

DUE DATE _____

NAME _____

ENGR/DRAFT 105 Assignment #13, Auxiliary Views – Part 2

Draw mechanically the 3 auxiliary view assignments (Plates 19, 26, and 27).

Note the 2 important rules of **Auxiliary Views**:

1. Adjacent Views share projection lines.
2. Alternate views share distances from reference planes (or fold lines).

Note the 4 important rules of descriptive geometry:

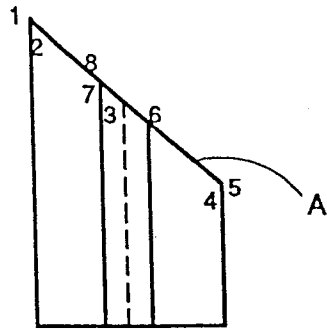
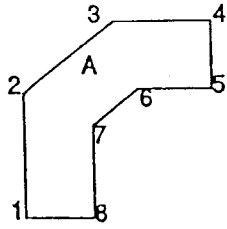
1. A plane shows **true size and shape** in a view parallel to (perpendicular projection lines) an **edge view** of the plane. That is to say, the line of sight (and therefore the projection lines) are perpendicular to the edge view of the plane.
2. In order to get an **edge view** of a plane, **get any line** in that plane to appear as a **point**.
3. In order to get a **point view** of a **line** (i.e., in order to get a line to appear as a **point**), take a view perpendicular to (one parallel projection line) the **true length** of the **line**. That is to say, the line of sight (and therefore the projection lines) are parallel to the true length of the line.
4. In order to get the **true length** of a **line**, get a view parallel to (perpendicular projection lines) any view of **the line**.

Staple this sheet to the front of your drawings in the correct order. Write your name at the top of the page. Write your name on each drawing.

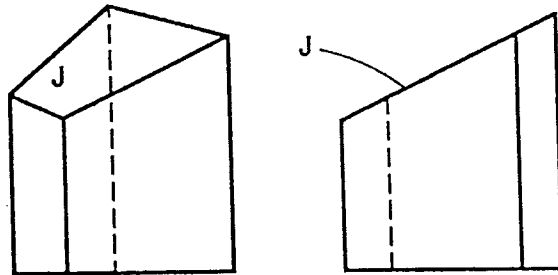
AUXILIARY VIEWS

In all 4 problems, follow the directions given and MECHANICALLY draw your solution. Use folding lines and label views with appropriate notation.

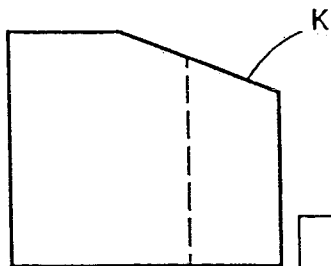
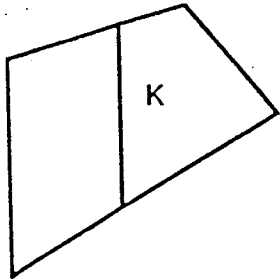
1. Draw an auxiliary view showing the true size of surface A ONLY.



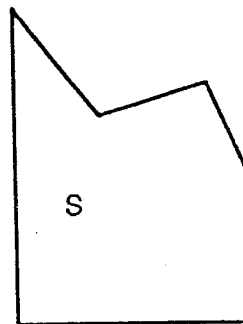
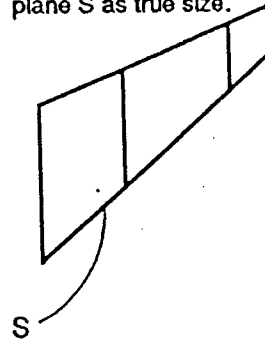
2. Draw a COMPLETE auxiliary view showing plane J as true size.



3. Draw a COMPLETE auxiliary view showing plane K as true size.



4. Draw a COMPLETE auxiliary view showing plane S as true size.



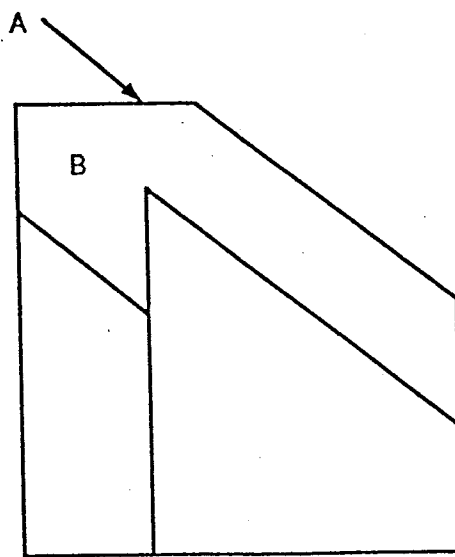
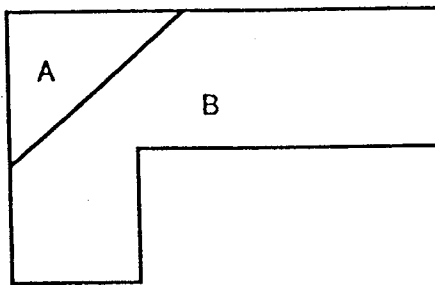
AUXILIARY VIEWS

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26

In all 4 problems, follow the directions given and SKETCH draw your solution. Use either folding lines or reference planes. Label views with appropriate notation.

1. Using MECHANICAL methods, and given the two orthographic views, draw auxiliary views (primary and secondary) which:
- (a) Shows the true angle between planes A and B.
 - (b) Shows the true size of plane B



AUXILIARY VIEWS

MECHANICALLY draw your solutions to the problem below.
Use folding lines and label views with appropriate notation.

Given the two orthographic views of the Bevel Clamp as shown,

- a. Construct a primary auxiliary view showing the true angle between planes A and B. Draw only a partial auxiliary view.
- b. Construct a secondary auxiliary view showing the true size of plane A.

