

ENGINEERING GRAPHICS

:: END-OF-THE-COURSE REVIEW



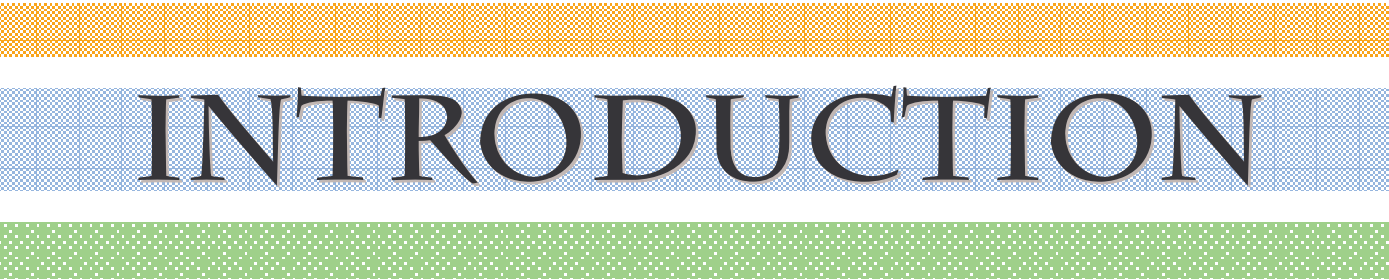
TA 101 : Engineering Graphics

2007-08 Semester II

January – May 2008

OUTLINE

- Total recall...
 - Of the FULL course



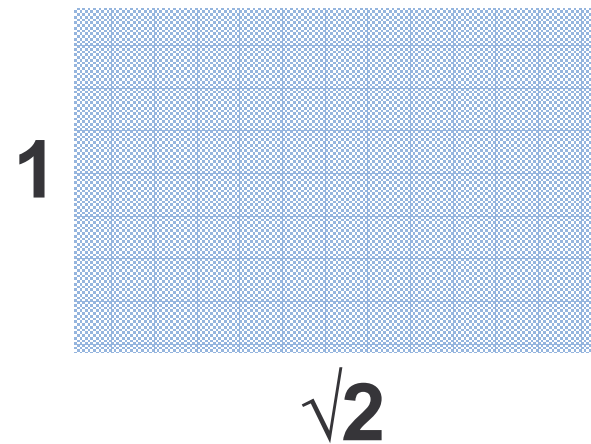
INTRODUCTION

- Drawing Paper

- Standard paper in India

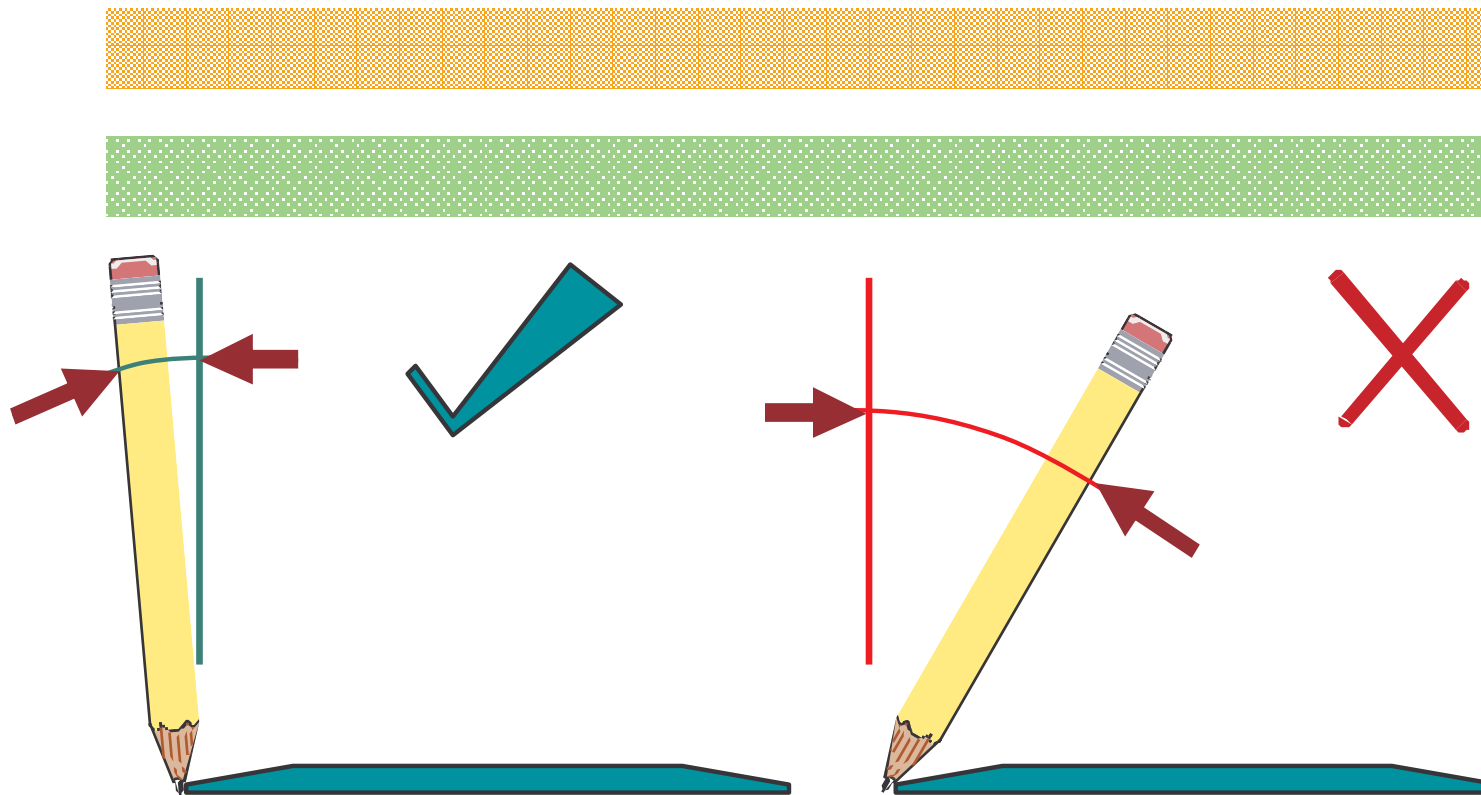
- A-series

- Constant aspect ratio



TIPS

- Butt the pencil vertically against the straight edge

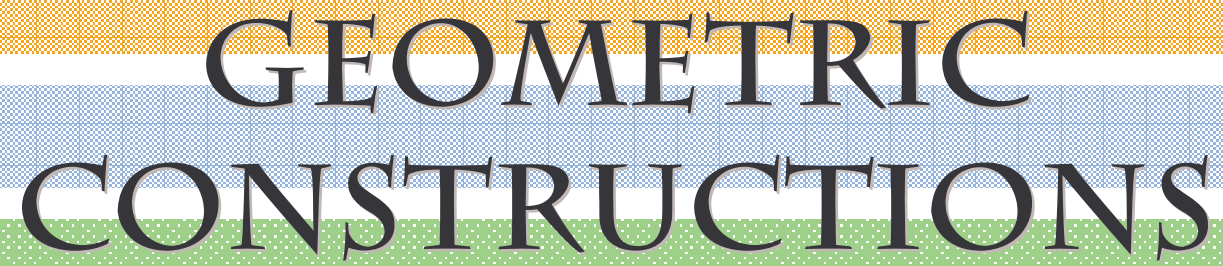




LETTERING

PENCIL STROKES

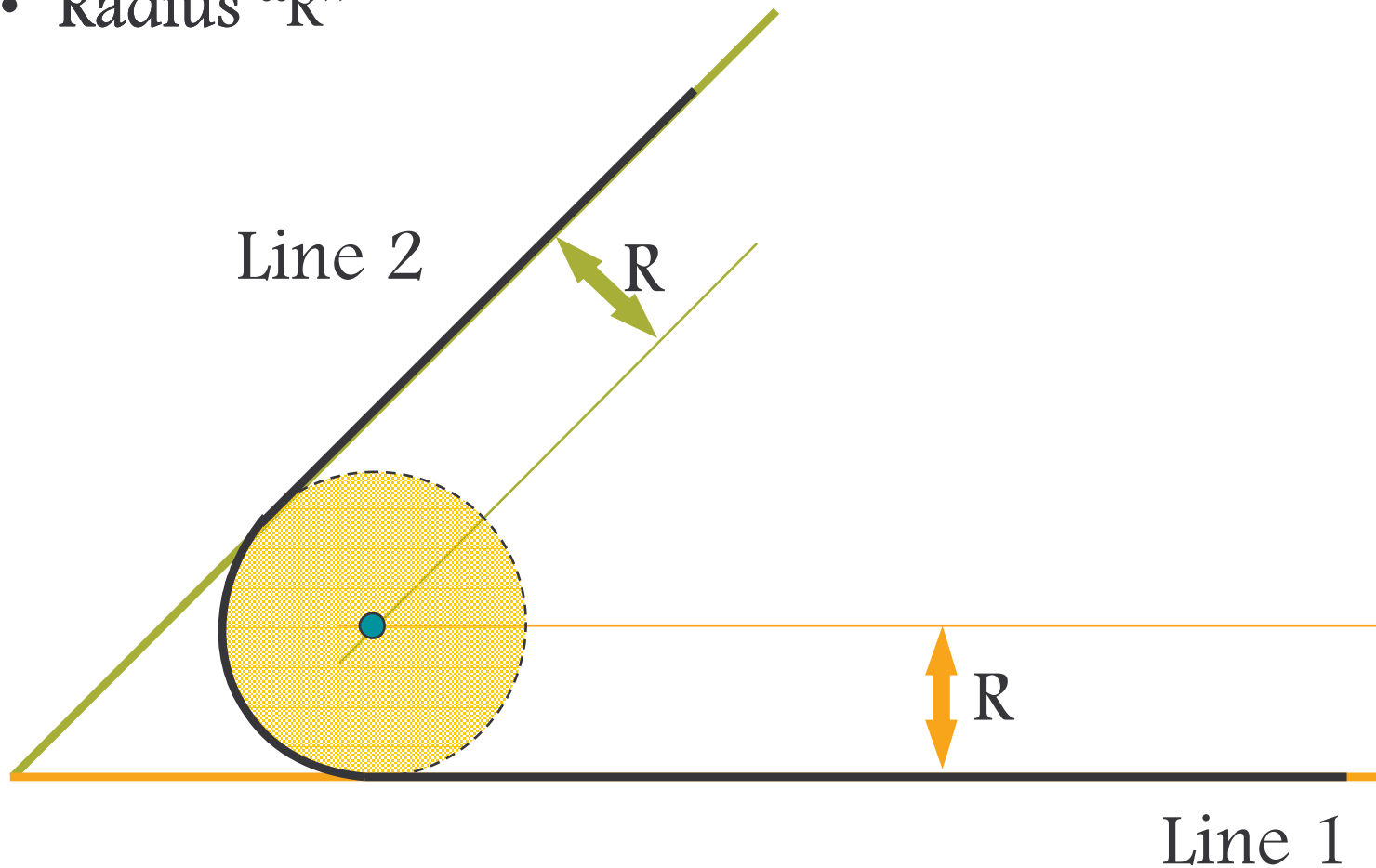




GEOMETRIC
CONSTRUCTIONS

CURVE TANGENT TO 2 LINES

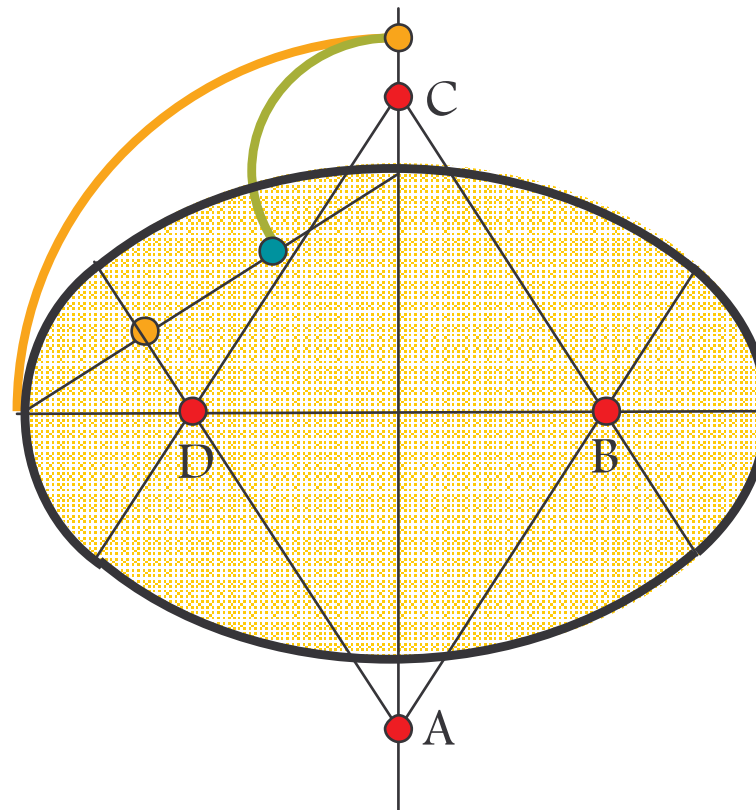
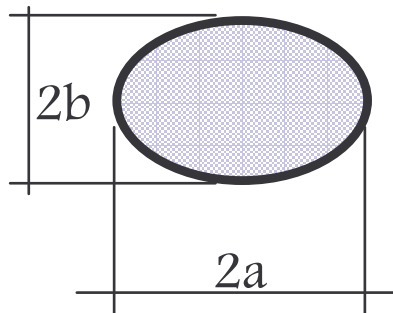
- Radius "R"



ELLIPSE

- Approximate Method

4-centered ellipse

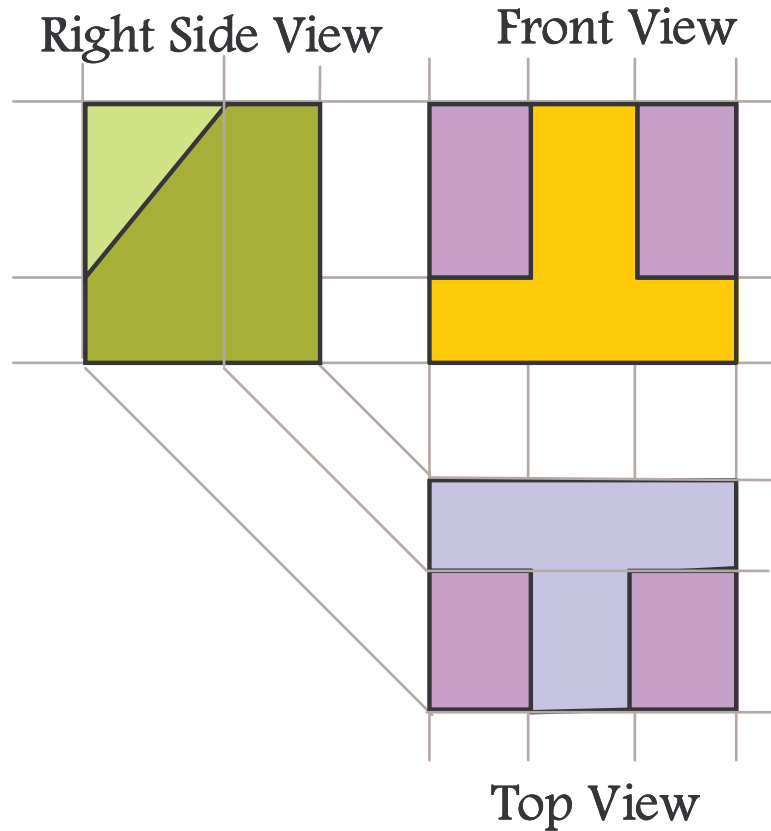
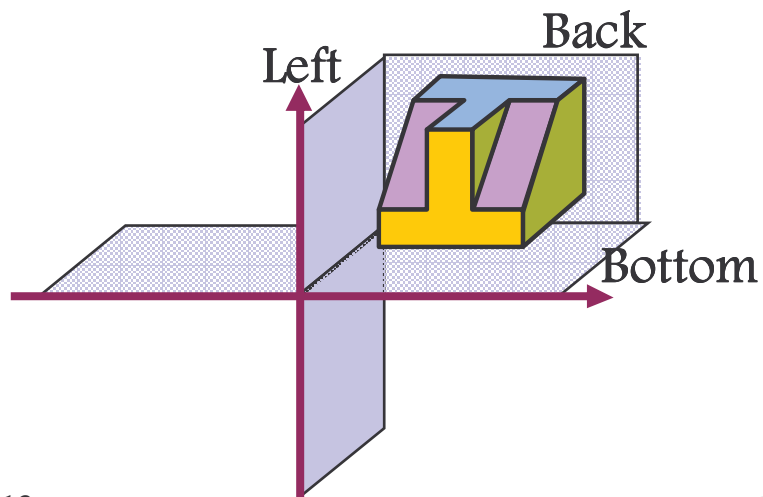




ORTHOGRAPHIC PROJECTIONS

TRANSPARENT VIEWING BOX

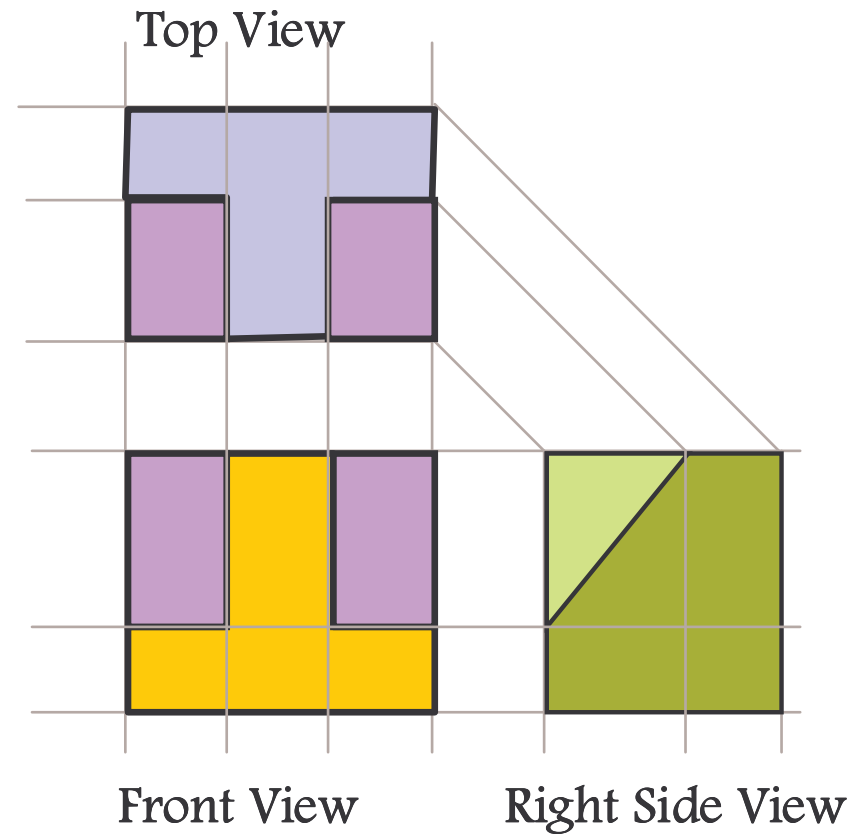
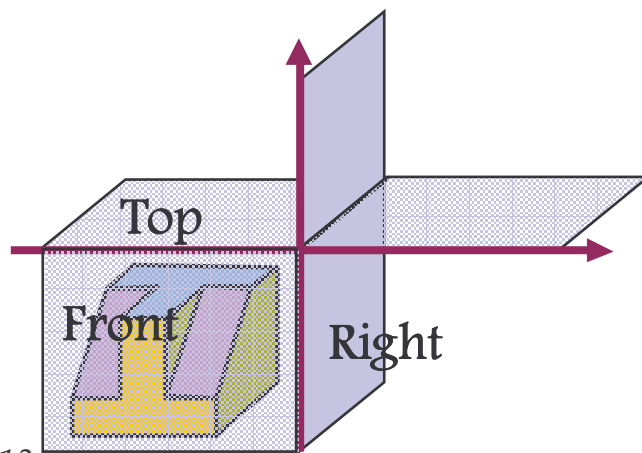
- **FIRST Angle Projection**
 - Object in front of plane



TRANSPARENT VIEWING BOX

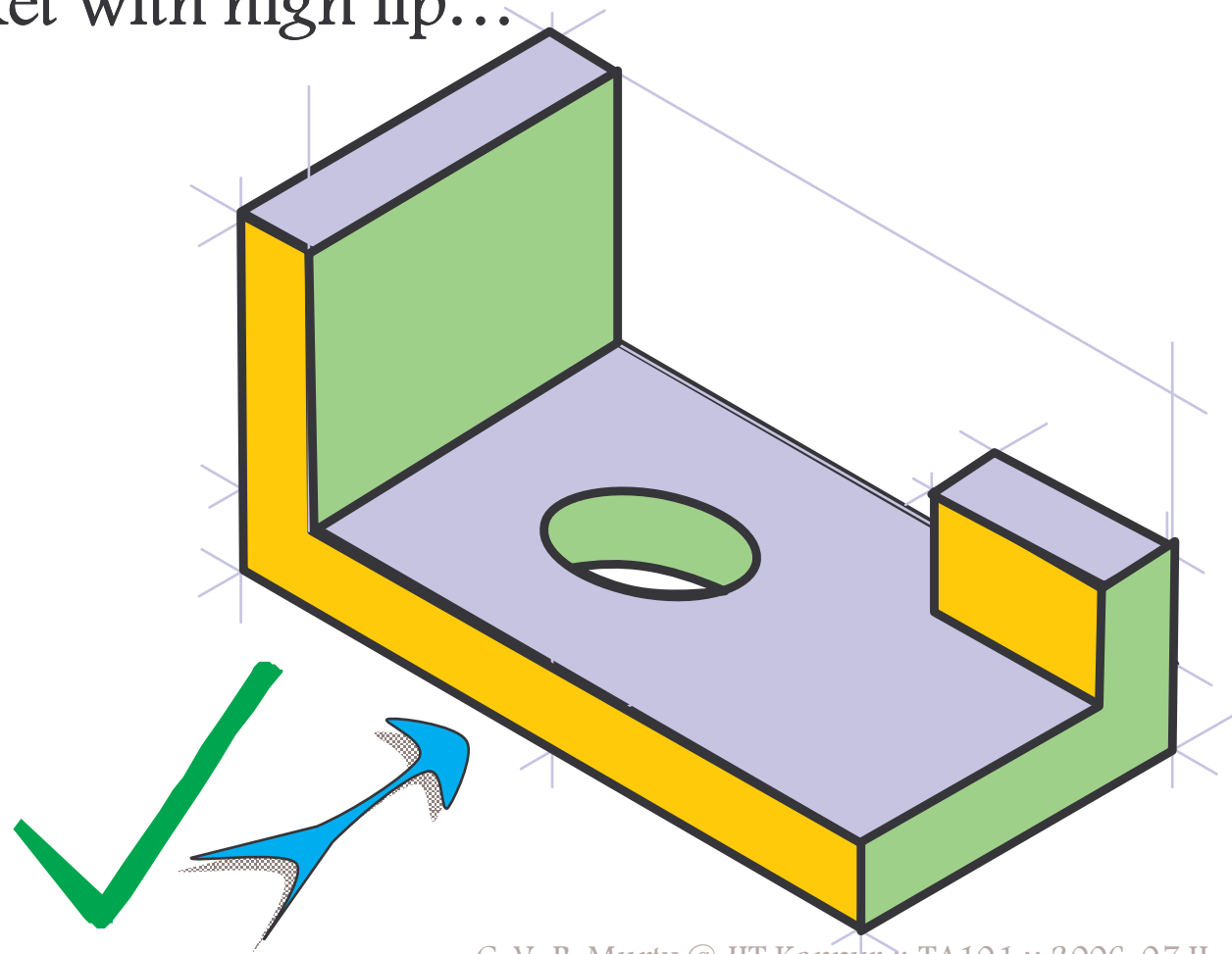
- **THIRD** Angle Projection

- Object behind plane



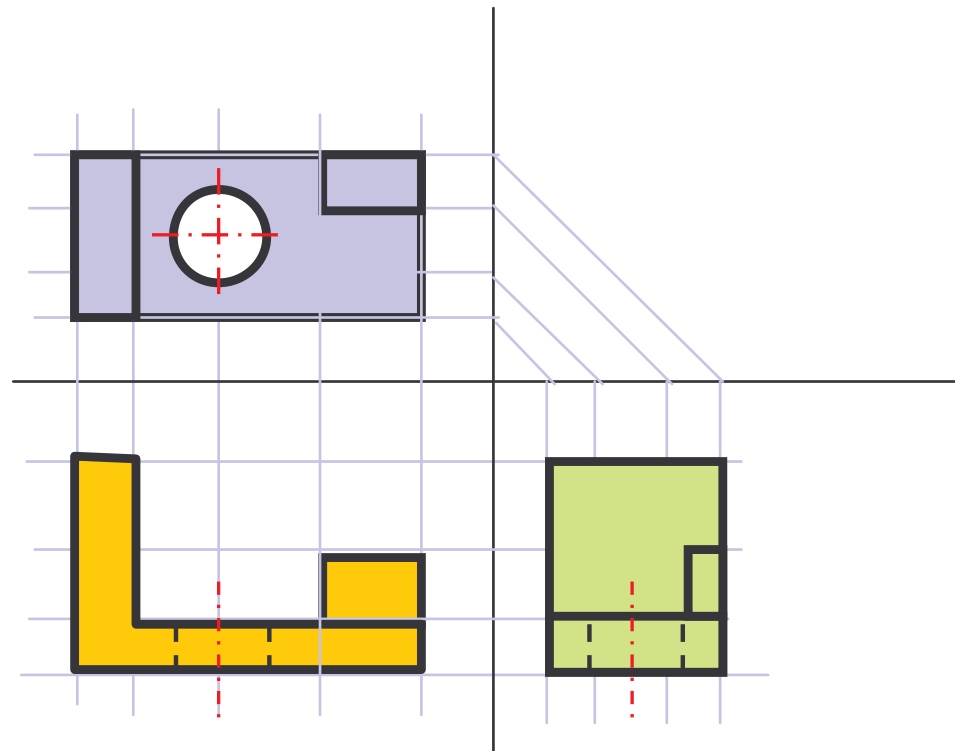
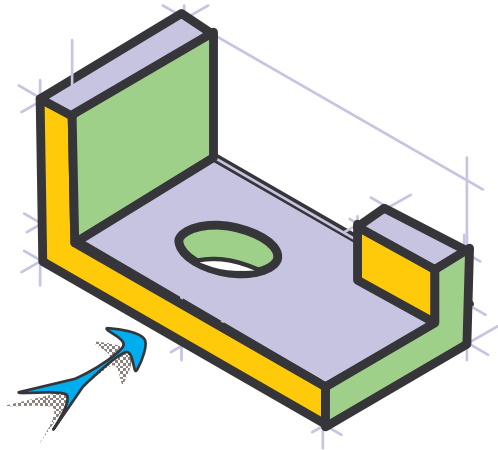
SIMPLE OBJECTS

- Bracket with high lip...

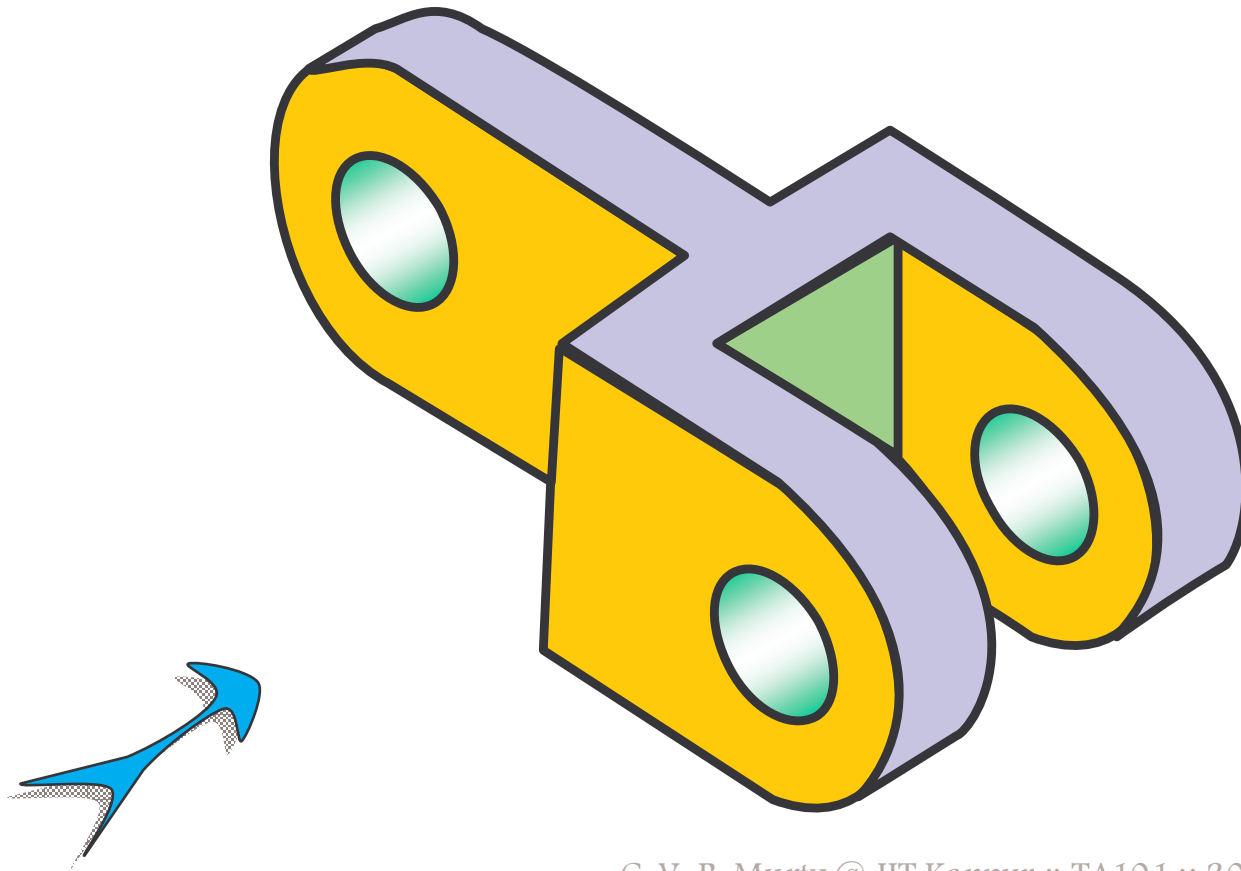


SIMPLE OBJECTS

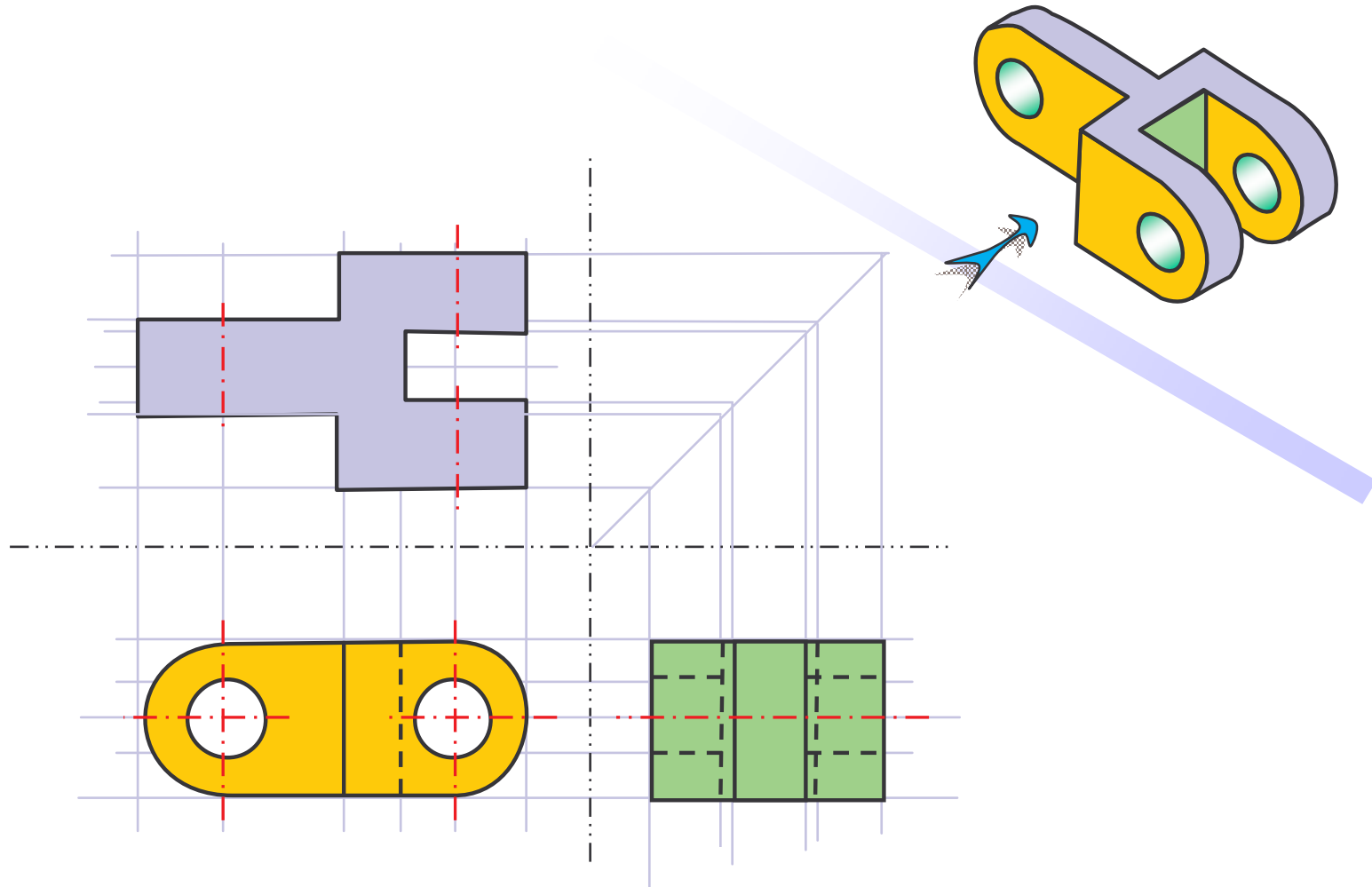
- Bracket with high lip...



EXAMPLE 7

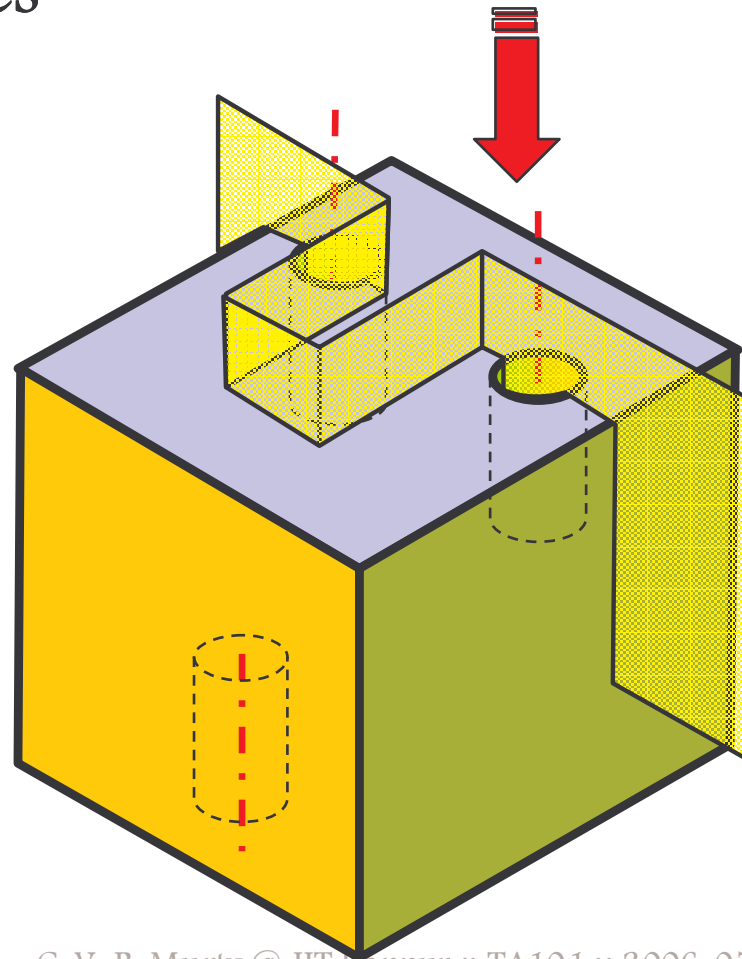


EXAMPLE 6



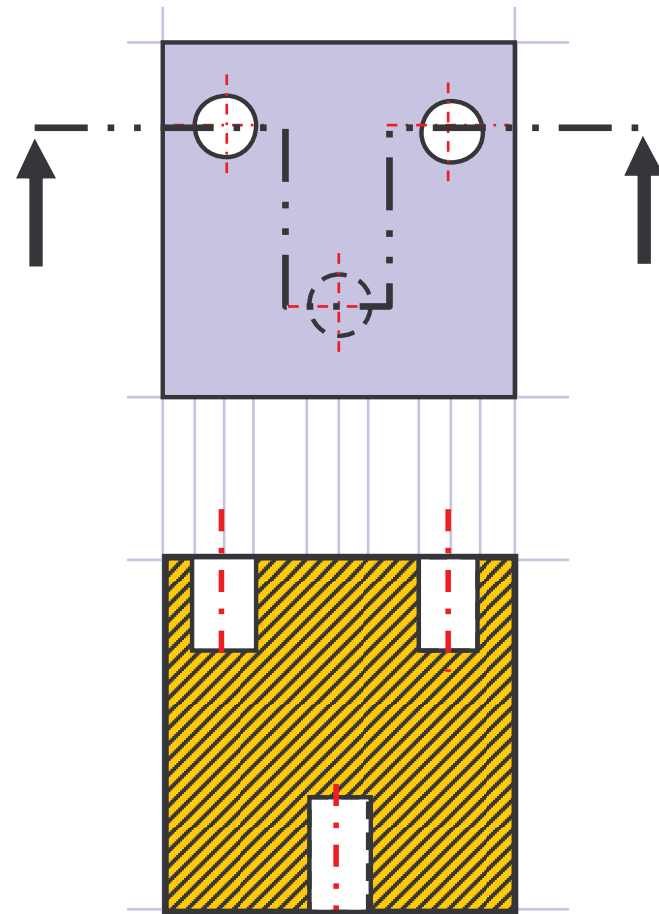
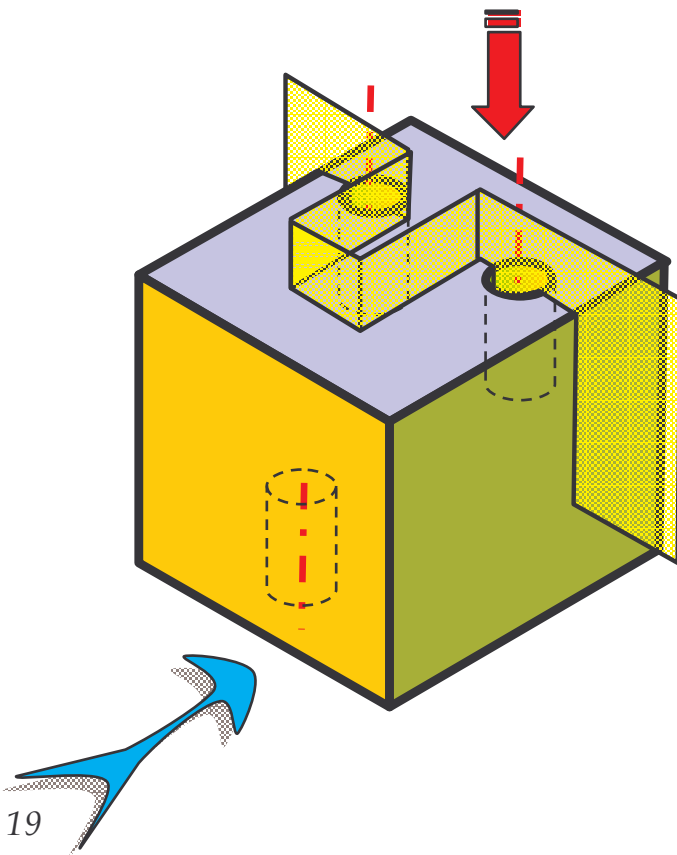
EXAMPLE 3

- Block with three holes



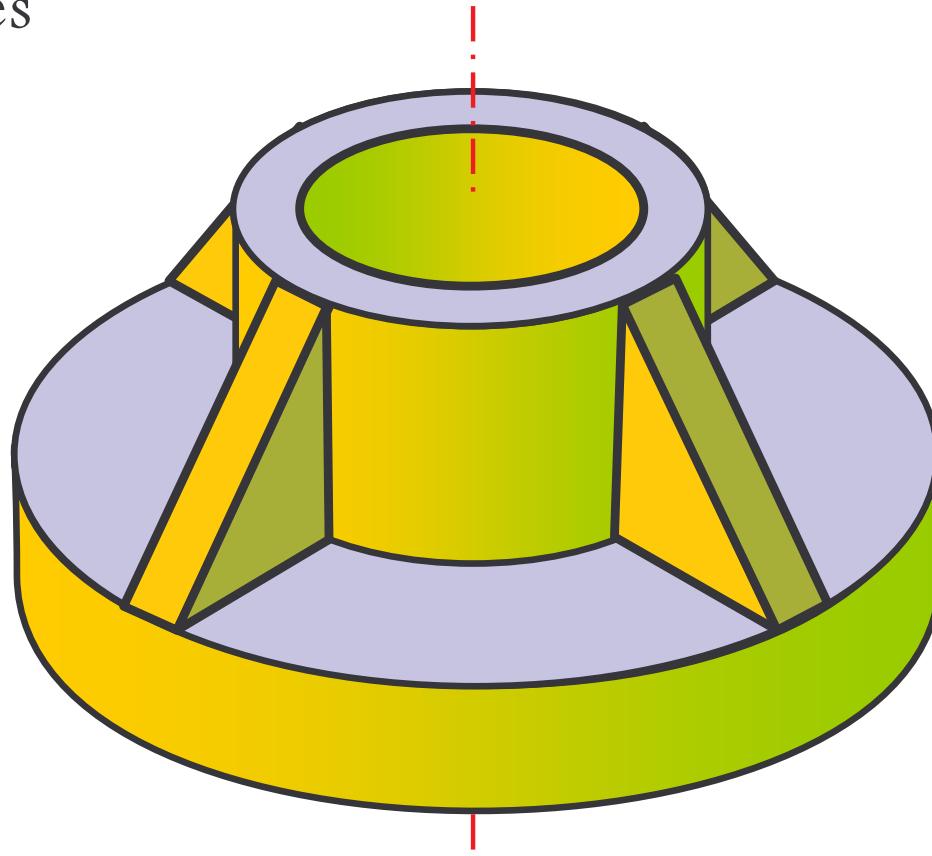
EXAMPLE 3

- Block with three holes



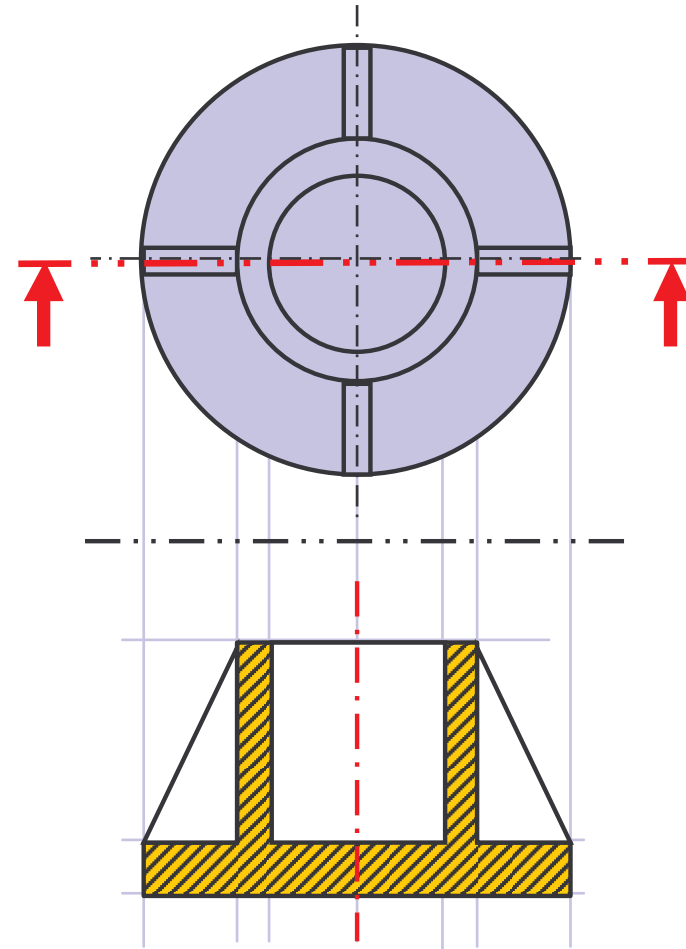
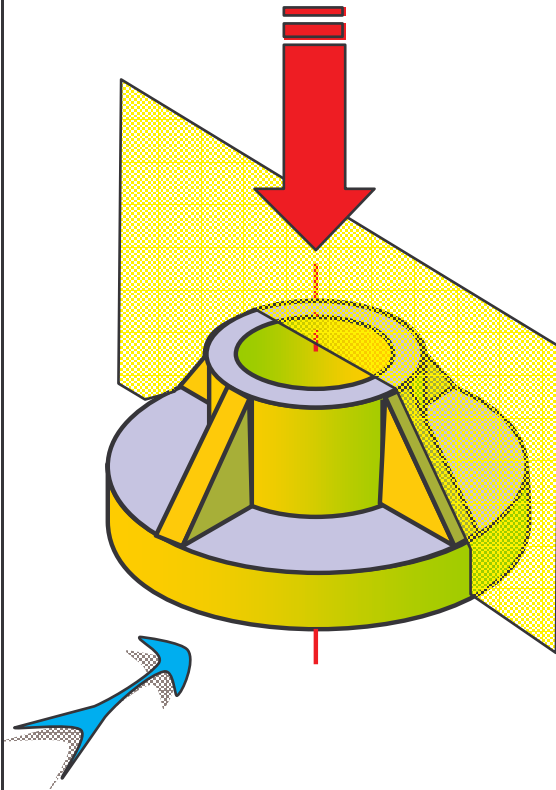
OTHER CONVENTIONS

- No sectioning
 - Ribs and spokes



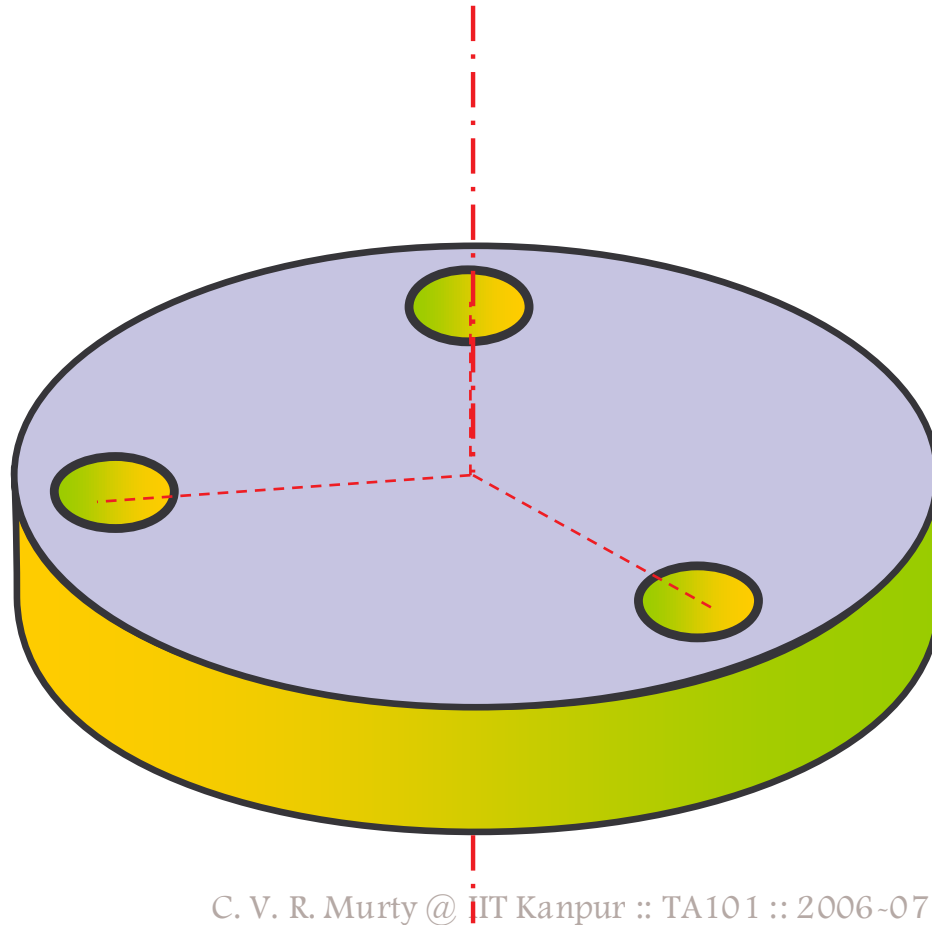
OTHER CONVENTIONS

- No sectioning
 - Ribs and spokes



OTHER CONVENTIONS

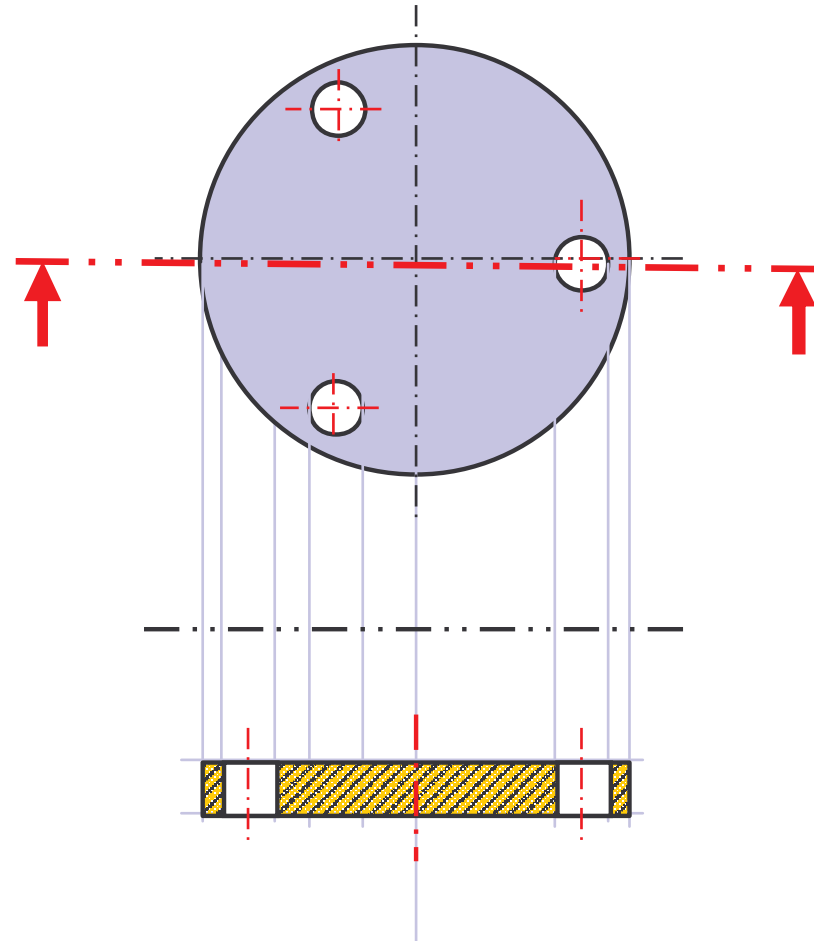
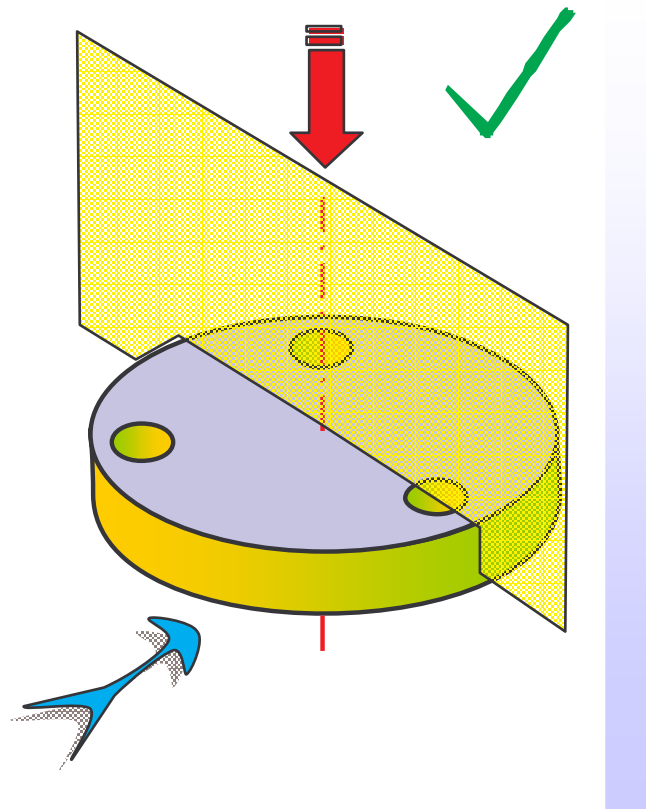
- Rotated Section
 - Holes



OTHER CONVENTIONS

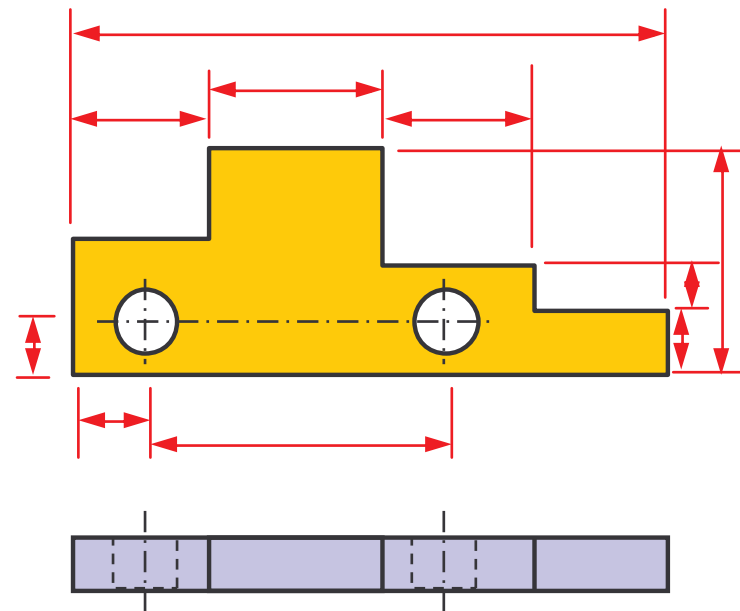
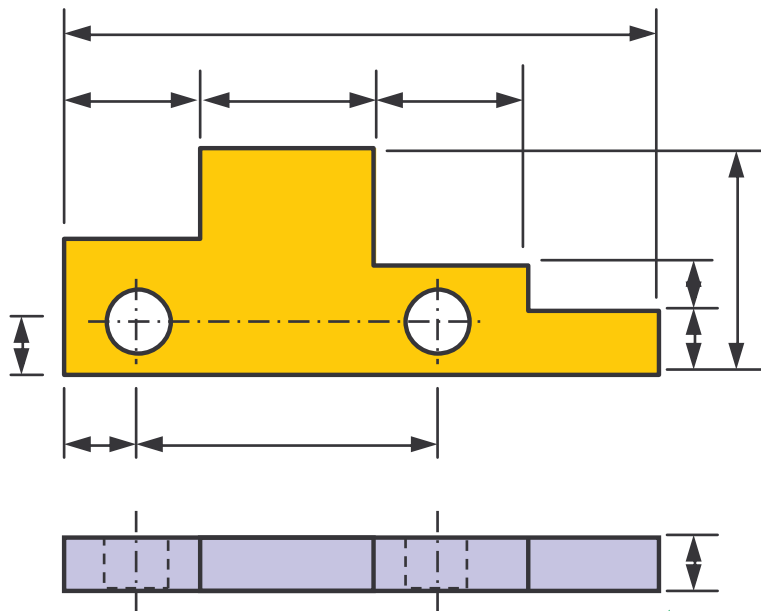
- Rotated Section

- Holes



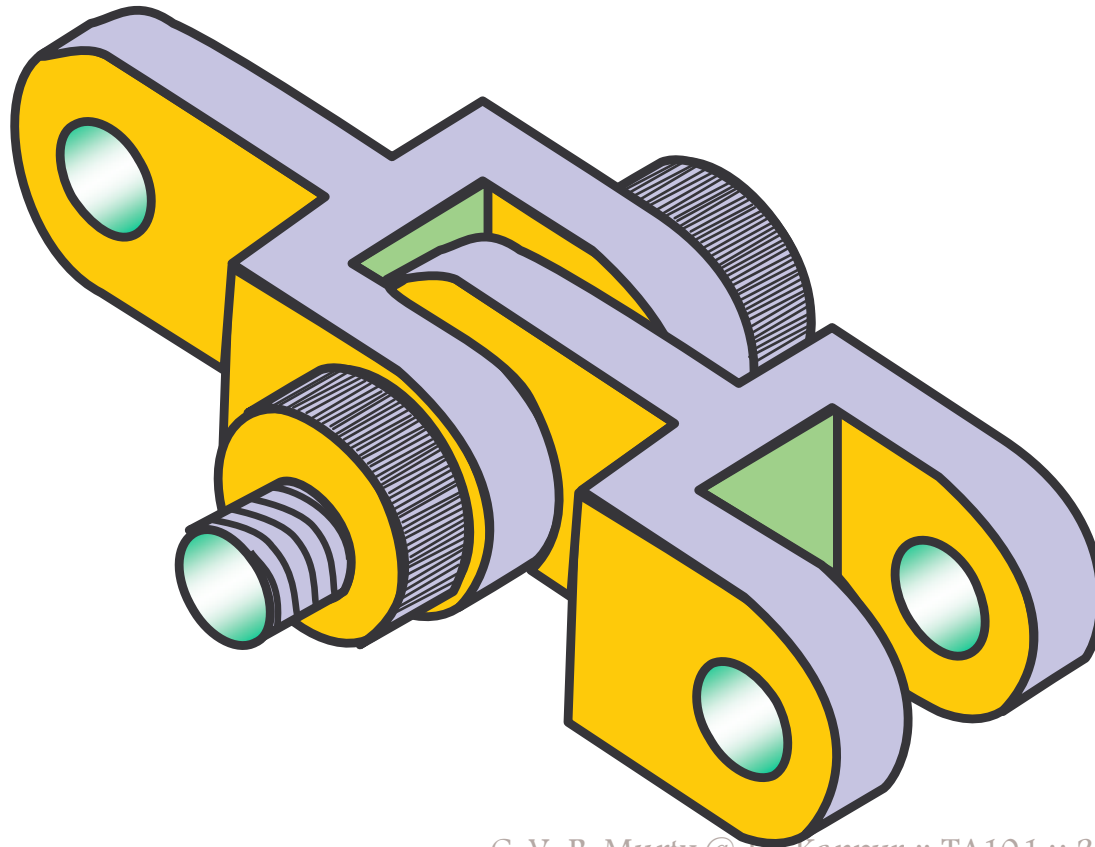
ARRANGEMENT OF DIMENSIONS

- Two styles
 - Chain Dimensions
 - Parallel Dimensions



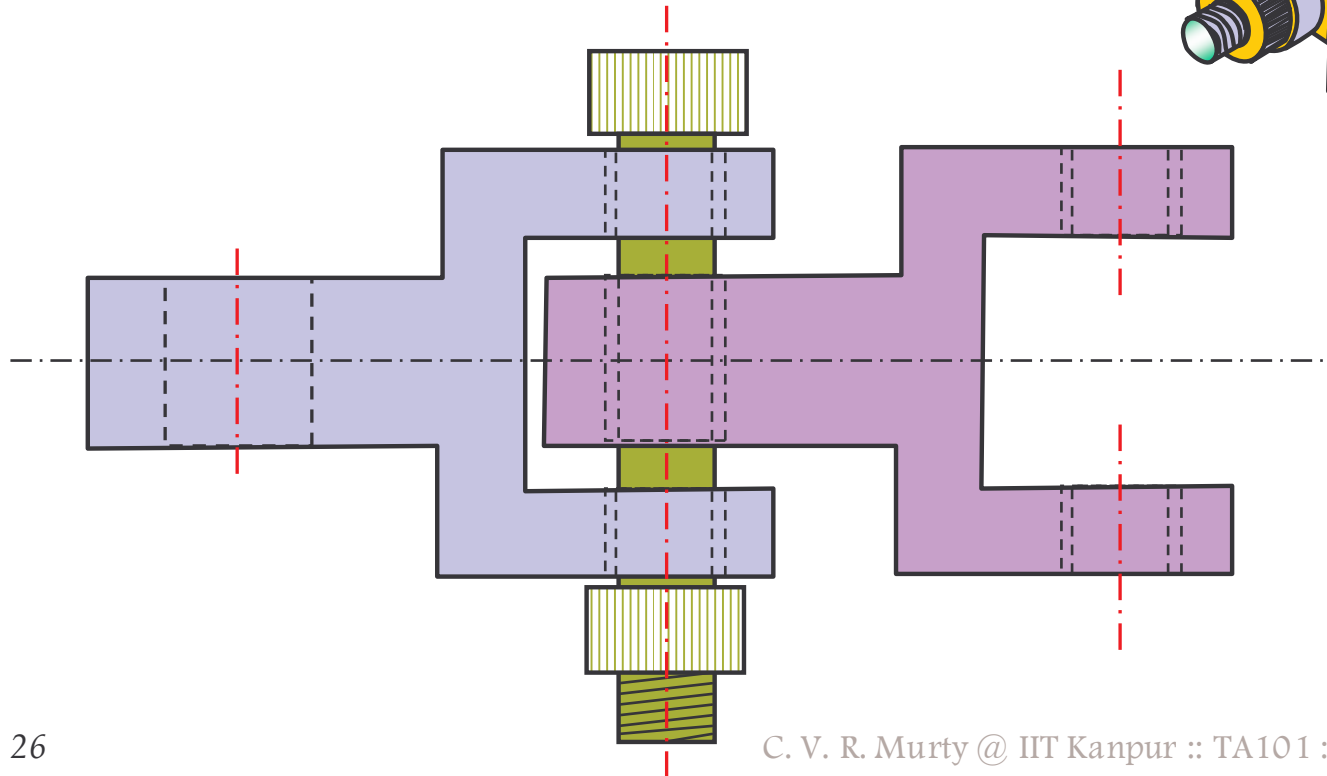
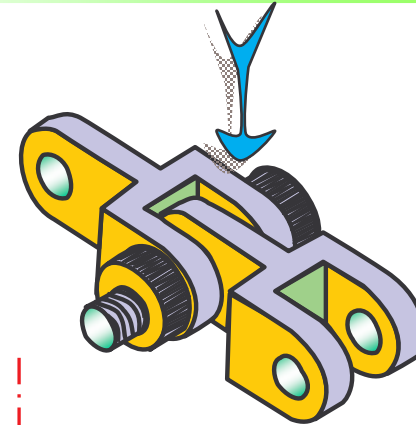
CONCEPT

- What is the sequence of manufacture?
 - Step 4



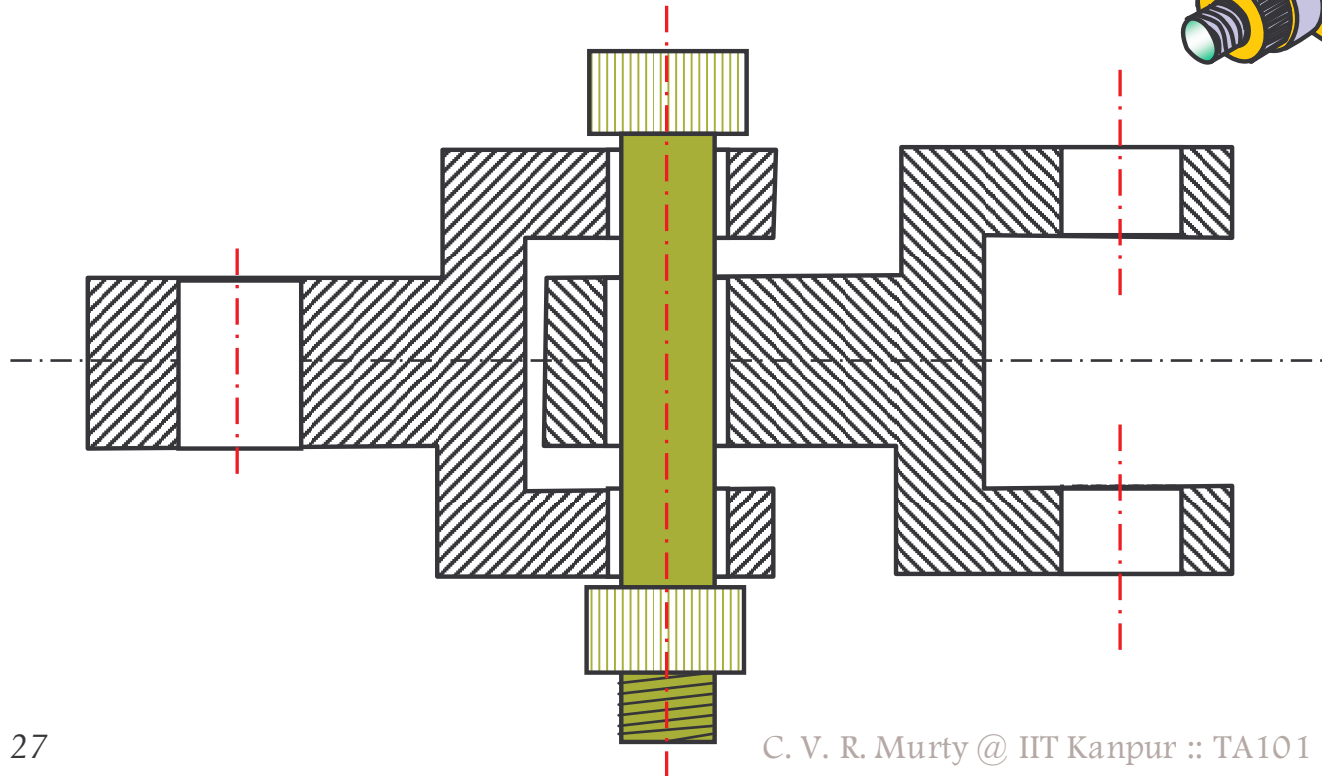
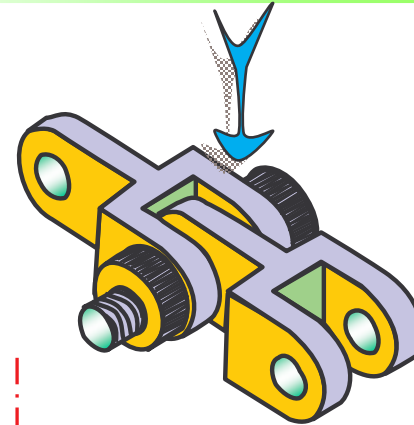
CONCEPT


- Top view



CONCEPT

- Importance of Sectional view
 - Know the gaps between the parts

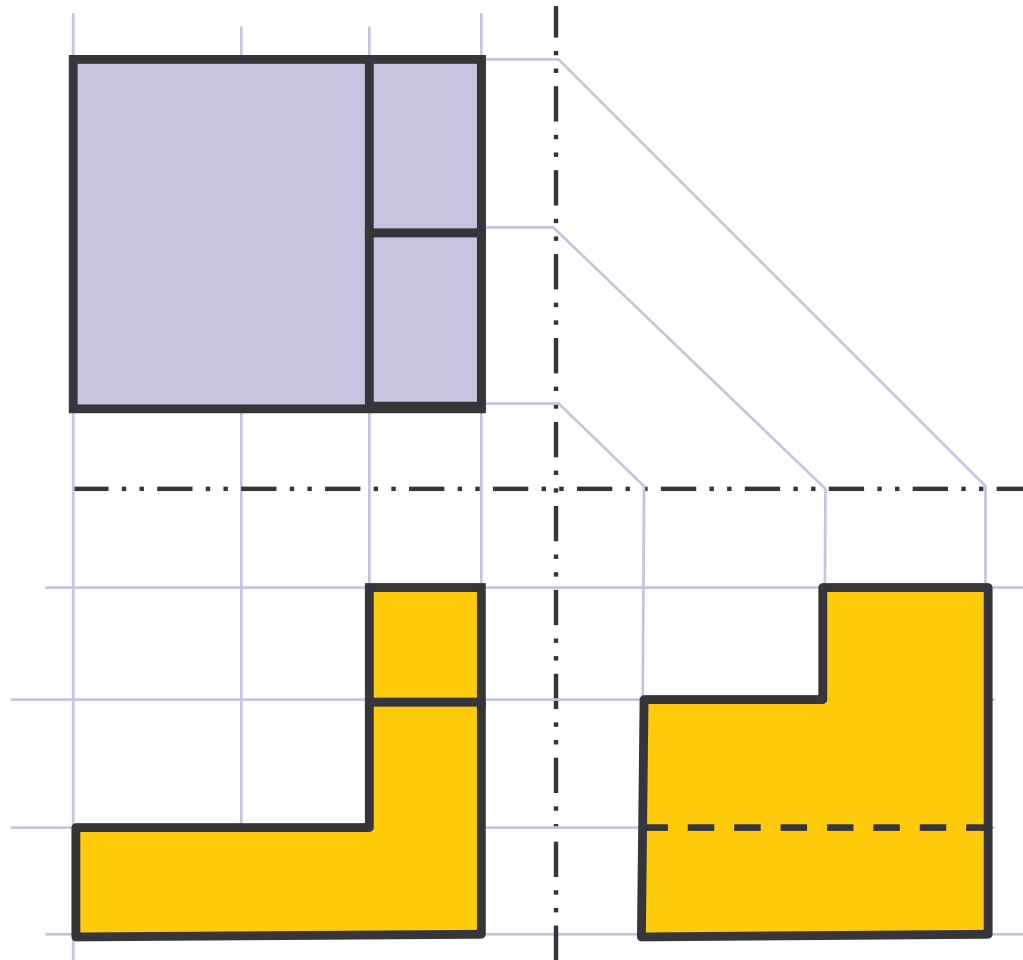




ISOMETRIC PROJECTIONS

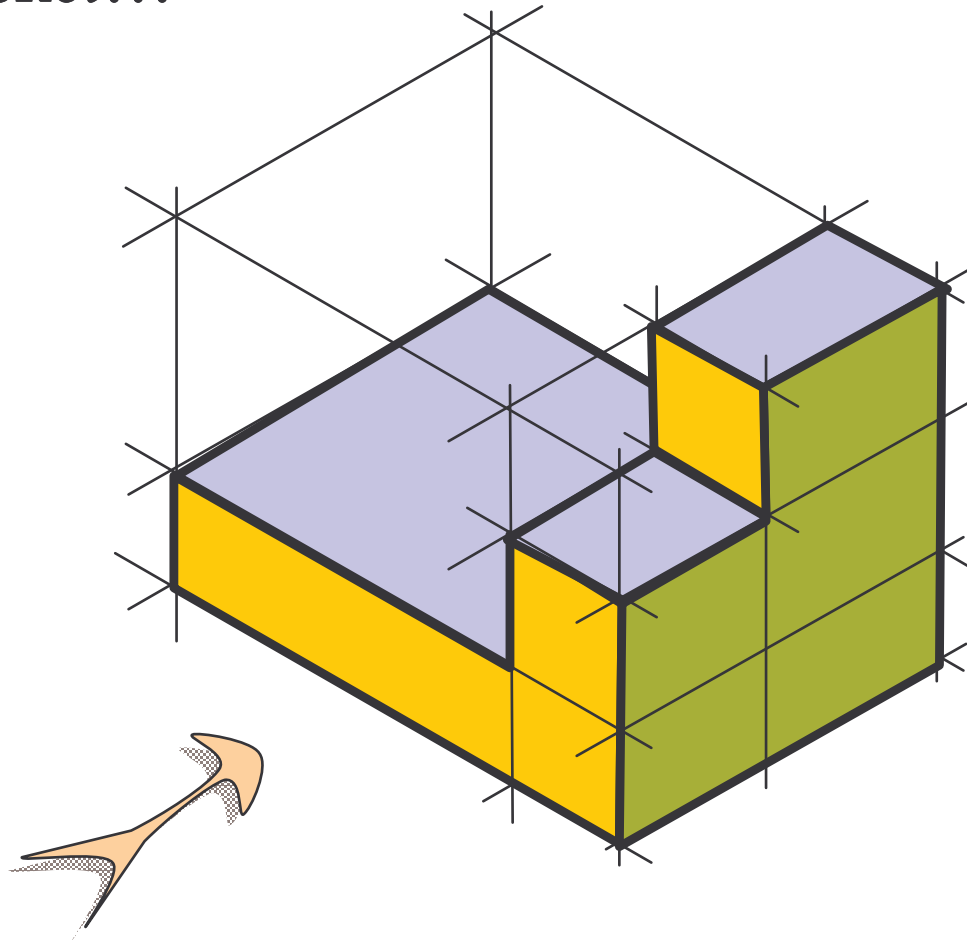
SIMPLE OBJECTS

- Bracket



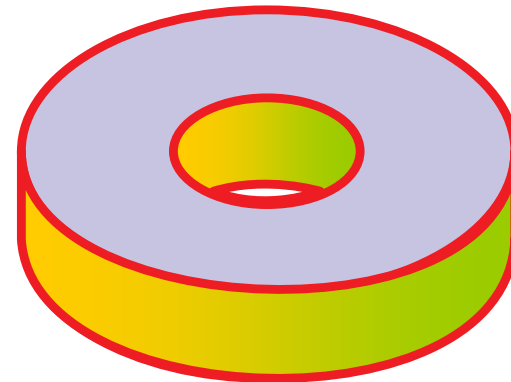
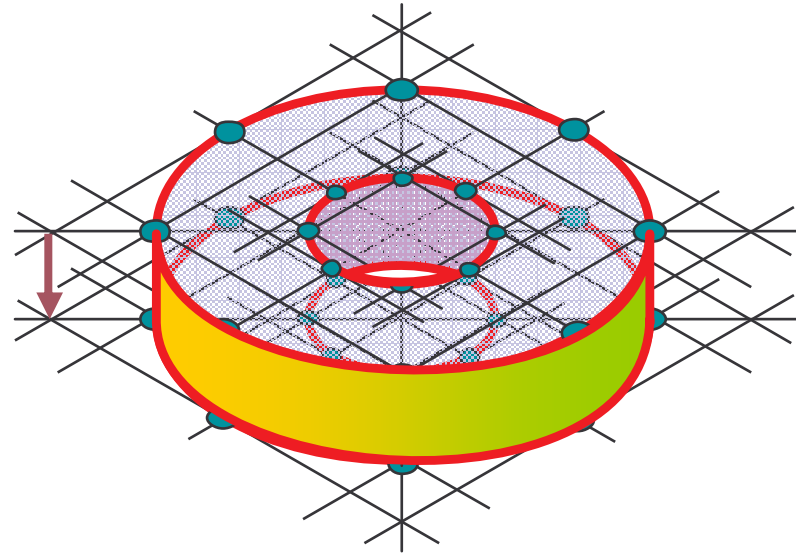
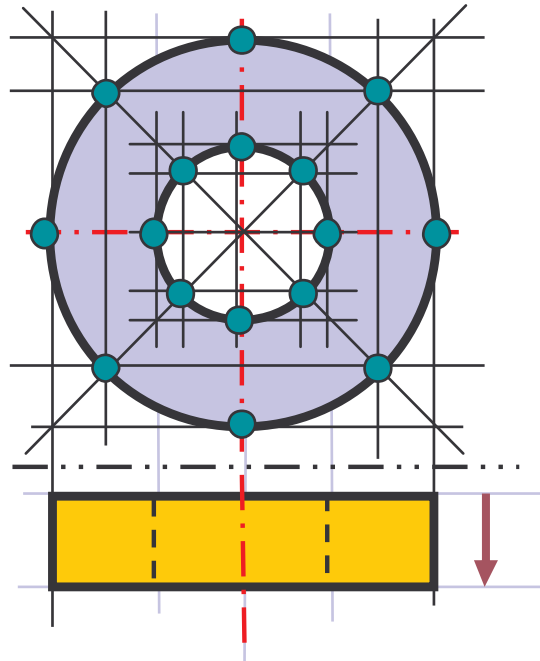
SIMPLE OBJECTS

- Bracket...



EXAMPLE 6

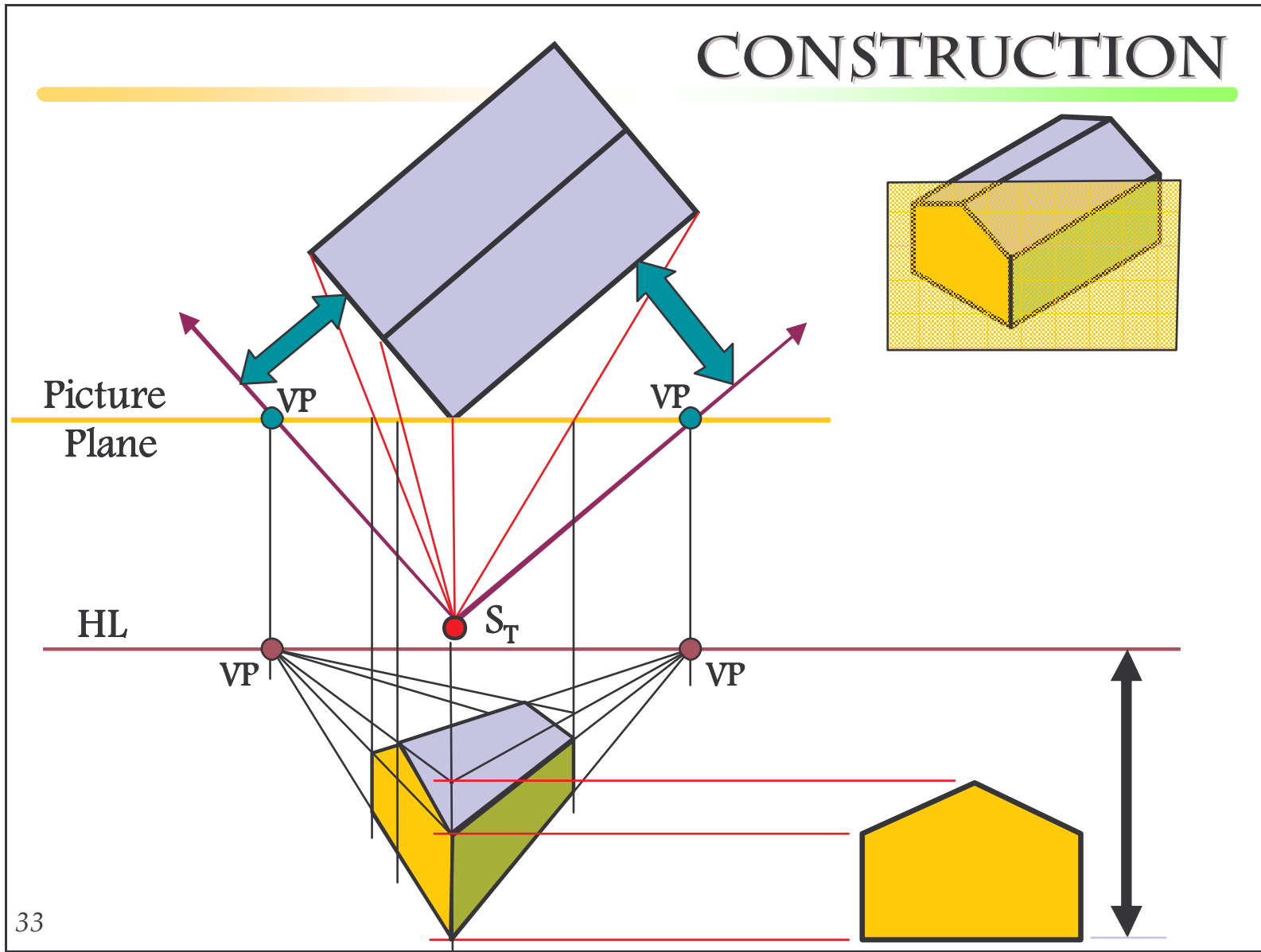
- Donut





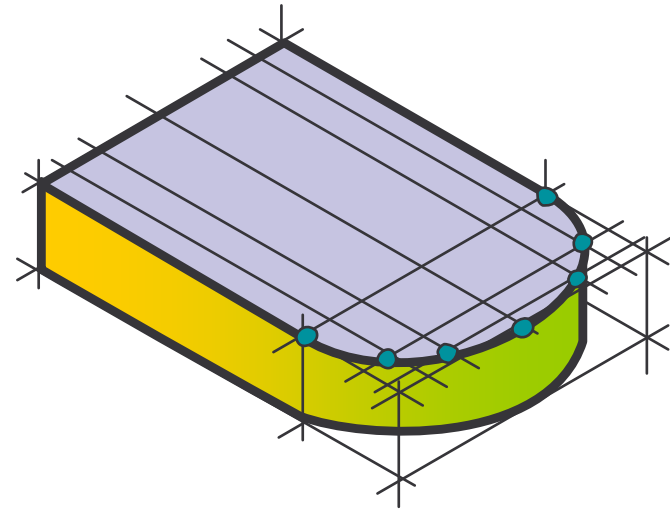
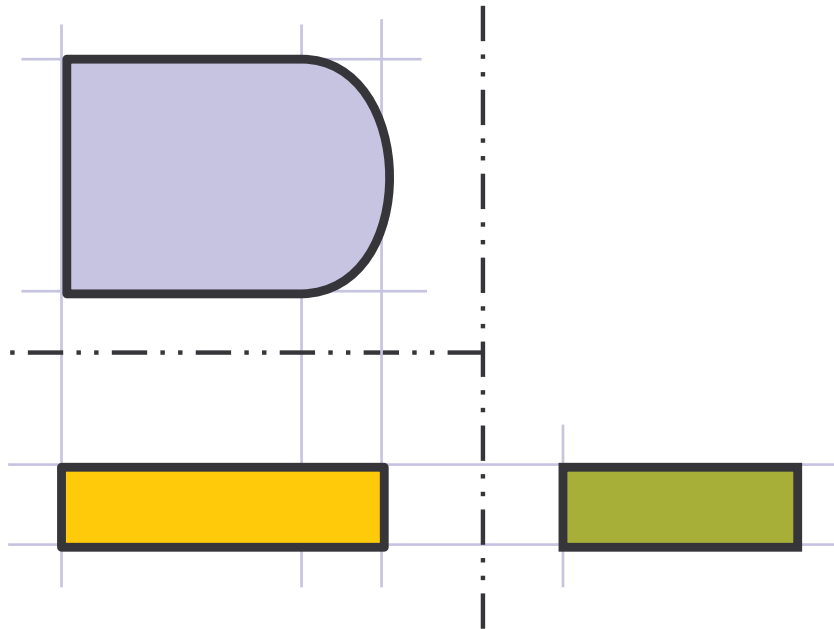
PERSPECTIVE VIEWS

CONSTRUCTION

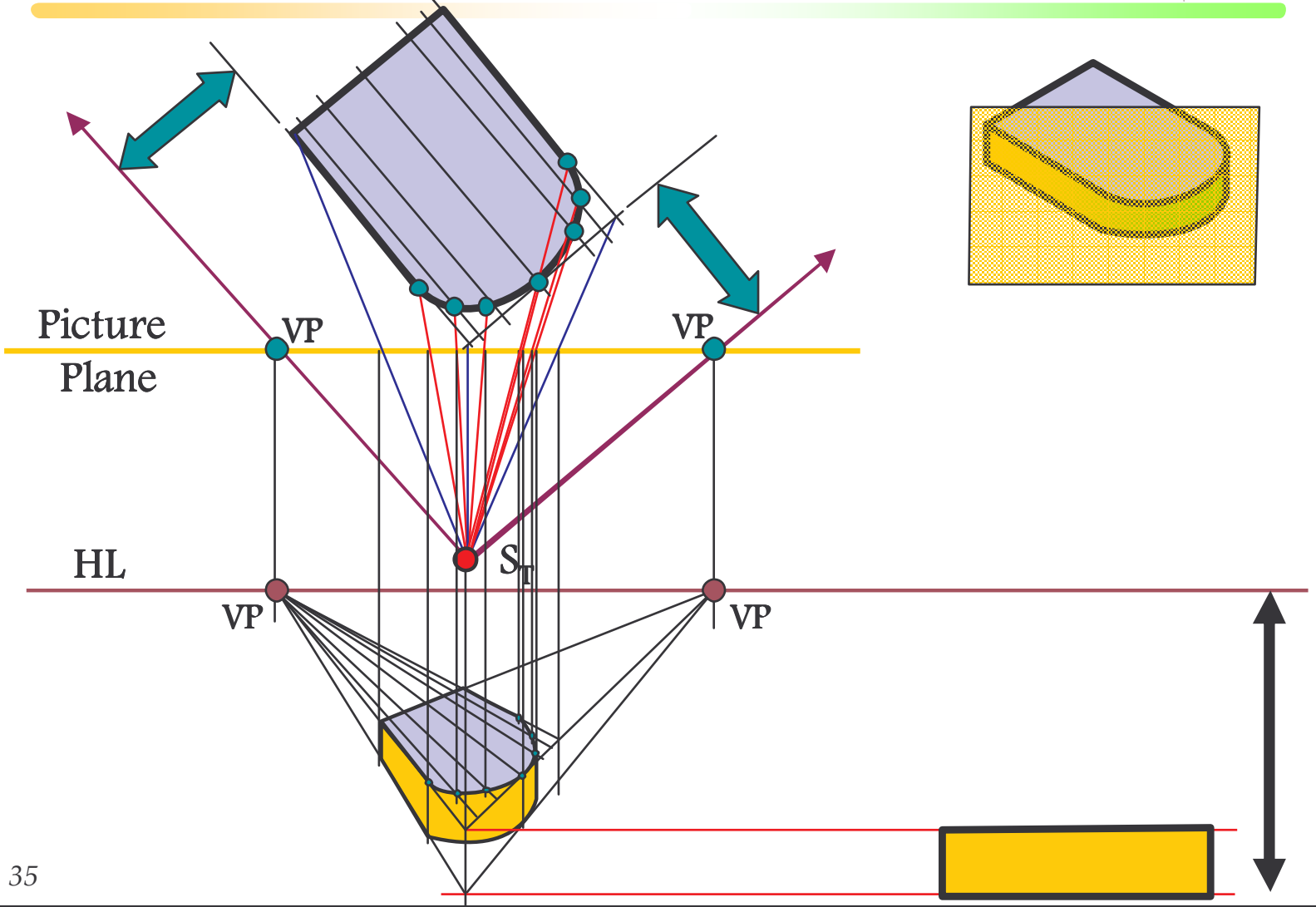


EXAMPLE 4

- Bread slice



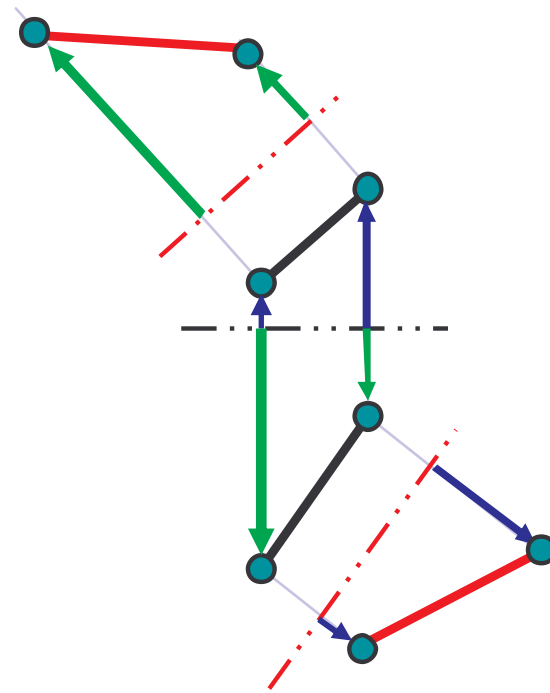
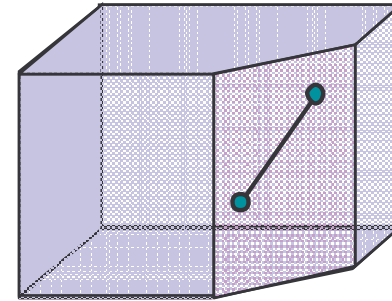
EXAMPLE 4



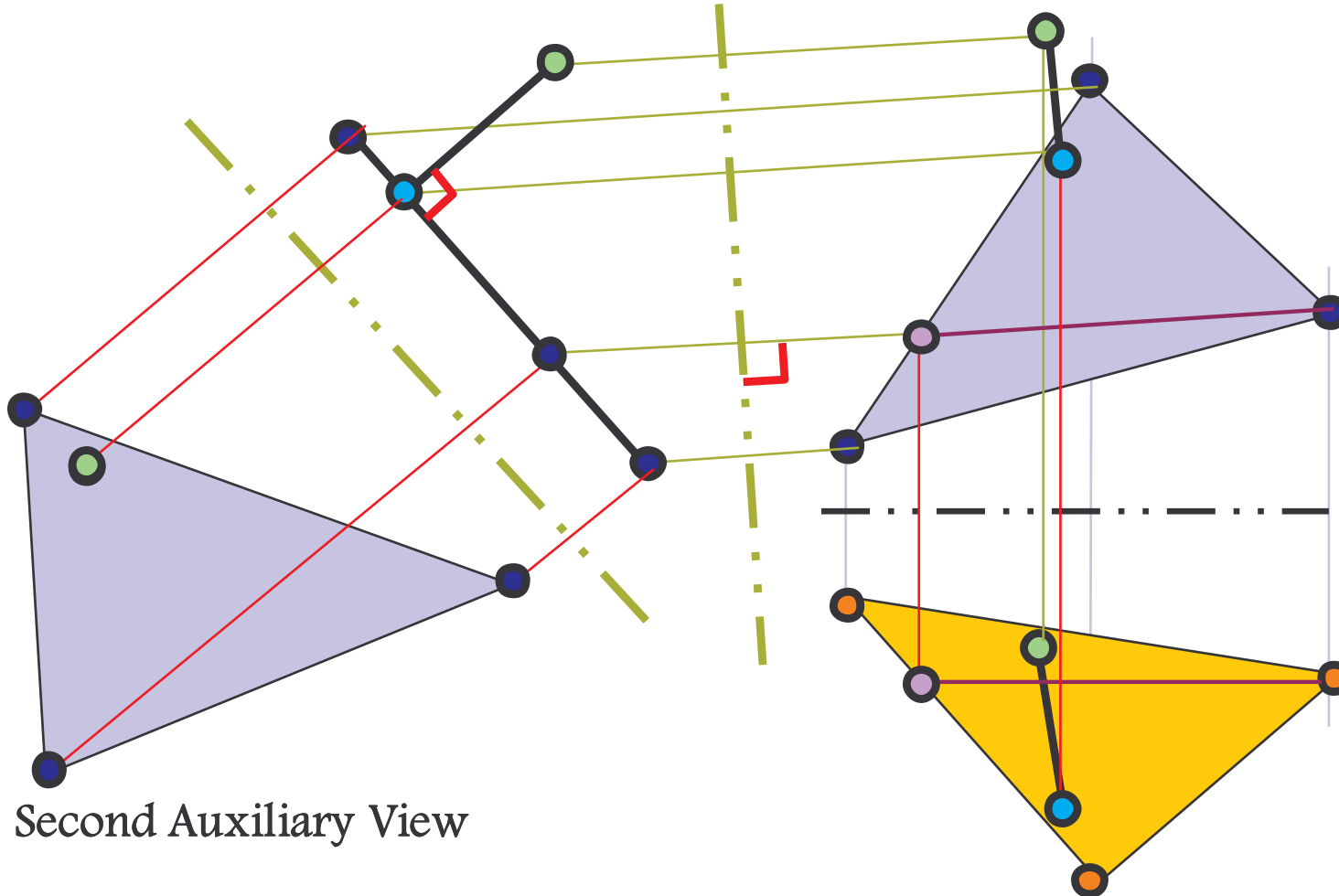


SPACE GEOMETRY

AUXILIARY PLANE METHOD

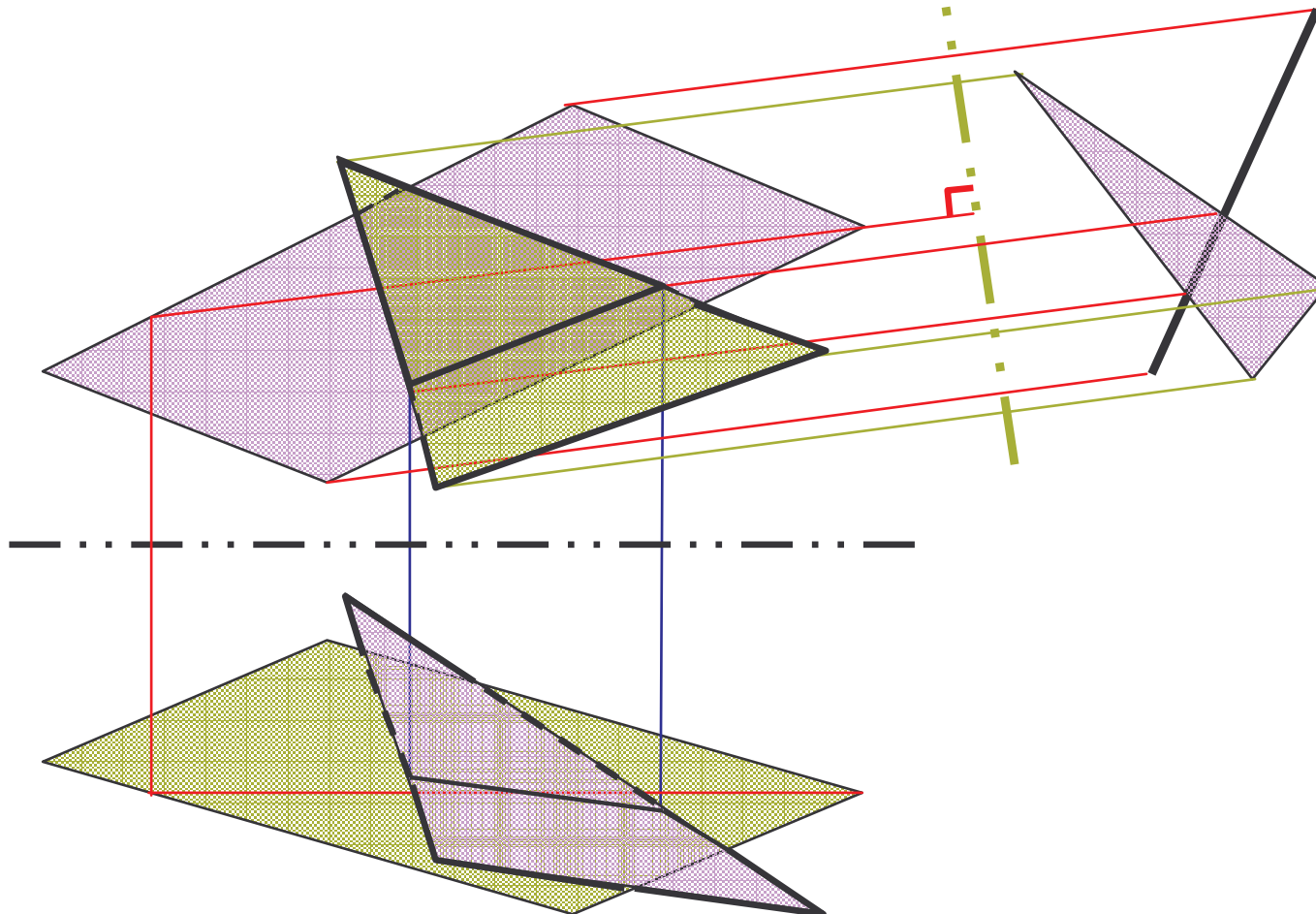


POINT ON PLANE



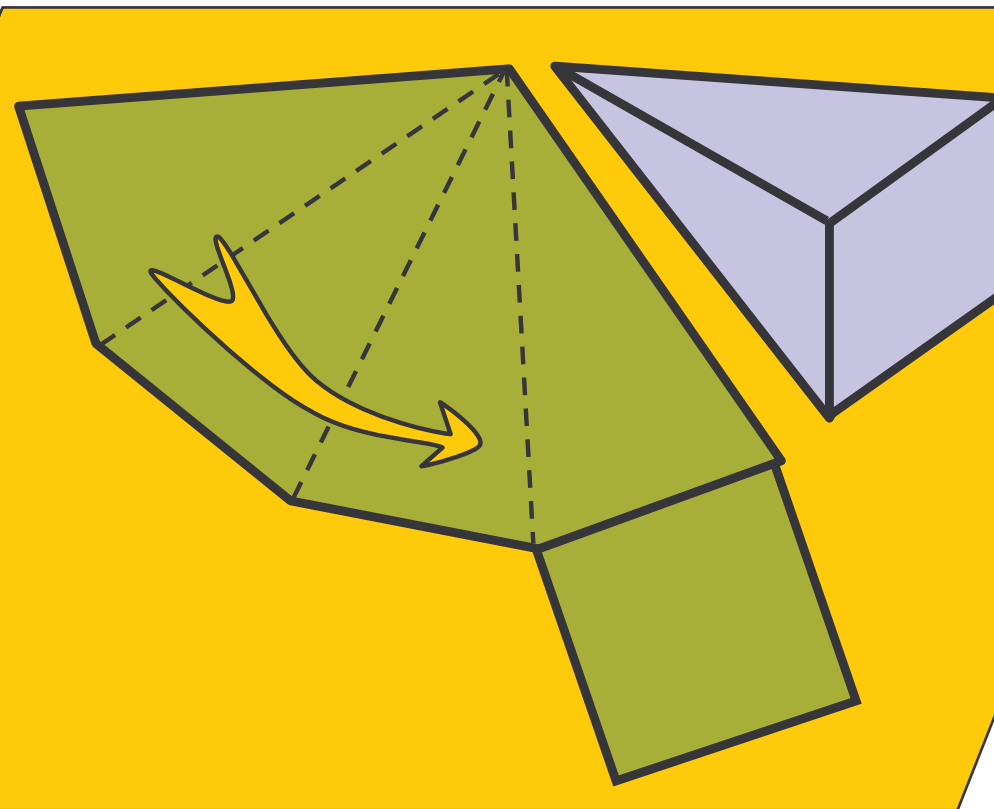
Second Auxiliary View

EDGE VIEW METHOD

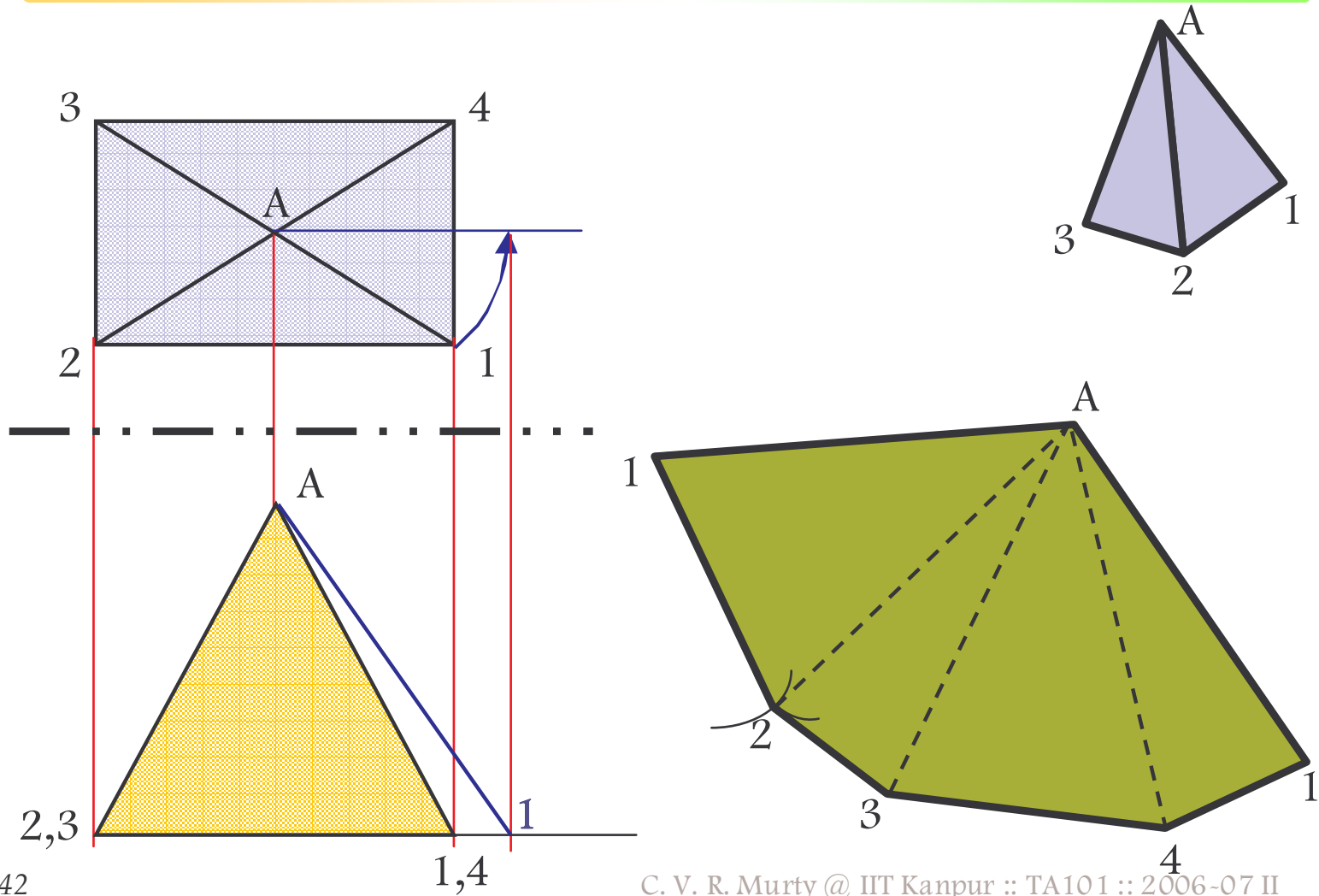


DEVELOPMENT OF LATERAL SURFACES

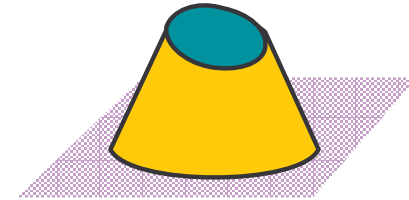
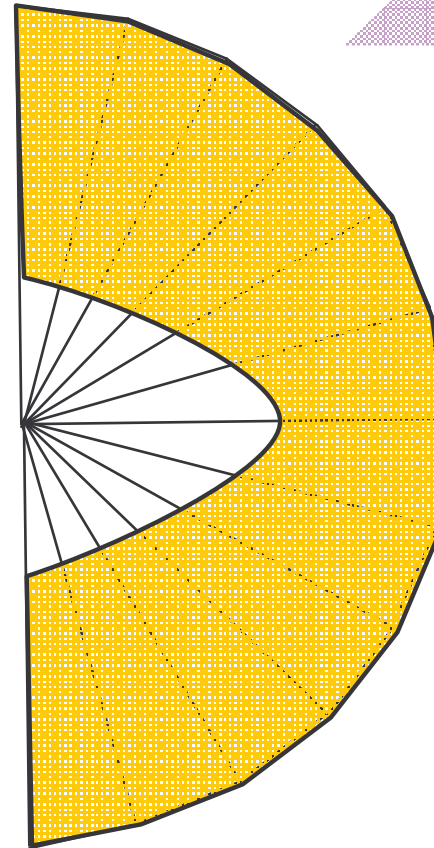
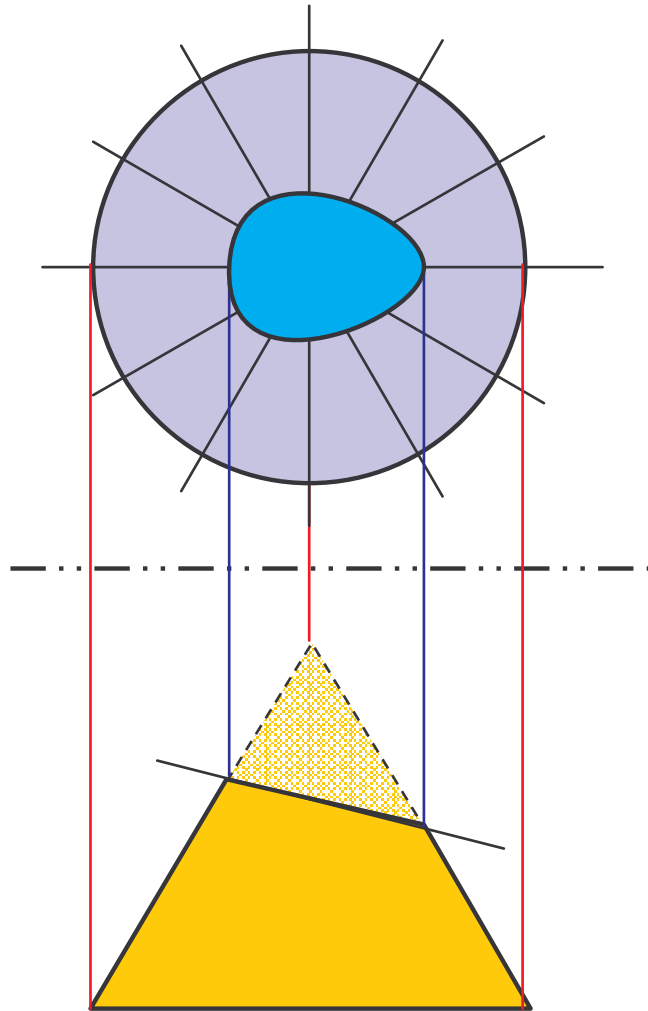
PYRAMID



RIGHT RECTANGULAR PYRAMID



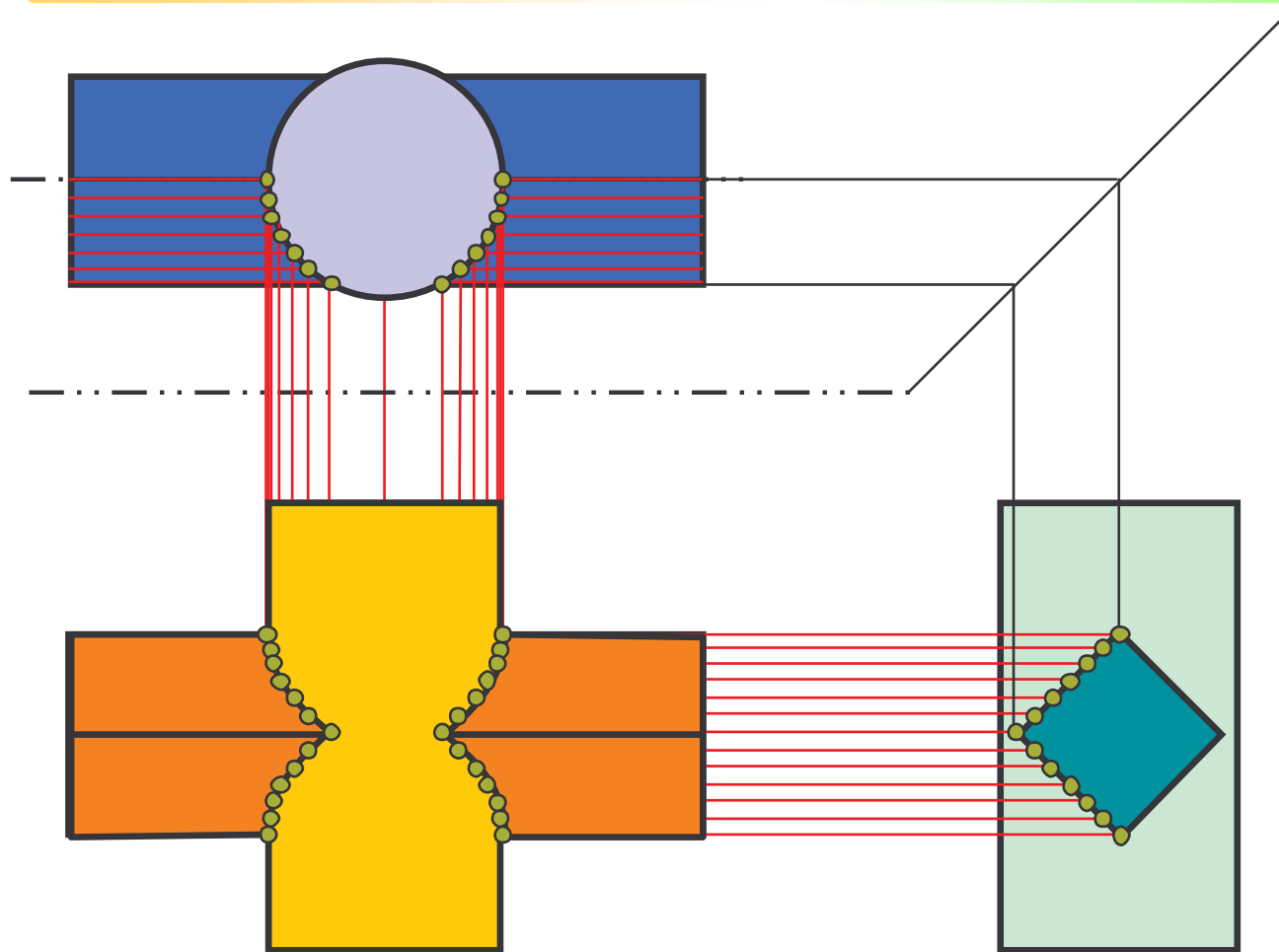
TRUNCATED CONE



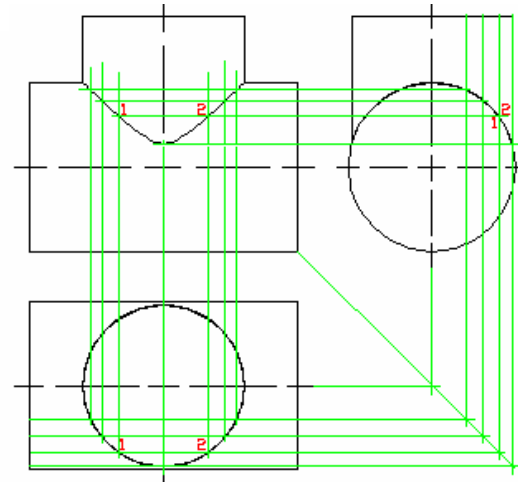
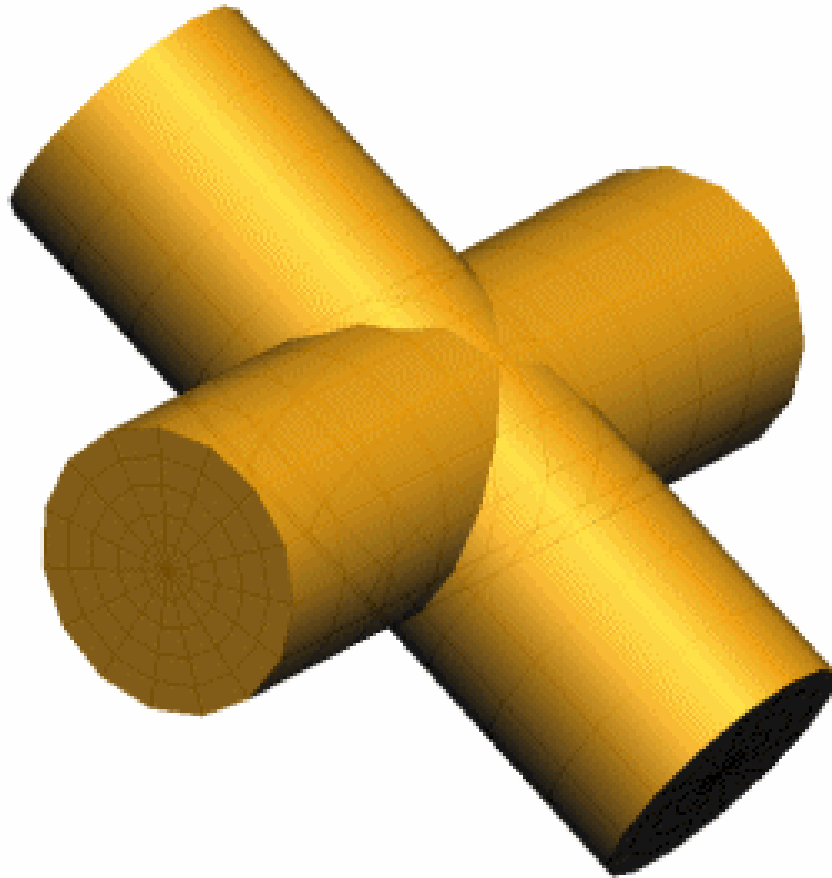


INTERSECTION
OF SOLIDS

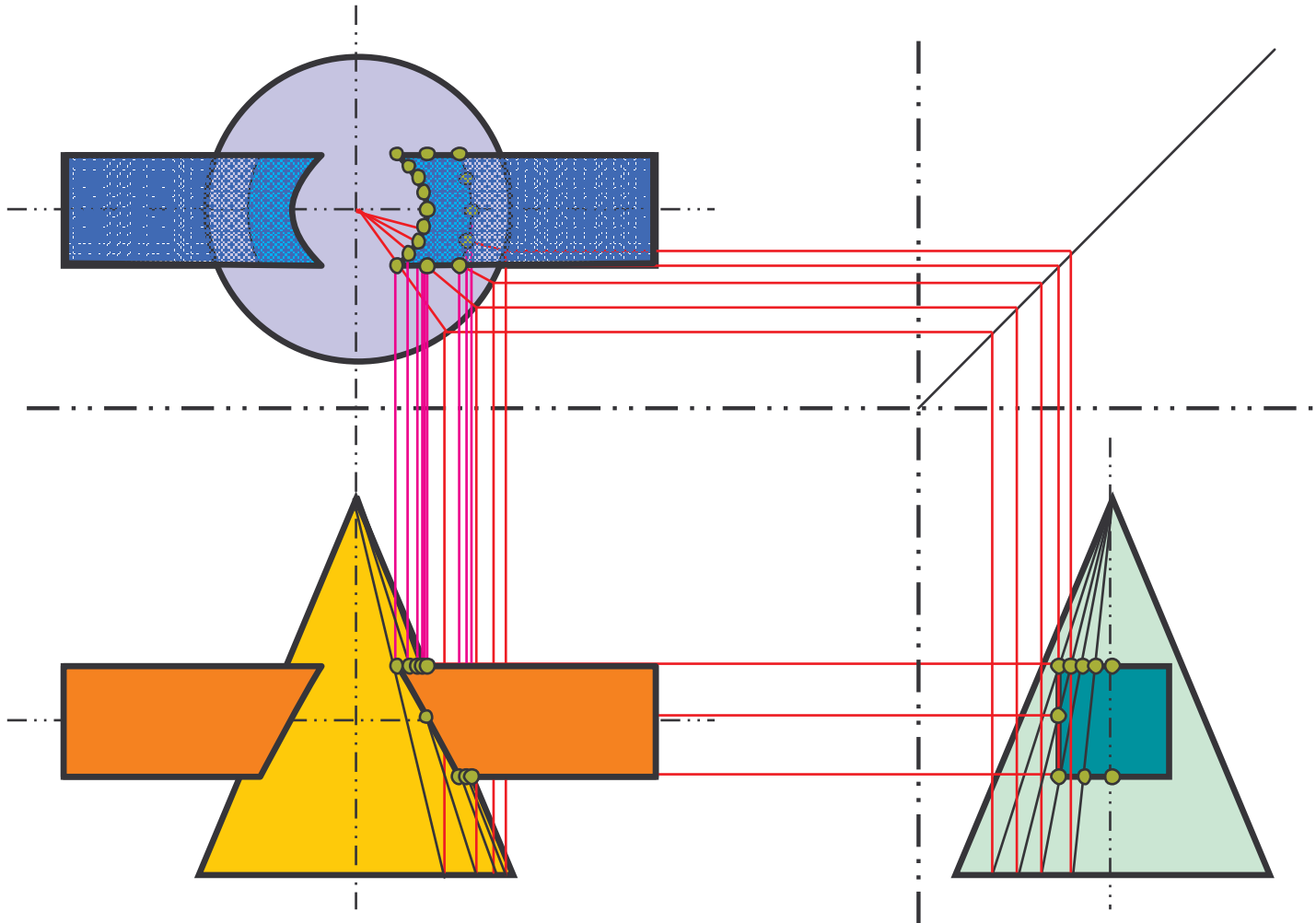
CYLINDER & PRISM : LINE METHOD



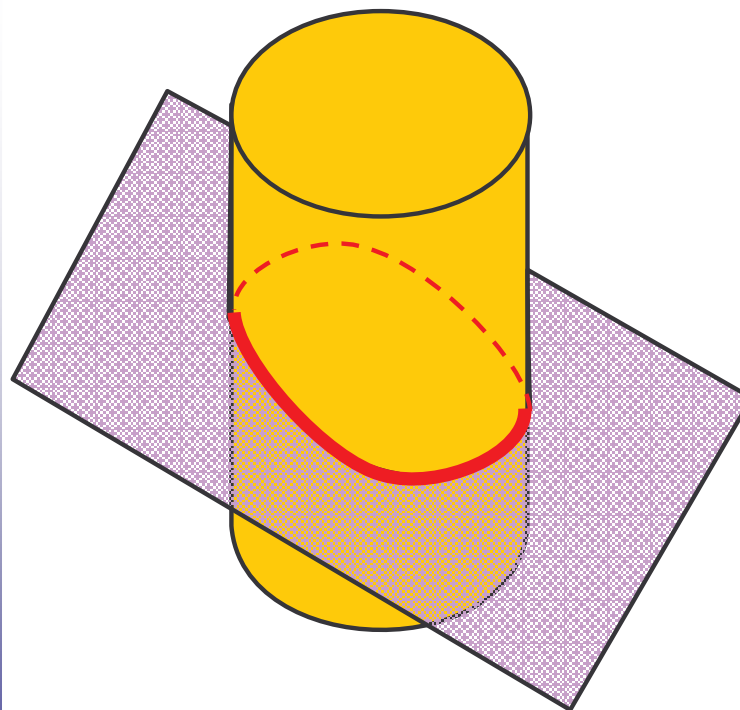
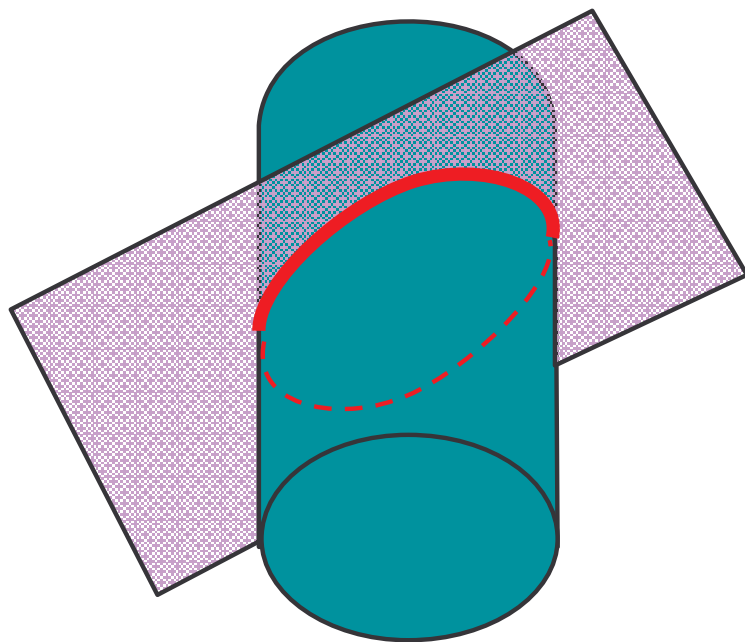
CYLINDER & CYLINDER



CONE & SQ. PRISM : LINE METHOD

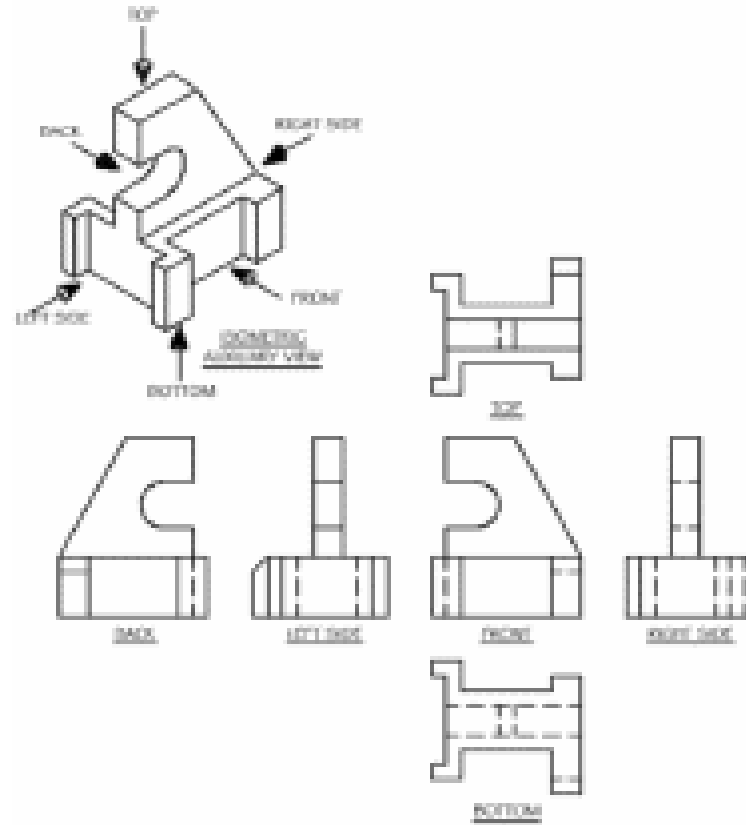


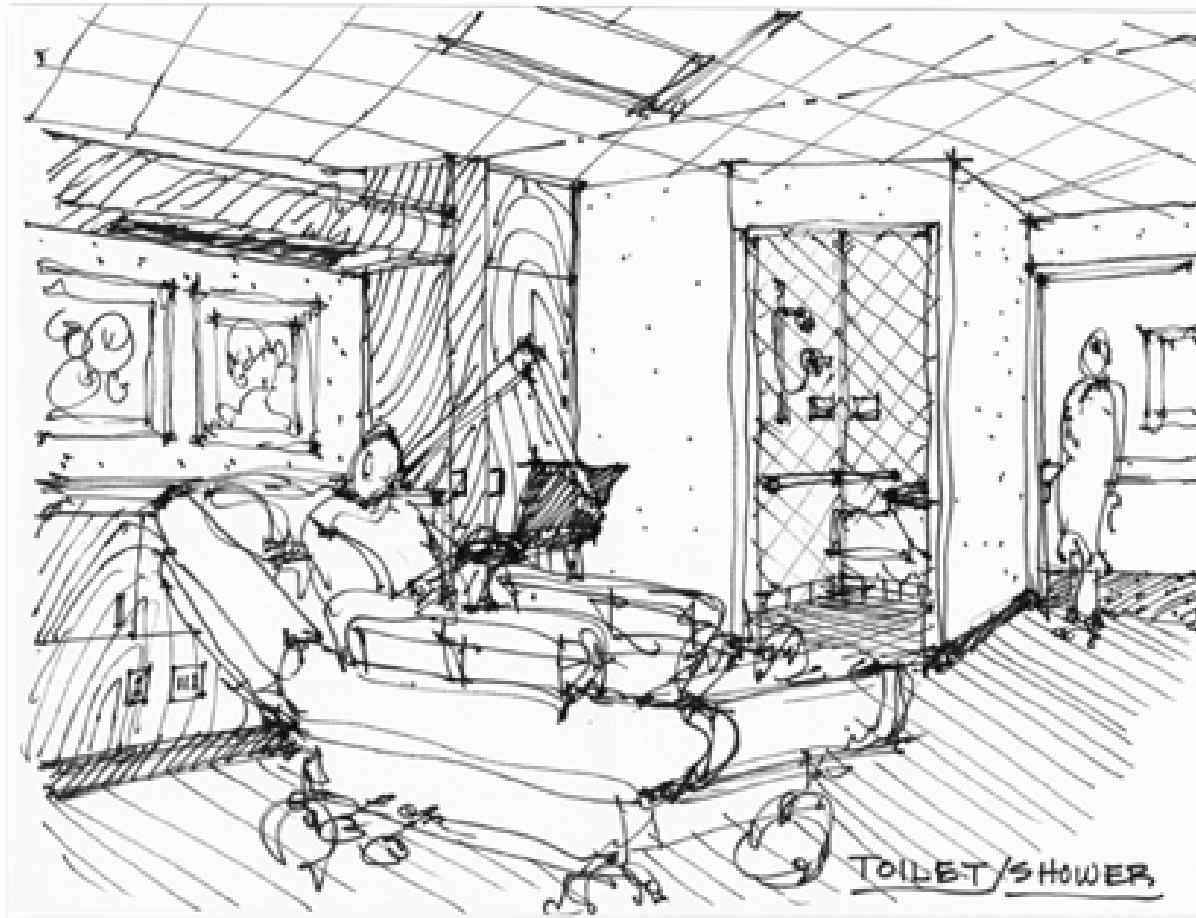
VISIBILITY

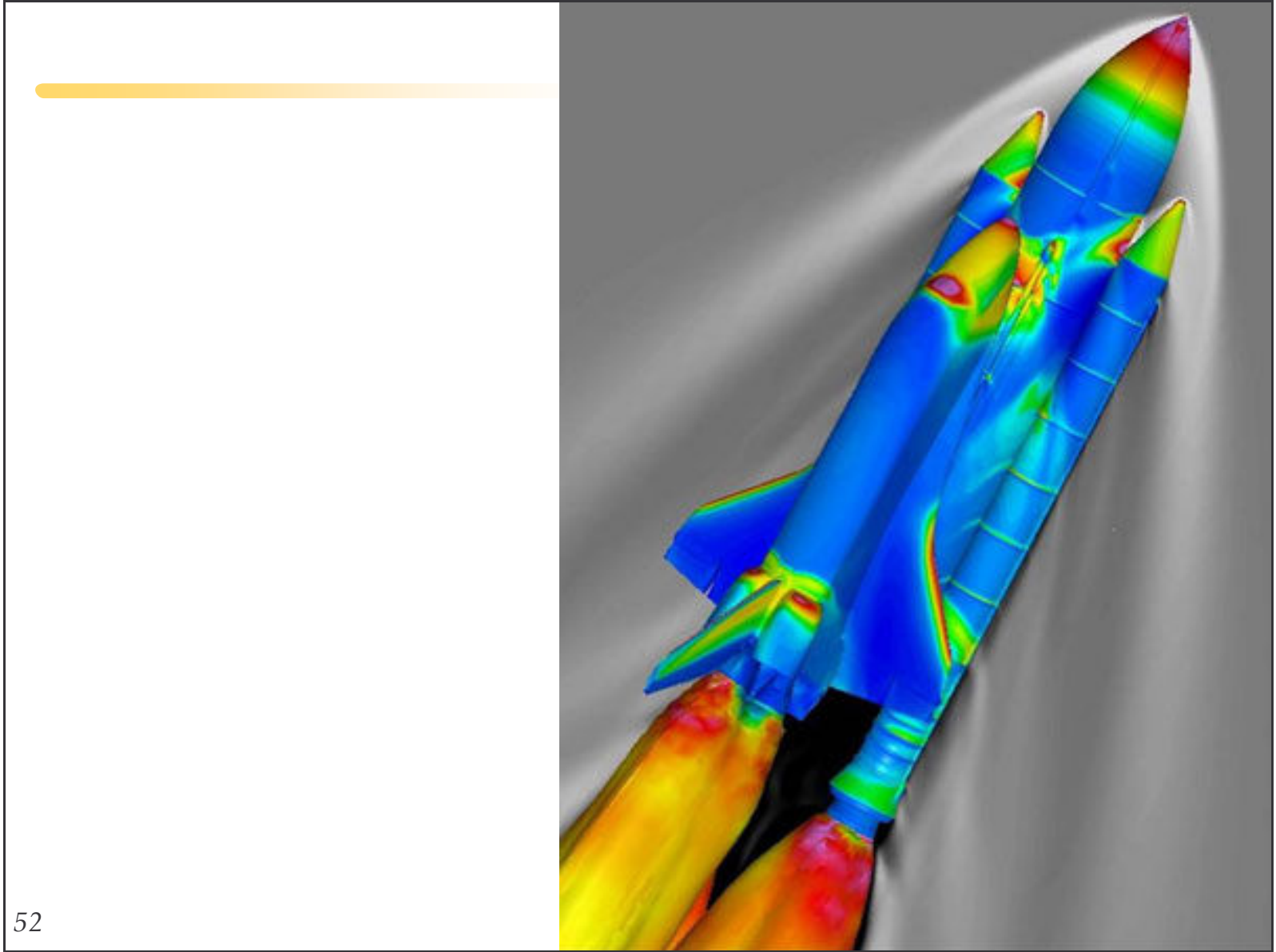


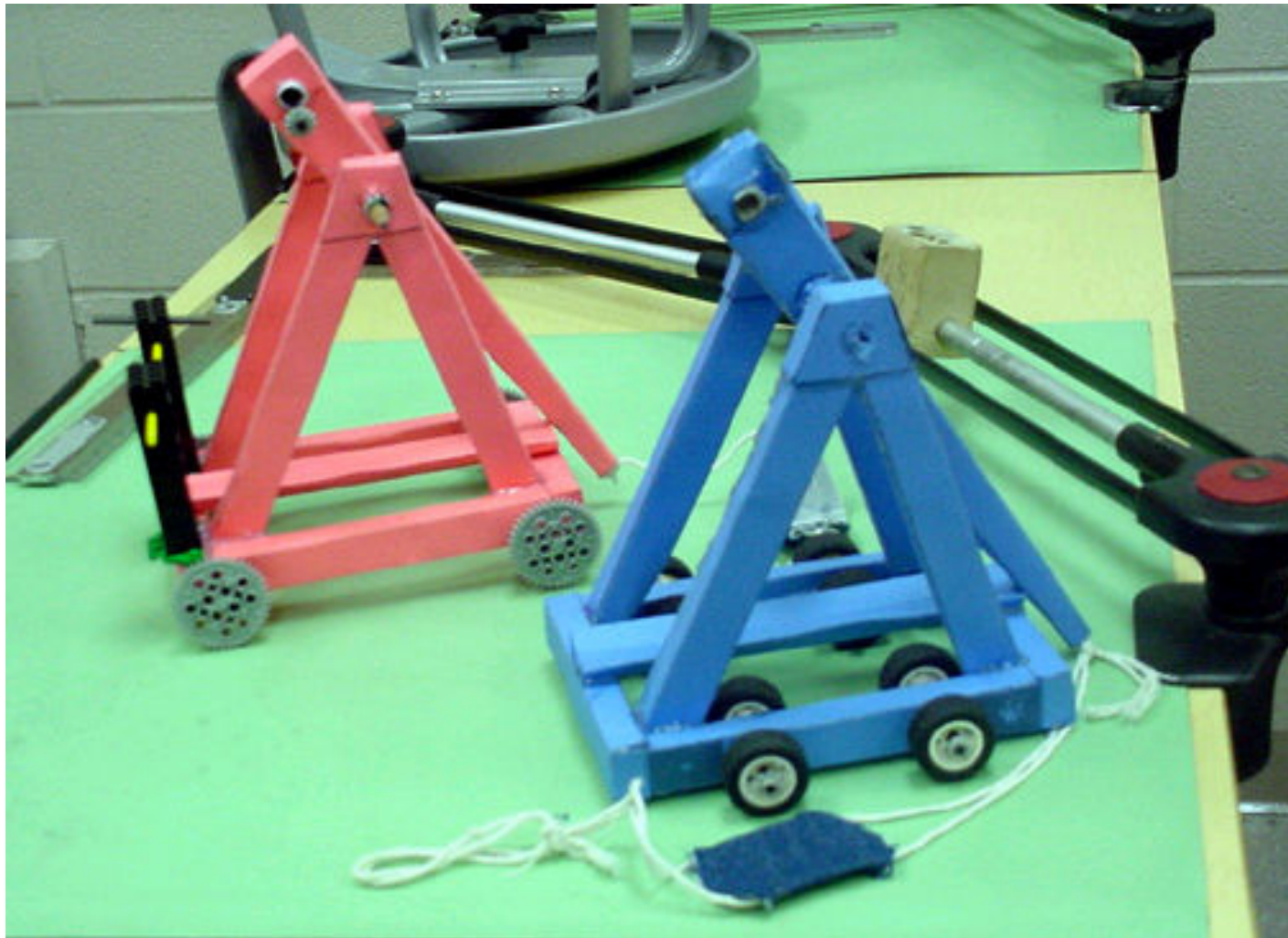


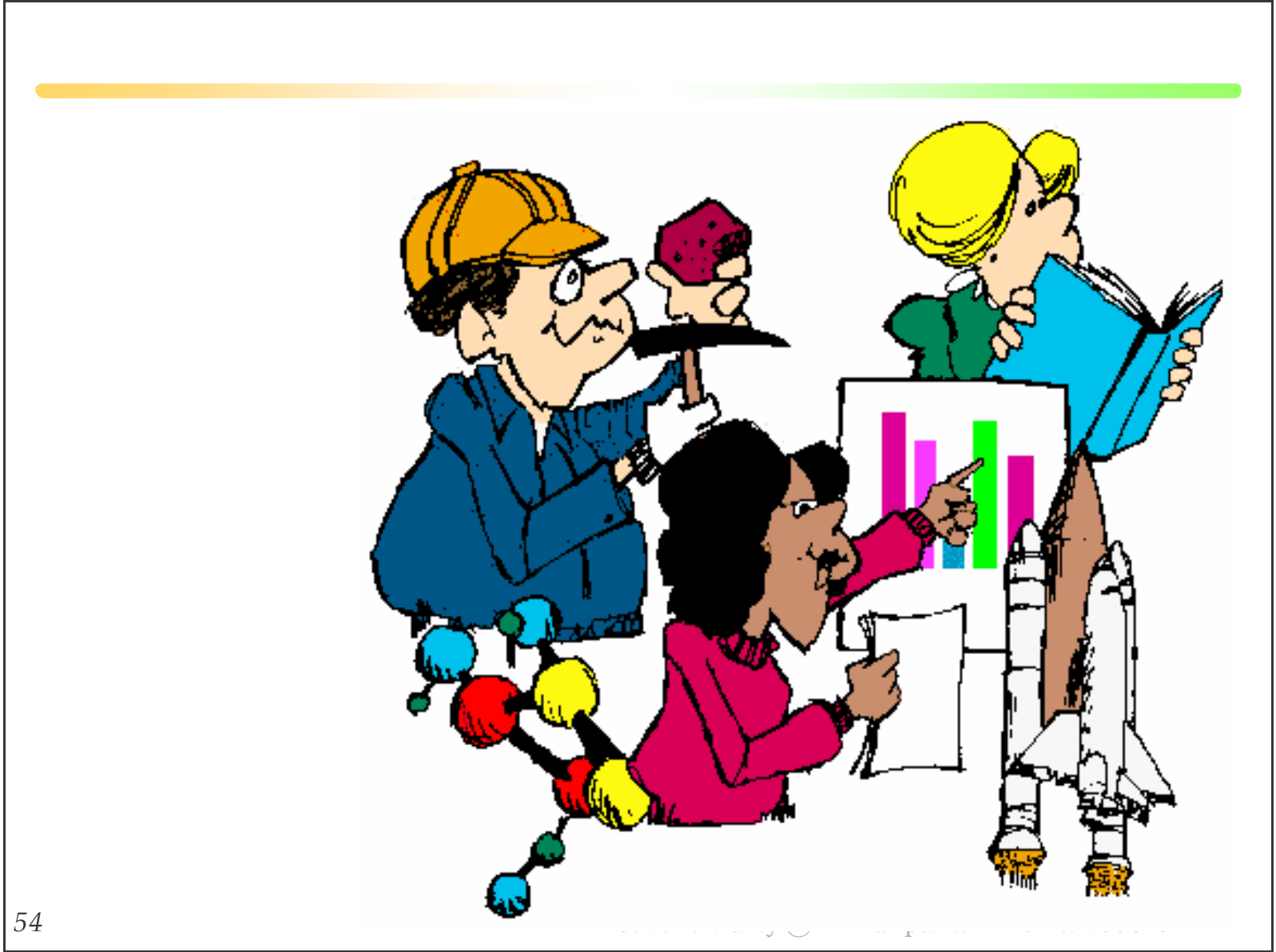
ENGINEERING
GRAPHICS





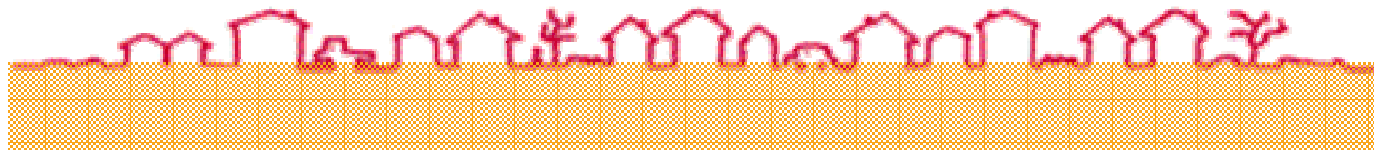












All the best in the Examinations

... and Happy Holidays!!

EXAMPLE 8

- Notched block

