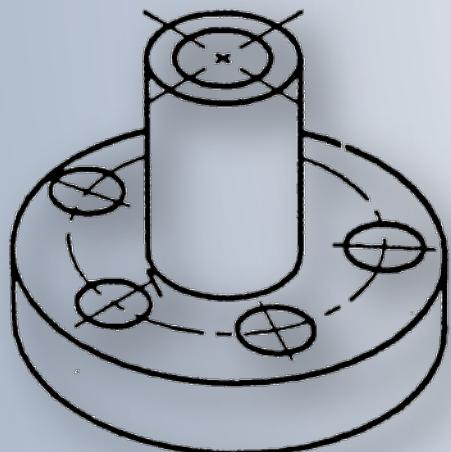
BREAK VIEW – LONG PARTS

when have something long make it shorter

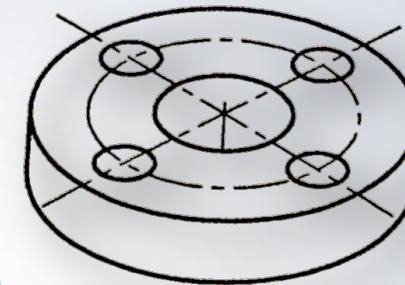


ROTATED - FLANGES

- The front view is drawn, the rotated axes of the holes in the other view are drawn and the place and number of holes are specified.



Four hole flange



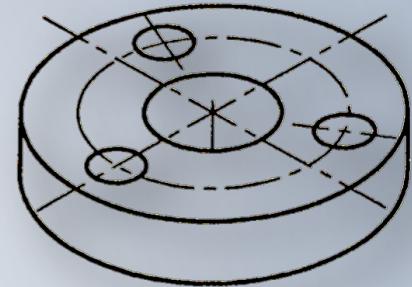
REAL
PART



TOP
VIEW



Three hole flange

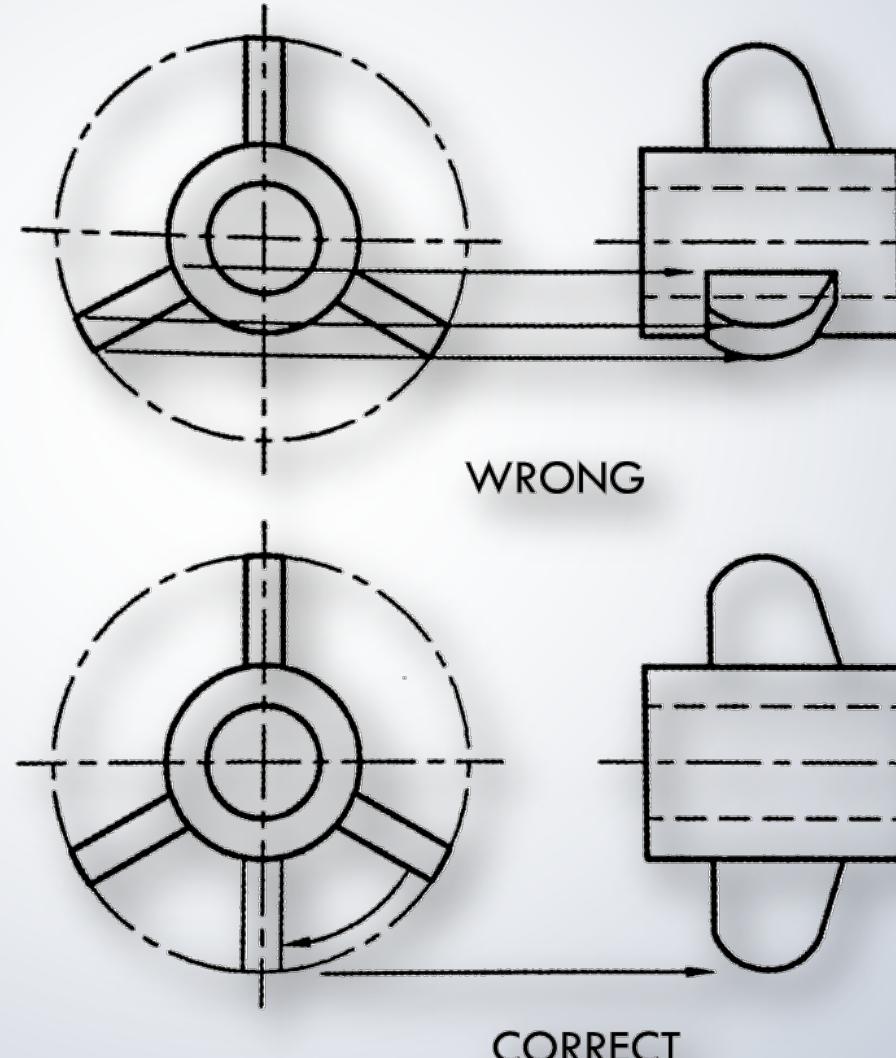
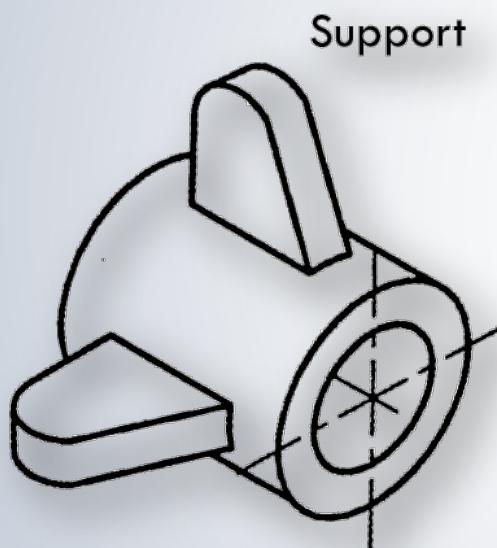


CORRECT
FRONT
VIEW
WRONG



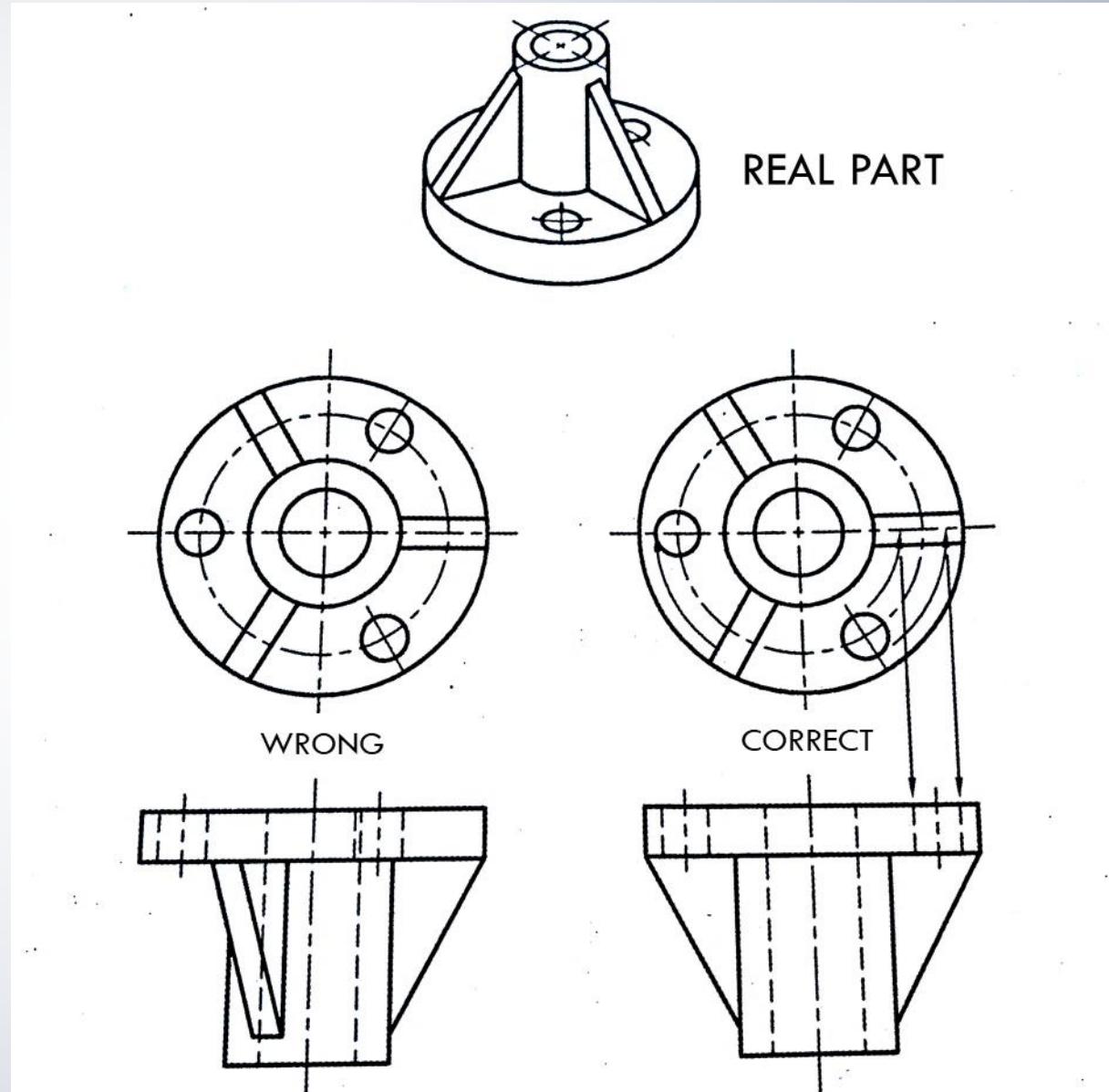
ROTATED - CIRCUMFERENTIAL SUPPORT MEMBER

- Rotated according to the symmetry axis and drawn in top view.



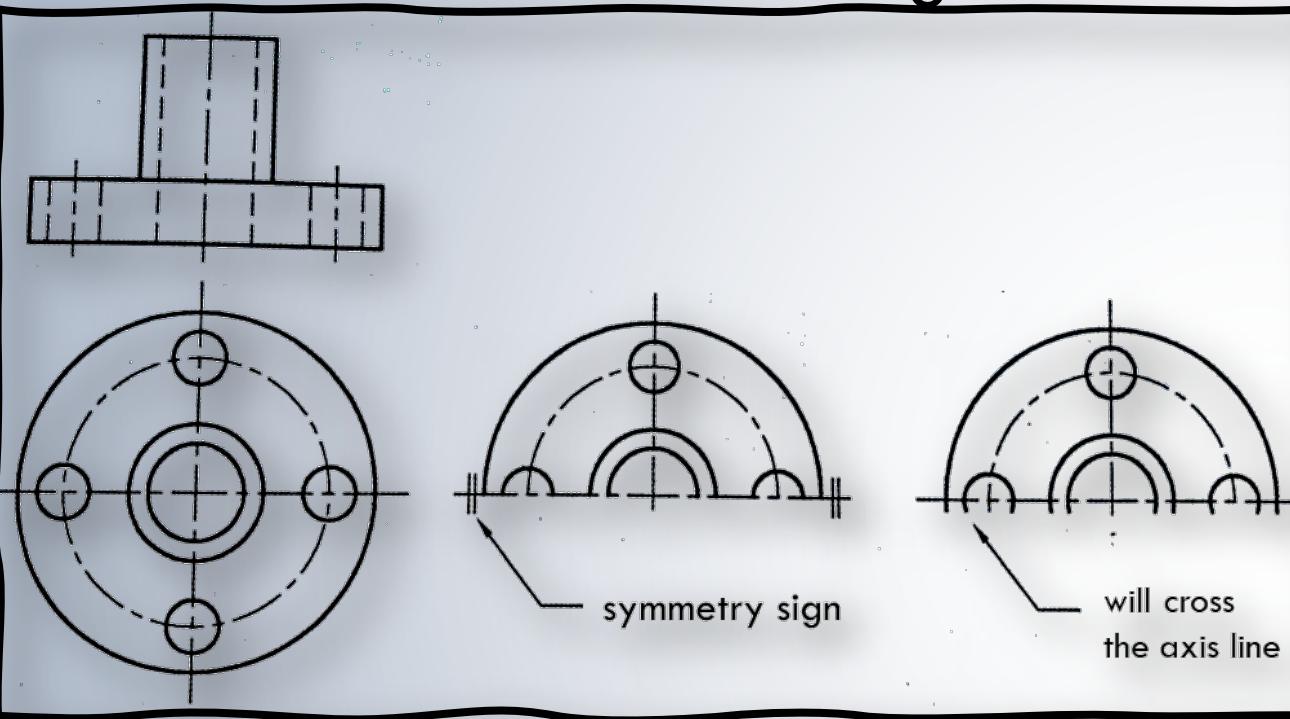
ROTATED – FLANGES WITH SUPPORTS AND HOLES

- The flange is always drawn in a rotated view
- Supports and holes are moved to the axis of symmetry and projected

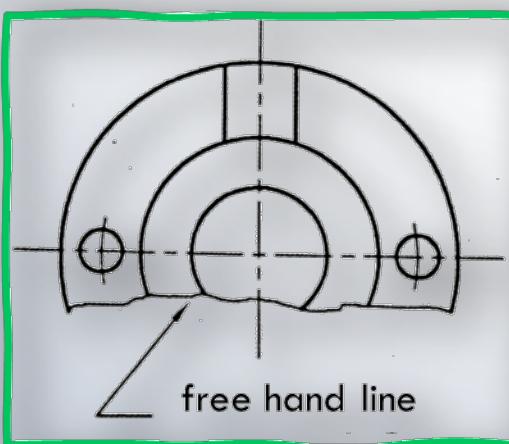


HALF VIEW – SYMMETRICAL PARTS

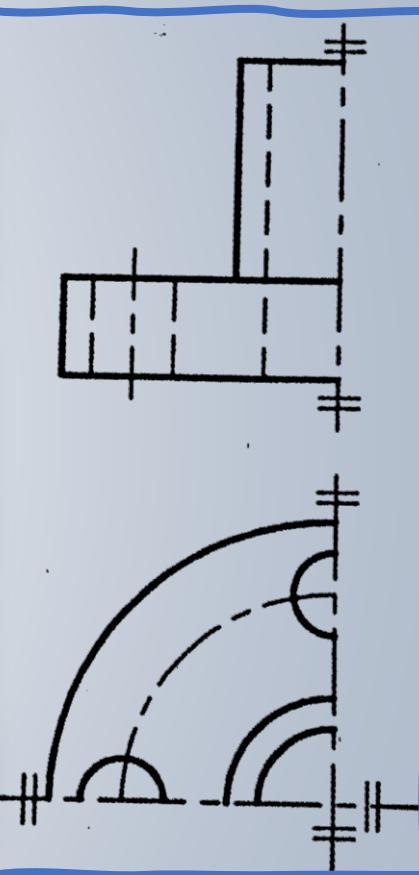
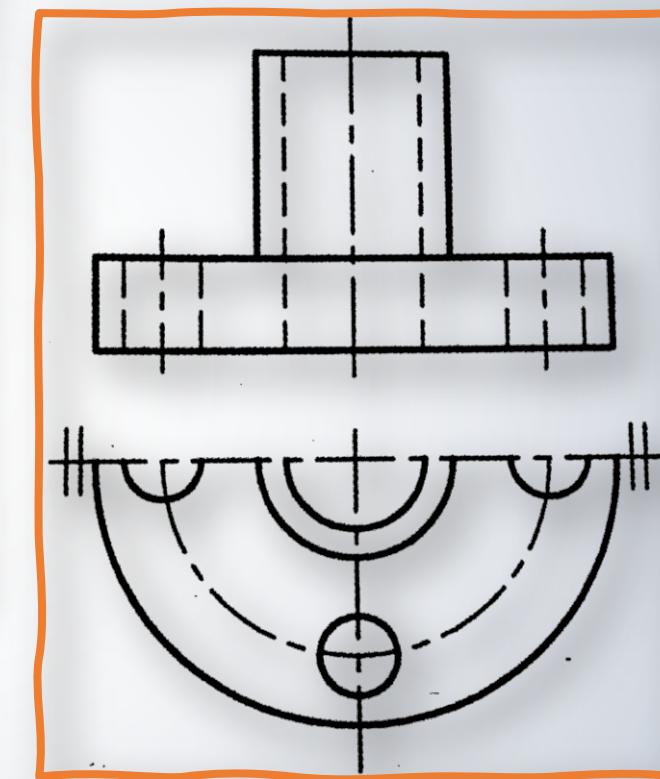
Half view drawing



Borderline by free hand line if not symmetrical



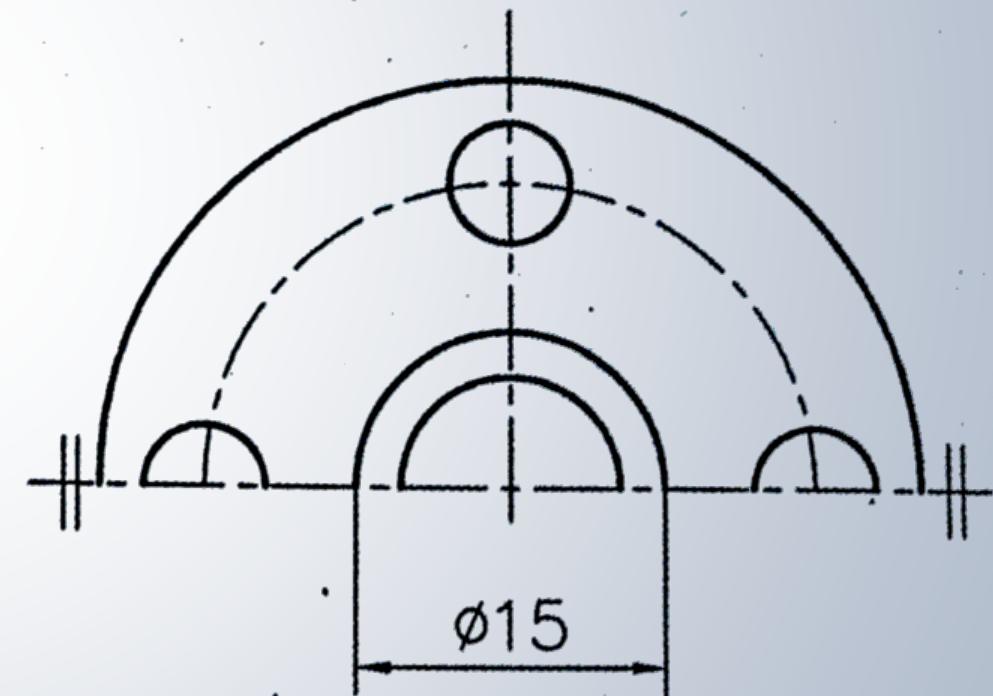
Half view



Two views
simultaneous
simplification

HALF VIEW DIMENSIONING

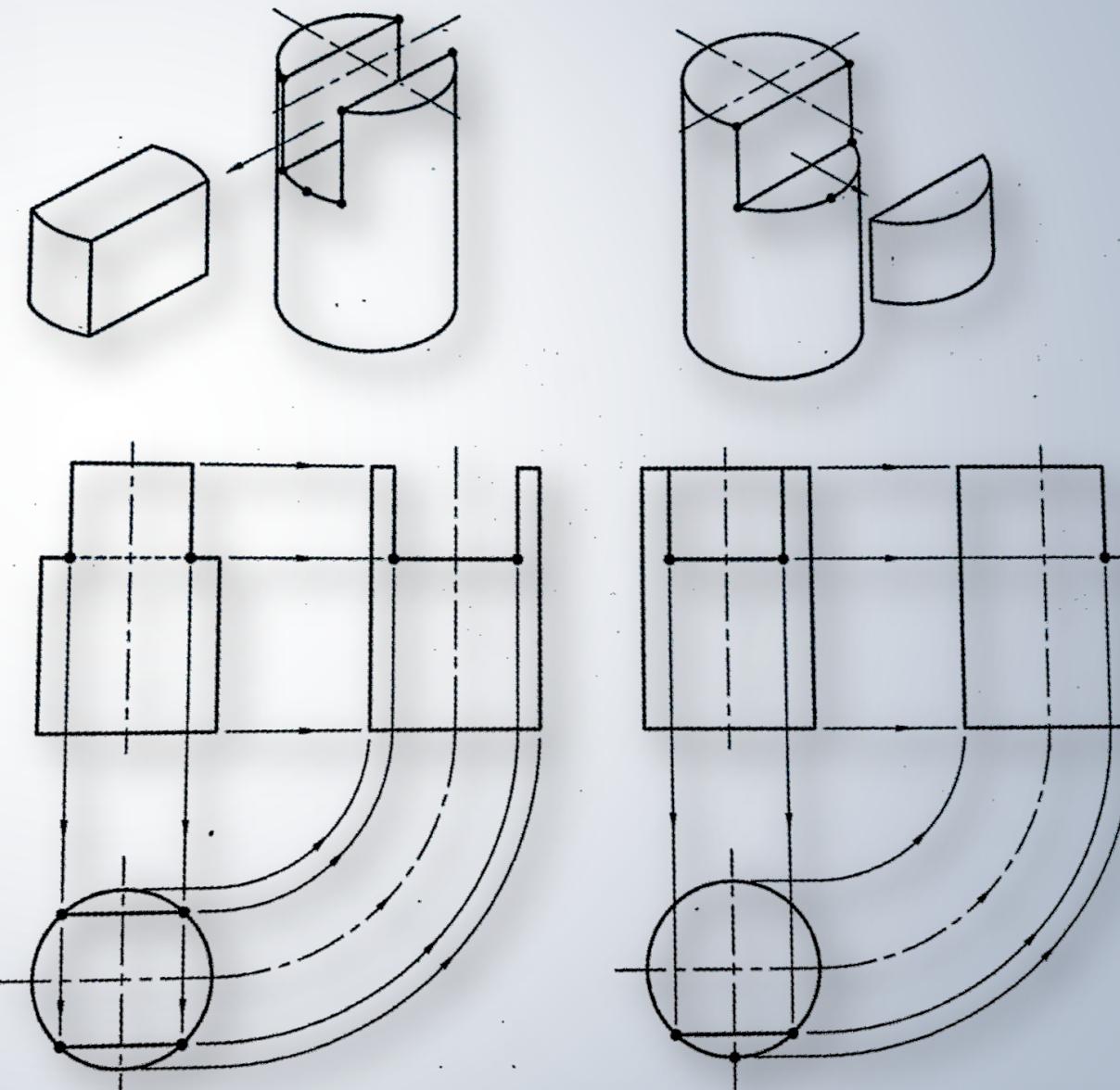
Symmetrical part



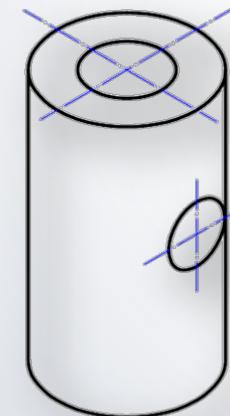
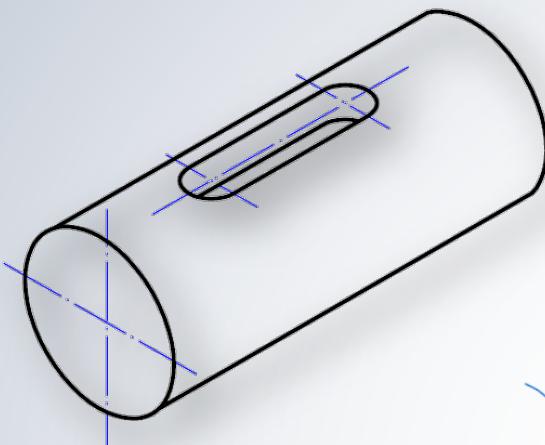
CROSS-SECTION VIEWS

- The joint points occur where geometric elements intersect or merge; and the lines and planes are formed by these points are called cross section.

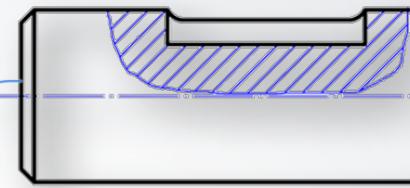
Cross-sections in a cylindrical part



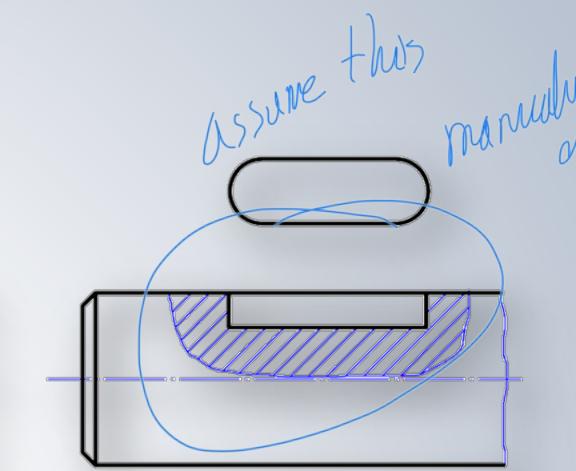
CROSS-SECTION VIEWS



ok no problem

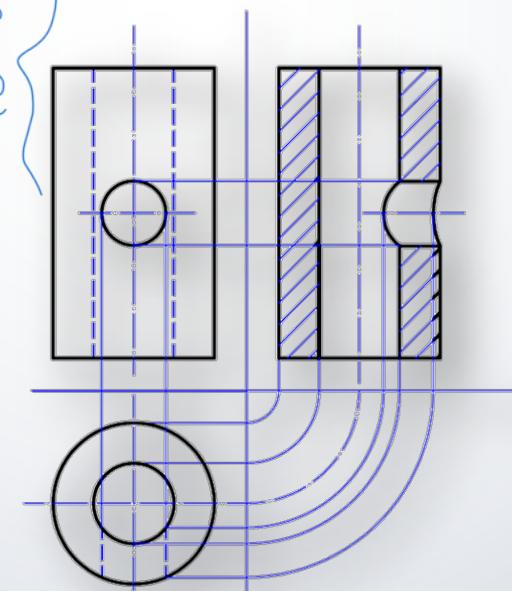


Real view

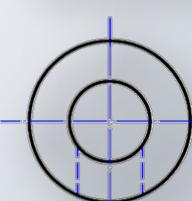
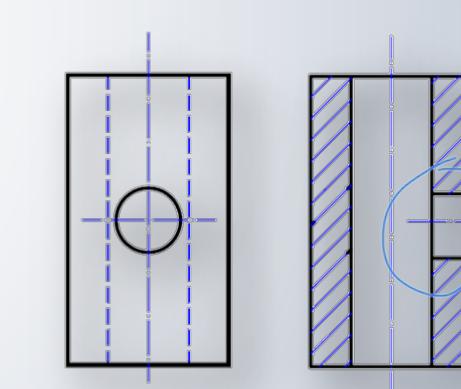


Preferred view

Solid works

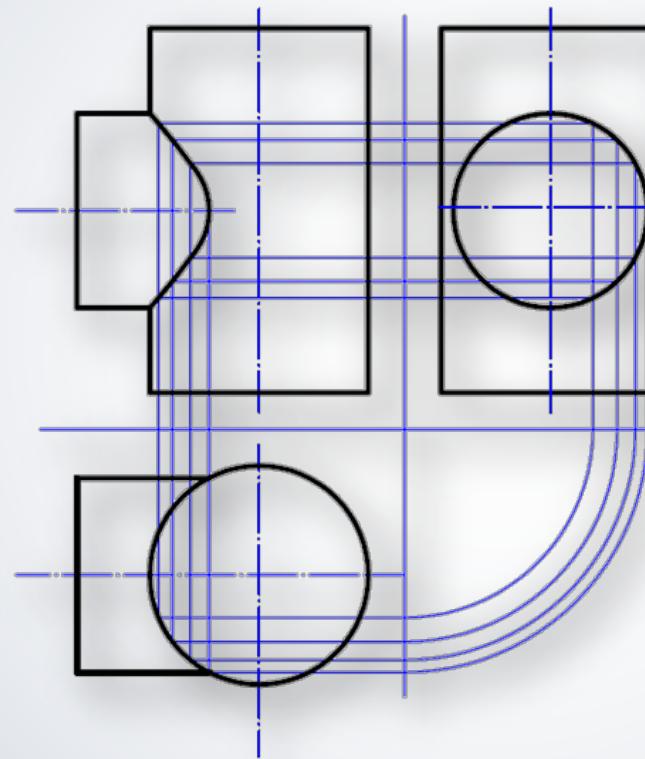
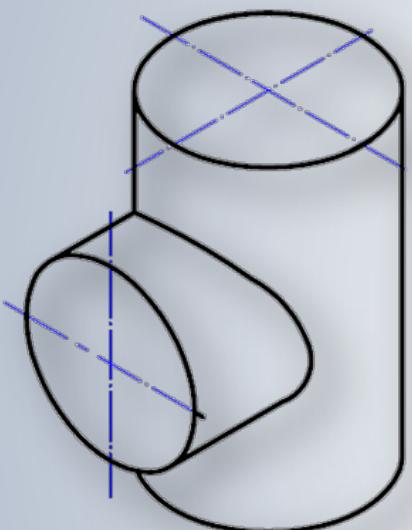


Real view

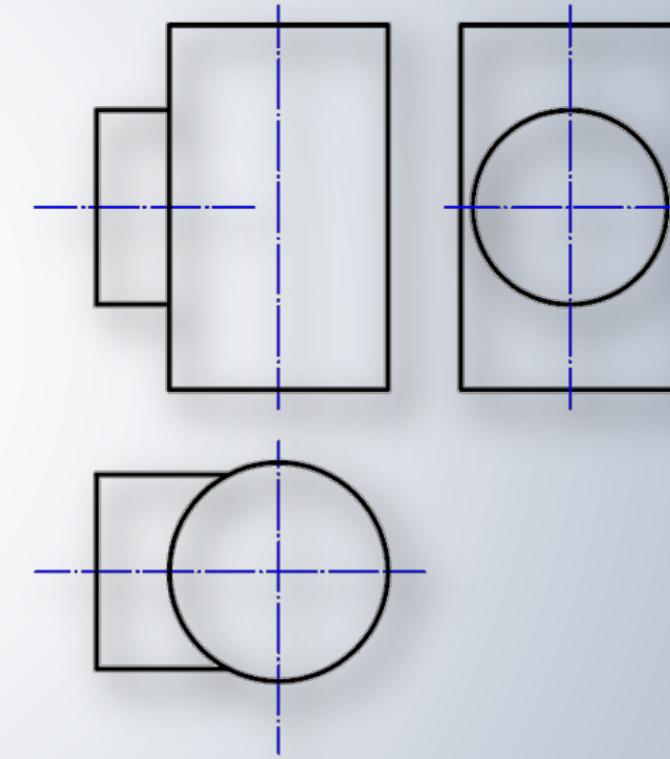


Preferred view

CROSS-SECTION VIEWS

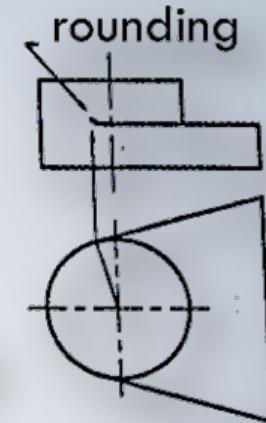
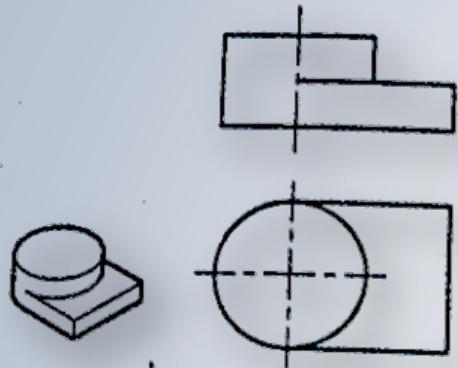


Real view

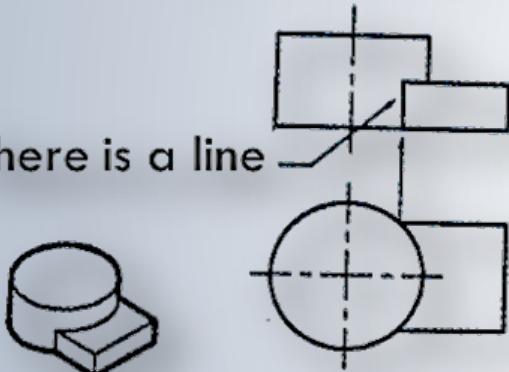


Preferred view

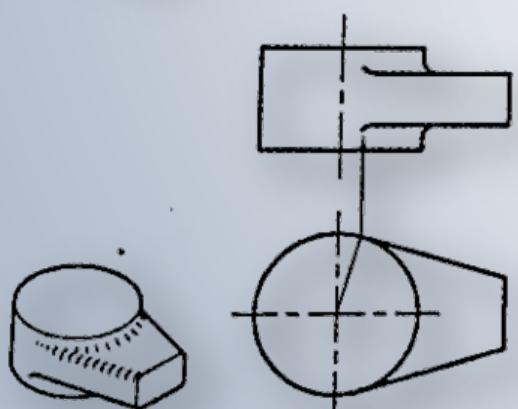
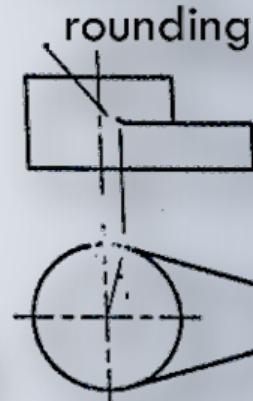
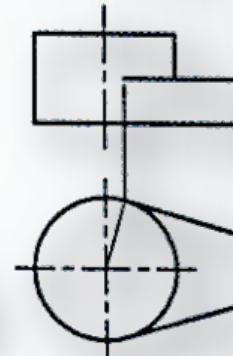
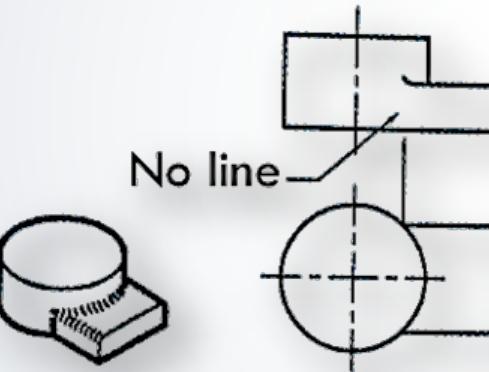
MERGE ROUNDINGS



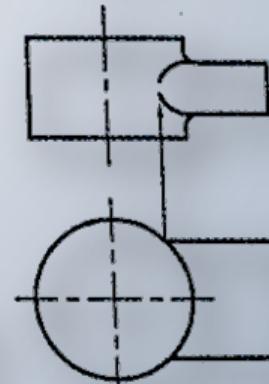
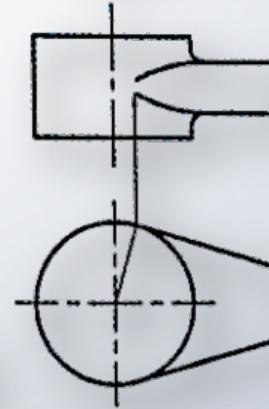
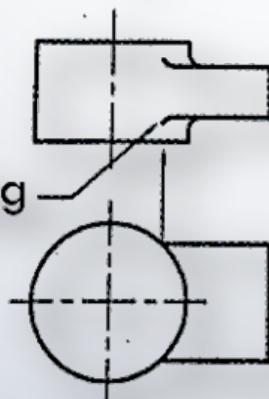
There is a line



No line



rounding



CURVED CORNERS

