School: Ba Sangam College
Subject: Technical Drawing

Year/Level: 13
Worksheet 20

Name: _____
Year: _____

Strand	Geometry
Sub Strand	Plane and Space Geometry
Content Learning Outcome	Define the terms and use the knowledge to find Dihedral angle

Given the Line of Intersection

(1) Project an auxiliary view from plan showing the true length of the line of intersection between the planes. View perpendicular to AB in plan.

(2) Project from this auxiliary viewing down along the true length. The x_2y_2 will therefore be perpendicular to the true length found. Both planes will be seen as edge views thus showing the dihedral angle. Note that the distances for the second auxiliary are taken from the x_1y_1 back to the plan or from a suitable measuring line.
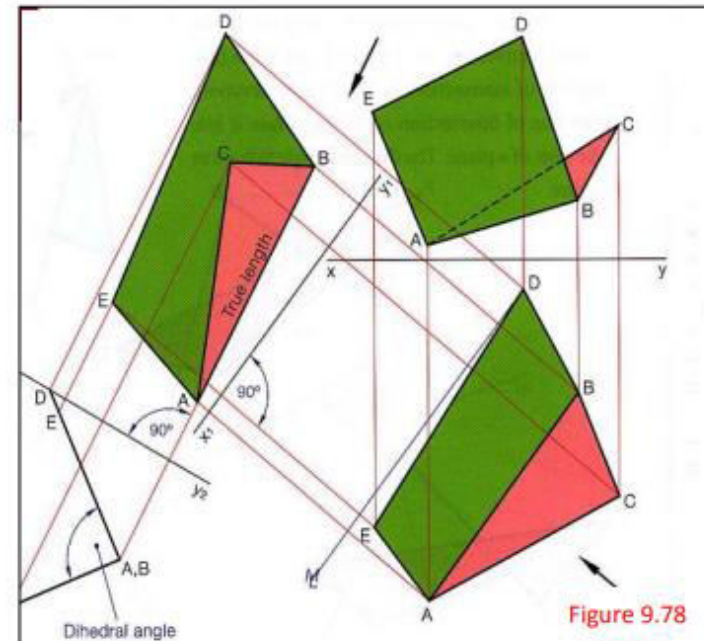

Figure 9.78

Name: _____

Year: _____

QUESTION 2   (15 marks)

Given: A typical truss with loads acting on it and its sketch not drawn to scale.

Required:

a).	Find the TL	(1 mark)
b).	Project all points parallel to TL line (suggest do one triangle at a time)	(2 marks)
c).	Find edge view of one triangle and a regular triangle of the other	(3 marks)
d).	Find the intersection of the two triangles	(3 marks)
e).	Project the intersection points back to all other views.	(3 marks)
f).	Shade the visible surfaces	(2 marks)
g).	Measure the dihedral angle. _____	(1 mark)