

PENANG SANGAM HIGH SCHOOL

P.O.BOX 44, RAKIRAKI

WEEK 17 WORKSHEET

Subject: Technical Drawing

Year/Level: 12

Strand	TD 12.3 APPLIED DRAWING
Sub Strand	TD 12.3.2 ARCHITECTURAL DRAWING
Content Learning Outcome	TD 12.3.2.2 Identify and construct the different engineering components, hardware & assembled drawings.

LESSON NOTES

ENGINEERING DRAWING

OUTCOME

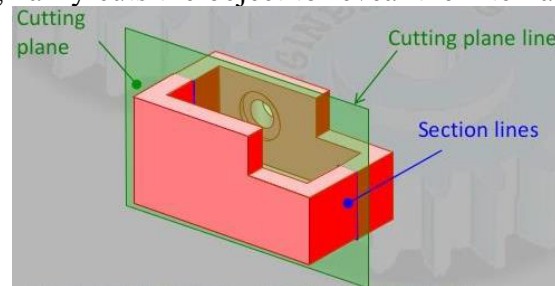
By the end of this topic, students will:

- a) Discuss the different methods of sectioning.
- b) Construct the sectional views of engineering assembled drawings in half and/or full sections.

INTRODUCTION

Cutting Plane

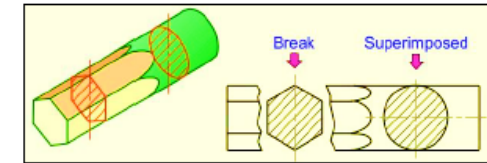
Cutting plane is a plane that imaginarily cuts the object to reveal the internal features.



Revolved Section

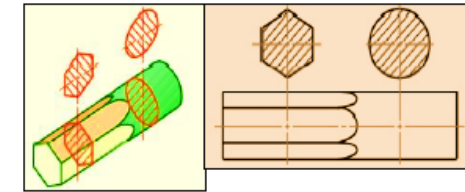
Placement of revolved section:

- i. Superimposed to orthographic view.
- ii. Break from orthographic view.



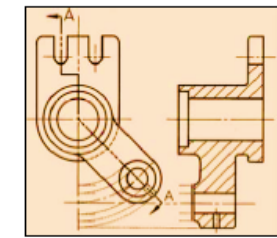
Removed Section

Sections are removed.



Aligned Section

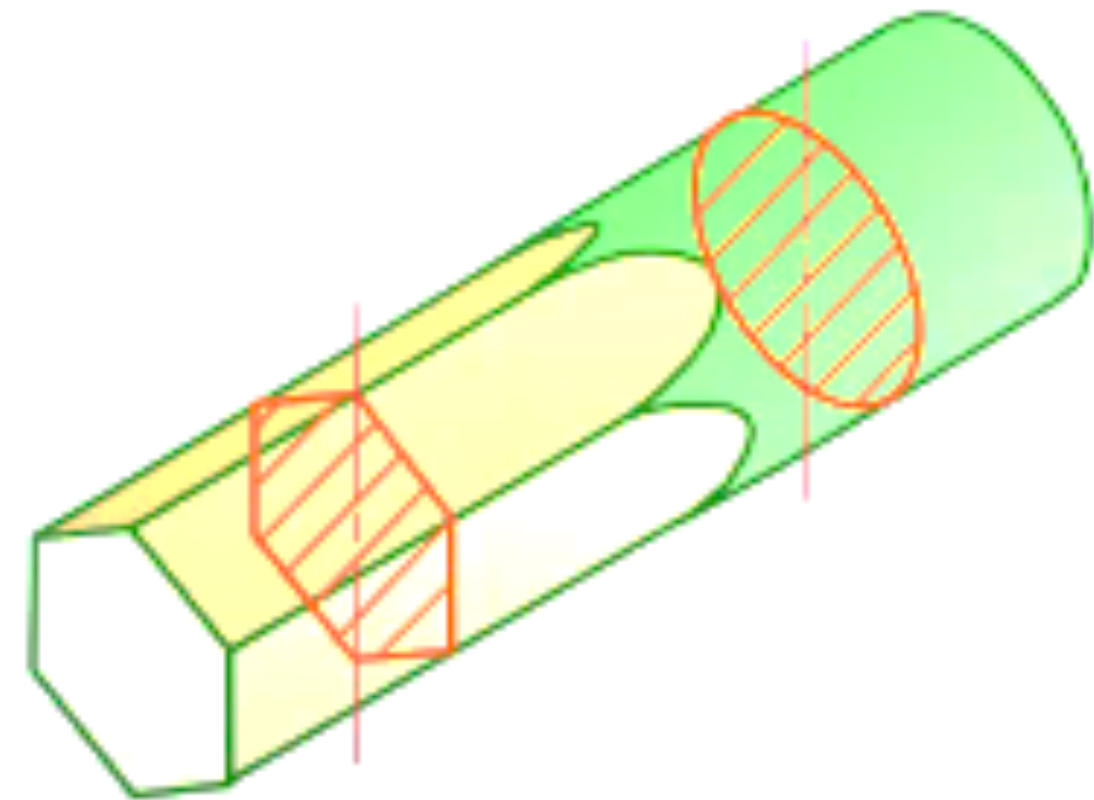
Aligned sections use an angled cutting plane to pass through angled features. The plane and feature are then imagined to be removed into the original plane and the section projected from there.



STUDENT ACTIVITY

Given: The sketch of a shaped block

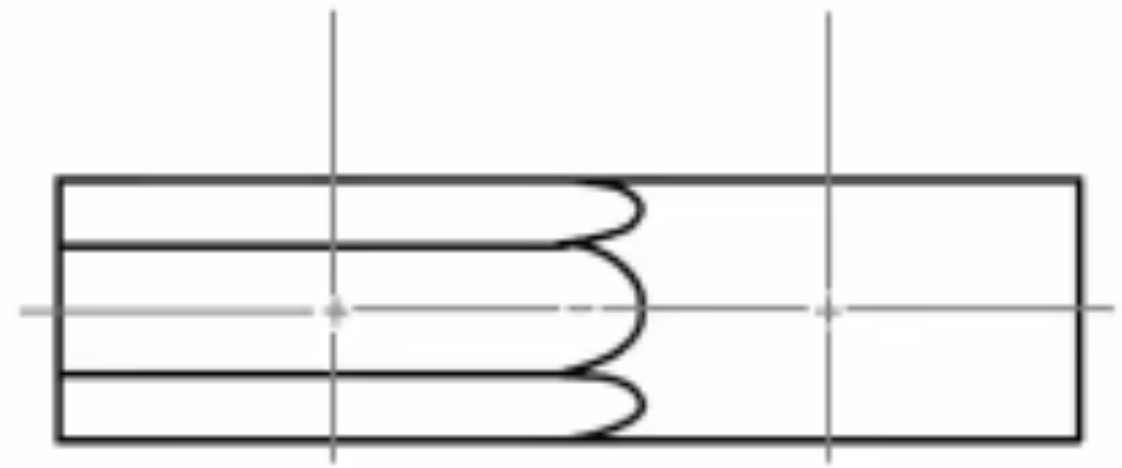
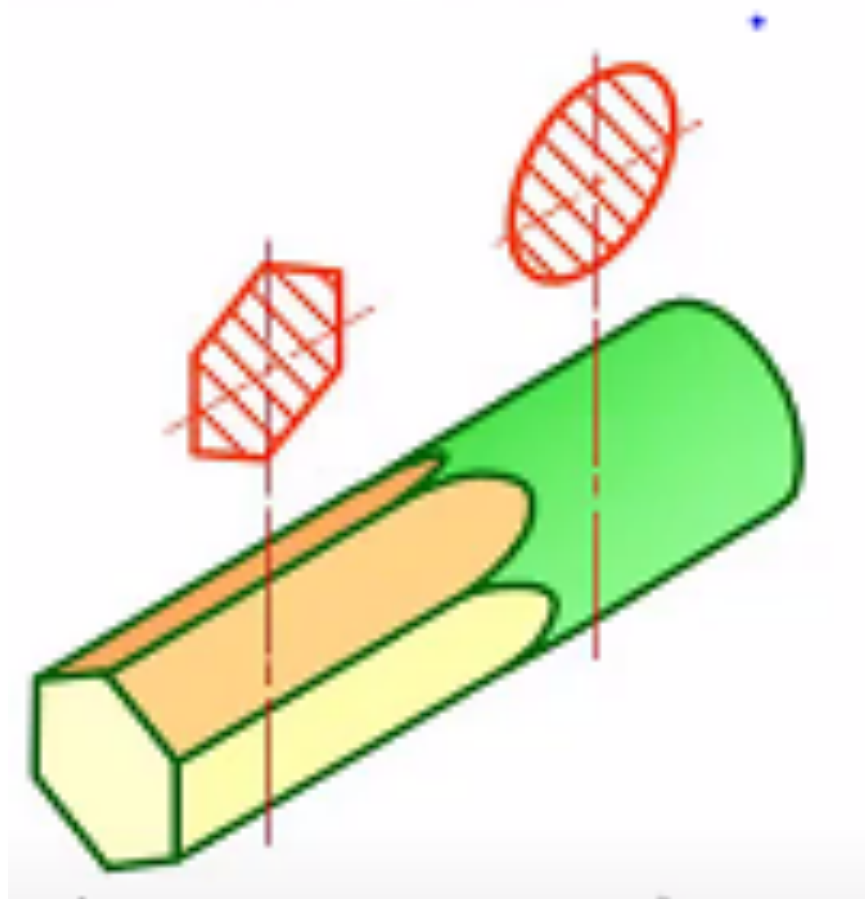
Required: Draw the Revolved section on the given Plan.





Given: The sketch of a shaped block

Required: Draw the Removed section on the given Plan.



Example of aligned section.

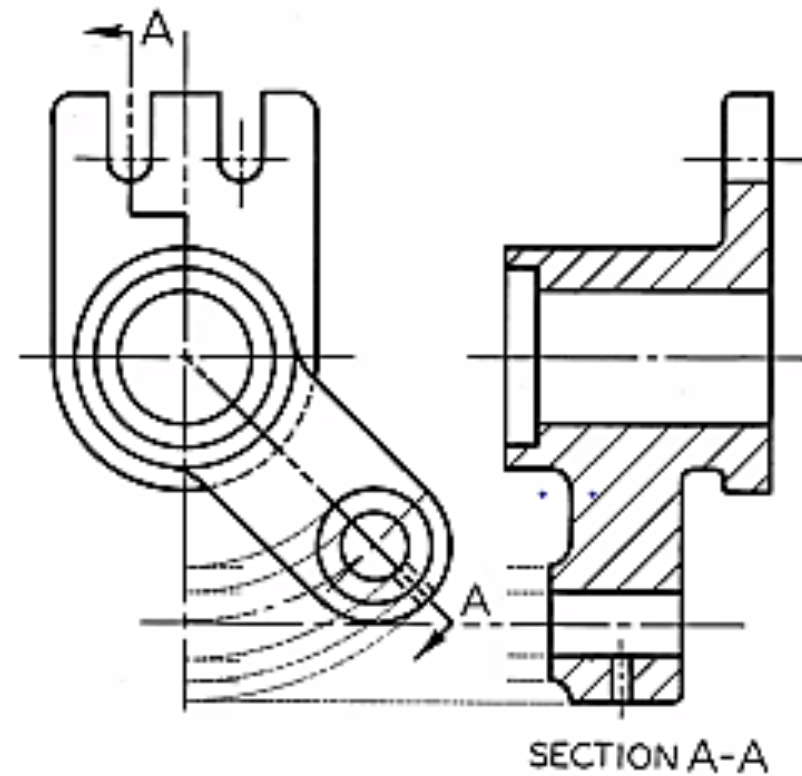
Section Views

Aligned Sections:

To include in a section view certain angled elements, the cutting plane may be bent to pass through those features.

The plane and features are imagined to be revolved into the original plane.

In the example the cutting plane bent to pass through the angled arm and then revolved to a vertical position (aligned) from where it is projected across to the section view.



For the reference visit the mentioned link on the youtube.
<https://youtu.be/kowtnit9YQk>

THE END

SANGAM EDUCATION BOARD – ONLINE RESOURCES