PENANG SANGAM HIGH SCHOOL

P.O.BOX 44, RAKIRAKI

WEEK 8 WORKSHEET

Subject: Technical Drawing

Year/Level: 12C/D

Strand: 1	Geometry
Sub Strand	Solid Geometry and Surface Development
Content Learning Outcome	 Identify the types of development used in various types of solids
	 Produce surface developments of solids and truncated solids
	 Produce lines of intersection of two interpenetrating solids

LESSON NOTES

OUTCOME

By the end of this topic, students will:

- a) Define interpenetration.
- b) Identify and sketch the intersecting lines of different solids.
- c) Draw the line of intersection for different solids.
- d) Complete the orthographic drawing and developments of the solids.
- e) Draw the development to show the true shape of the intersection.

Example

Given on the right is the interpenetration of a cylinder to cone. Radial line development has been used to draw the development of the cone to show the true shape.

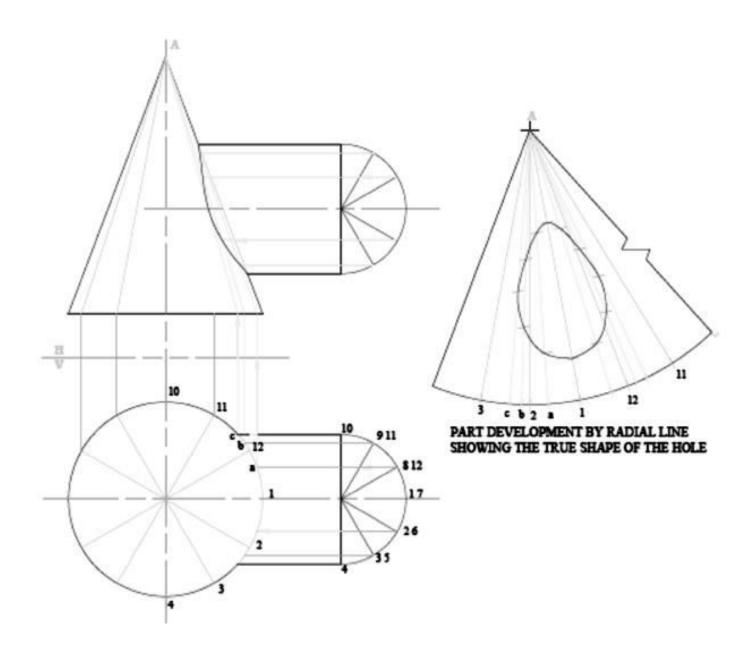


GIVEN:

THE 1ST ANGLE ORTHOGRAPHIC PROJECTION OF A CYLINDER TO CONE INTERSECTION

REQUIRED:

- 1. Complete the elevation by drawing the line of intersection.
- 2. Draw the development of the cone to show the true shape of the hole.



STUDENT ACTIVITY

GIVEN: The 1st angle orthographic projection of a Cylinder to Cone intersection

- REQUIRED:
 1. Complete the plan by drawing the line of intersection
 2. Complete the elevation by drawing the line of interpenetration
 3. Draw the development of the cone starting at point 'A'

