PENANG SANGAM HIGH SCHOOL P. O. BOX 44, RAKIRAKI

LESSON NOTES - 11

SCHOOL: PENANG SANGAM HIGH

SUBJECT: TECHNICAL DRAWING

Strand	TD13.1 GEOMETRY
Sub - Strand	TD13.1.1 Plane & Space Geometry
Content Learning Outcome	TD13.1.1.1 Determine the true lengths and point view of line/skew lines.

SKEW LINES

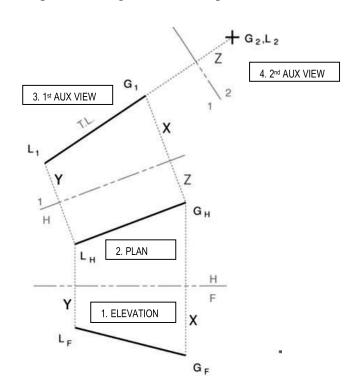
Learning Outcomes

By the end of this topic, students will:

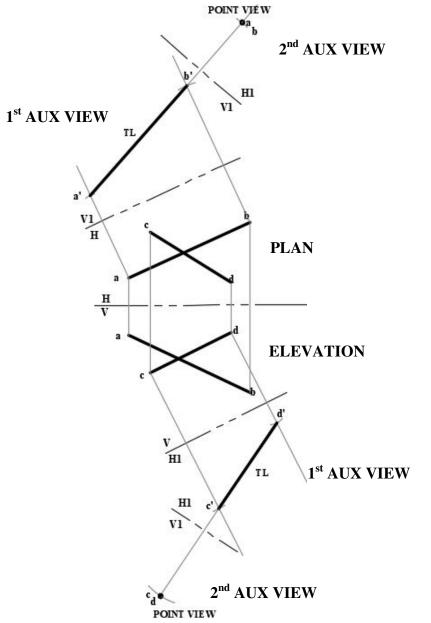
a) identify the true length and point view of skew lines

A. Finding the point view of a line

- 1. A line can be seen as apoint if projected onto a plane perpendicular to it.
- 2. So an auxiliary planeperpendicular to a line that shows True Lengthwill show as a point.
- 3. Note: To show line as apoint we need a view that shows TL first.
- 4. The example on the right shows 4 steps of construction.



B. Finding the point view of a skew line



STEPS

1. Draw perpendicular line from a and b in plan.

YEAR/ LEVEL: 13 C/D

- 2. Draw reference line V1 H parallel to line ab in plan.
- 3. To locate a' and b' in 1st aux view, transfer the distance of a and b from reference line HV to V1H. This will give you the TL for line ab.
- 4. To locate the point view in 2nd aux view, extend the the TL a'b'and draw a perpendicular line to locate reference line V1H1.
- 5. Transfer the distance of a and b from V1H in the plan to the reference line V1H1 to locate the point view in the 2nd aux view.

Follow the same steps to locate the point view of line cd.

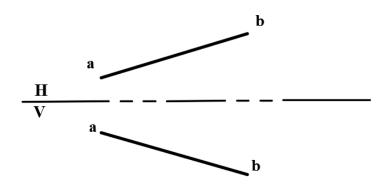
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SHEET 2

QUESTION 1

Given: The plan and the elevation of a line

Required: To draw the point view.



QUESTION 2

Given: The skew lines

Required: To draw the point view.

