PENANG SANGAM HIGH SCHOOL

P.O.BOX 44, RAKIRAKI

WEEK 15 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

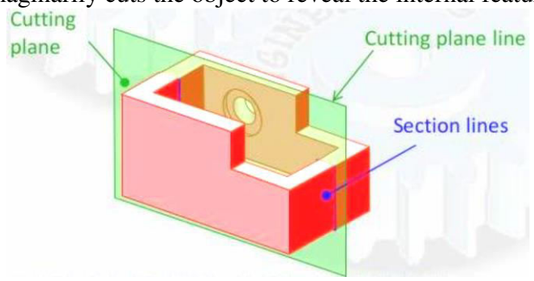
By the end of this topic, students will:

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

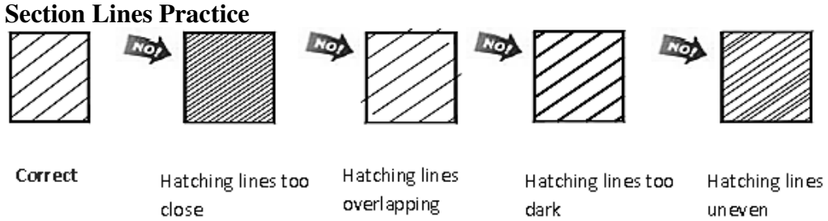
Cutting plane is a plane that imaginarily cuts the object to reveal the internal features.



Section Lines and Symbols

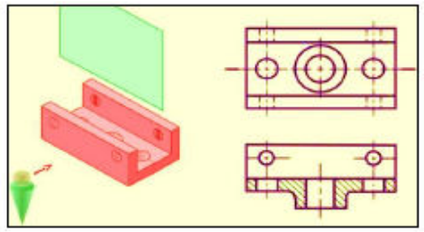
- The section lines are different for each of the material's type.
- For practice purpose, the cast iron symbol is used most often for any materials.

Section Lines Practice



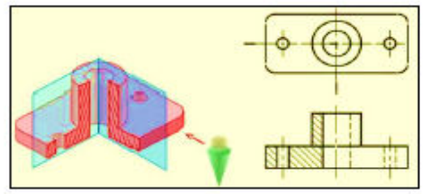
Full Section

The view is made by passing the ***straight*** cutting plane ***completely through*** the part.



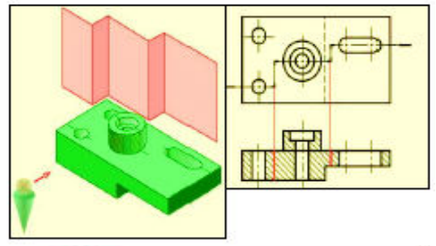
Half Section

The view is made by passing the cutting plane ***halfway*** through an object and removes a ***quarter*** of it.



Offset Section View

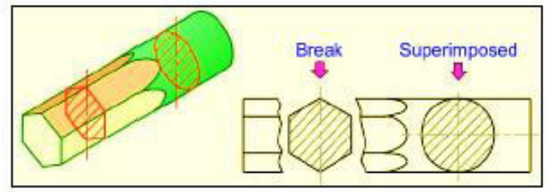
The view is made by passing the ***blended*** cutting plane ***completely through*** the part.



Revolved Section

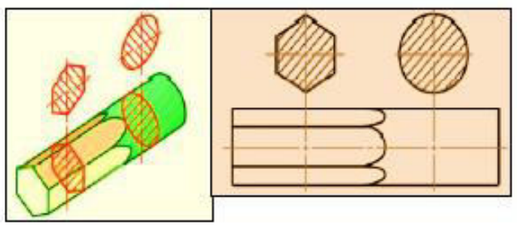
Placement of revolved section:

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



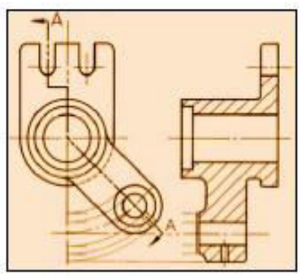
Removed Section

Sections are removed.



Aligned Section

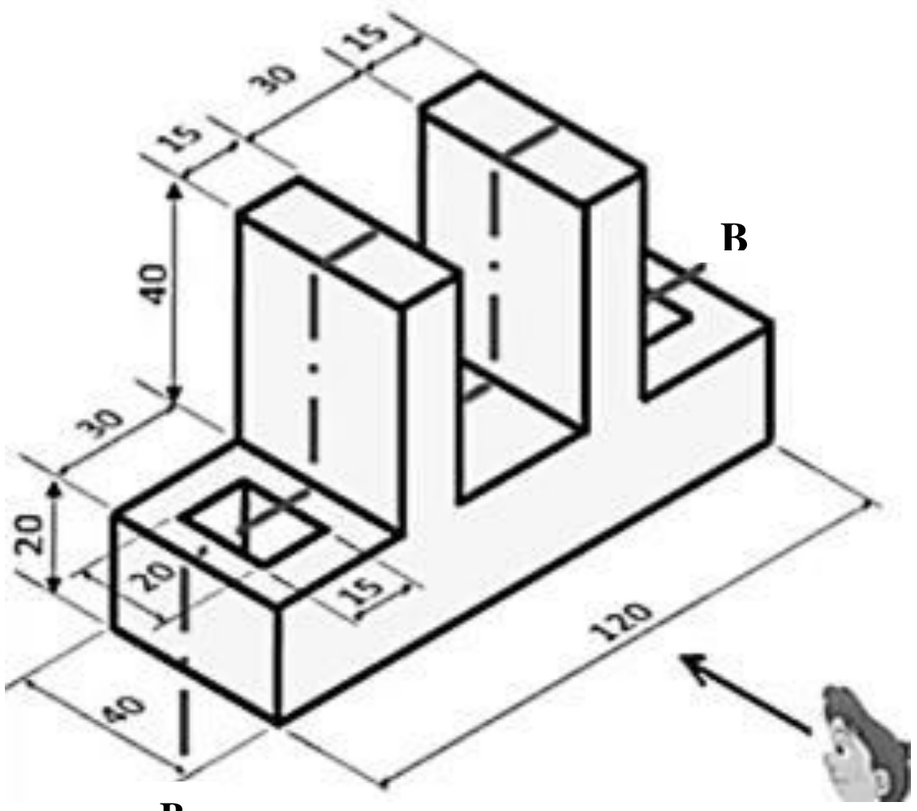
Aligned sections use an angled cutting plane to pass through angled features. The plane and feature are then imagined to be removed into the original plane and the section projected from there.



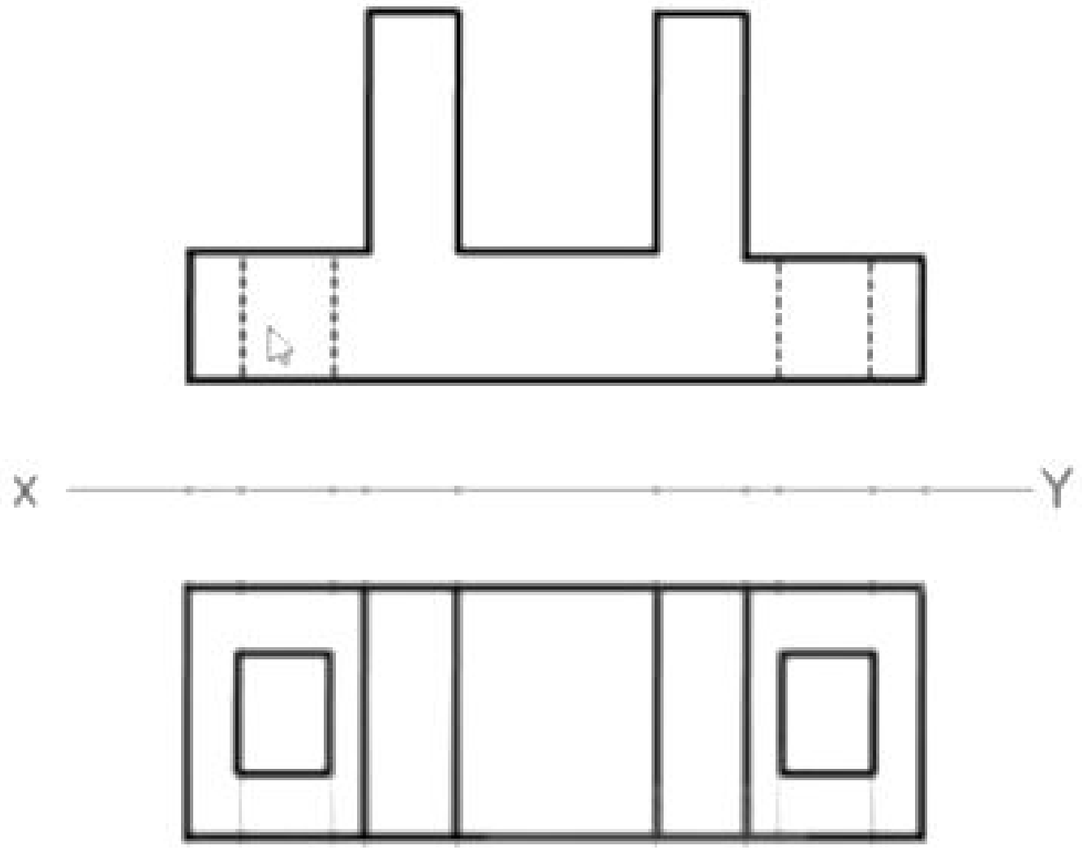
STUDENT ACTIVITY

Given: The sketch, plan and the elevation of a shaped block drawn in first angle orthographic projection and the cutting plane line **B-B**

Required: Draw the sectional front elevation and plan B-B



Note: draw on the given first angle orthographic views.



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