

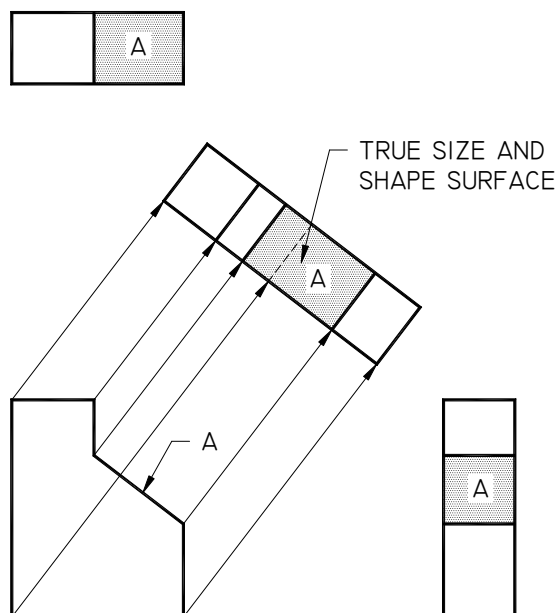
TERMS TO BE DEFINED OR IDENTIFIED for COMPETENCY 8:

- Parallel plane
- Auxiliary plane
- Auxiliary view
- Ellipse
- Primary auxiliary view
- Purpose of auxiliary view
- Secondary auxiliary view
- Foreshortened
- ANSI Y14.3
- True size and shape
- Needed feature
- True length

ITEMS FOR REVIEW FOR COMPETENCY 8:

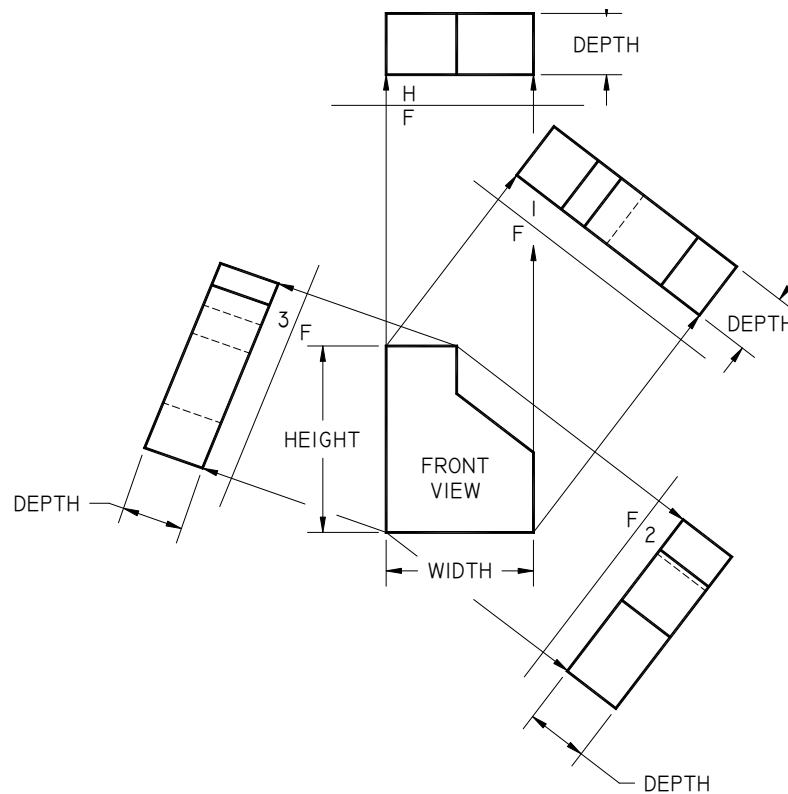
Use and function of an auxiliary view

- To show the true size and shape of a surface that is not parallel to any of the six principal views.
- To show irregularly shaped features that are not adequately shown in the principle views.
- To find the true length of a line.
- To find a point view of a line.
- To find the true size of a plane.
- To find the edge view of a plane.
- Circular features on incline surface will appear as an ellipse in principle view.

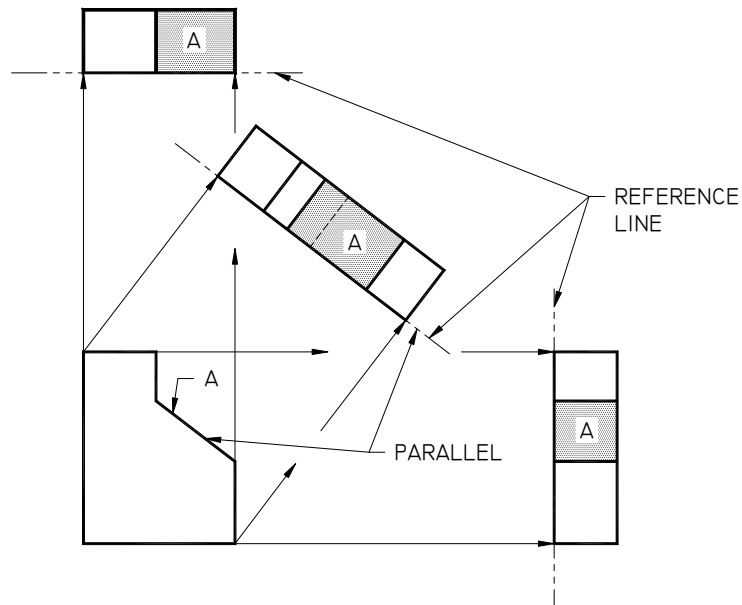


Height, Width, or Depth Auxiliary View? Auxiliary views are named for the principle dimensions of the object shown in the auxiliary view.

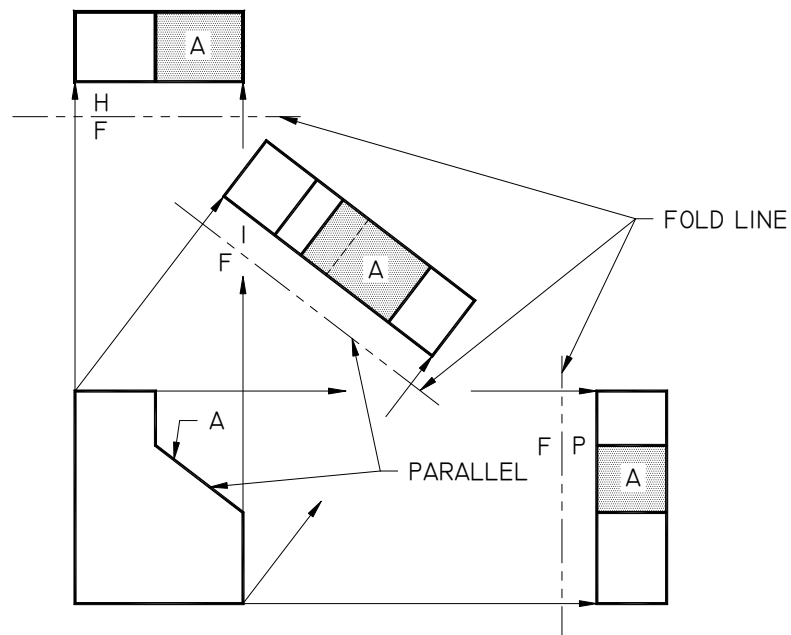
- Auxiliary views taken from the front view are known as depth auxiliary views.
- Auxiliary views taken from the top view are known as height auxiliary views.
- Auxiliary views taken from the side view are known as width auxiliary views.



Reference Line/Plane construction method



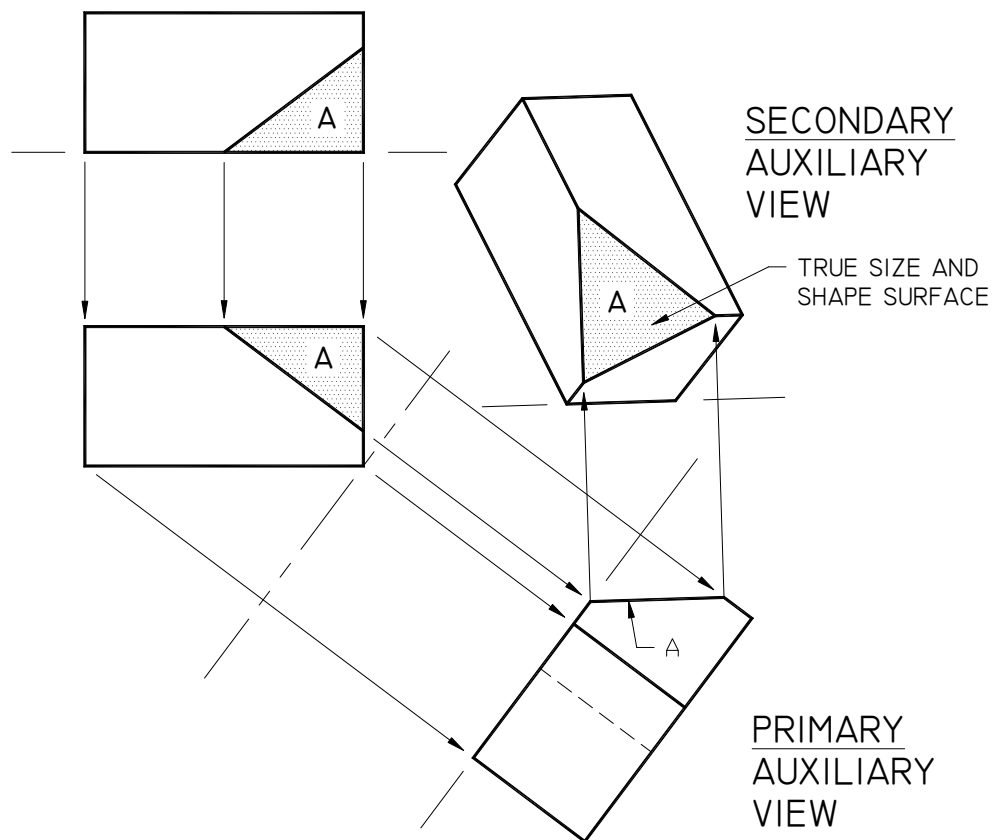
Fold Line construction method



- The reference line/plane or fold line must be constructed parallel to the edge view of a surface to get the true size and shape of the surface.

Secondary Auxiliary Views

- When a feature of an object is in an oblique position in relationship to the principal planes of projection, a secondary auxiliary view is required to find the true size and shape of the feature.



SAMPLE REVIEW QUESTIONS

1. Which of the following terms describes the imaginary plane from which an auxiliary view is obtained?
 - Unilateral plane
 - Auxiliary plane
 - Bi-plane
 - Parallel plane
2. An auxiliary view is projected from any view to depict?
 - Congruent lines
 - A needed feature
 - A double curved surface
 - An uneven edge
3. A line in a view is in true length when the line is perpendicular to the projection plane.
 - True
 - False
4. Which of the following is not a function of an auxiliary view?
 - To show the true length of a line
 - To show irregularly shaped parts or features that are not adequately shown in the principle views.
 - To show the true size and shape of a surface
 - To show interior construction of parts that cannot be clearly described by hidden lines.