

3055 BA SANGAM COLLEGE

PH: 6674003/9264117 E-mail: basangam@connect.com.fj



School: Ba Sangam College Subject: Technical Drawing Year/Level: 13 Worksheet 21

| Name: | |
|---------|--|
| Year: _ | |

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

Worked Example 1:

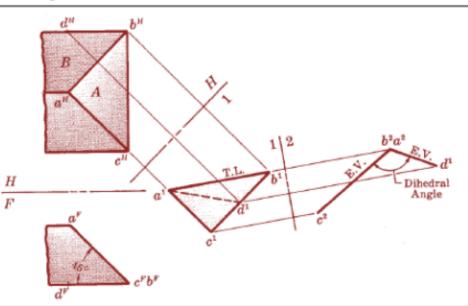
Given: The partial plan and front elevation of a hip roof.

Problem: Determine the dihedral angle between planes *A* and *B*.

Solution:

Locate a point on plane *B*, such as *D*. The two planes involved are *ABC* and *ABD*. Draw auxiliary elevation view 1 showing both planes and having the line of intersection *AB* shown in its true length: Draw inclined view 2 showing the line of intersection as a point and the planes as edges. The angle between the two edge views is the dihedral angle.

Ans. Dihedral Angle is 119° 30'



REVIEW QUESTIONS

| 1. | Define the term dihedral angle. | (1 mark) |
|----|---|----------|
| 2. | Write down the steps in finding the dihedral angle between two intersecting | (5marks) |
| | planes. | |
| 3. | Define skew lines. | (1 mark) |

Sangam Education Board – Online Resources

Sangam Education Board – Online Resources