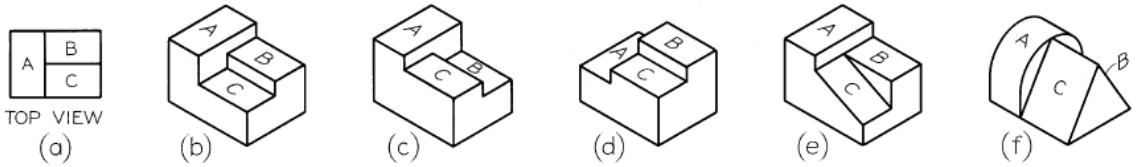
Chapter 6 Multiview Projection Day 2 Lecture- Notes

Adjacent Areas



- Consider figure (a), it is showing the top view of all figures, b-f, yet all the figures are _____.
- Since an area (surface) in a view can be interpreted in several different ways, other views must be observed to determine which interpretation is correct.
- Each area, (A, B, C) represents a surface at a different _____.
- No two _____can lie in the _____.

Similar Shapes of Surfaces

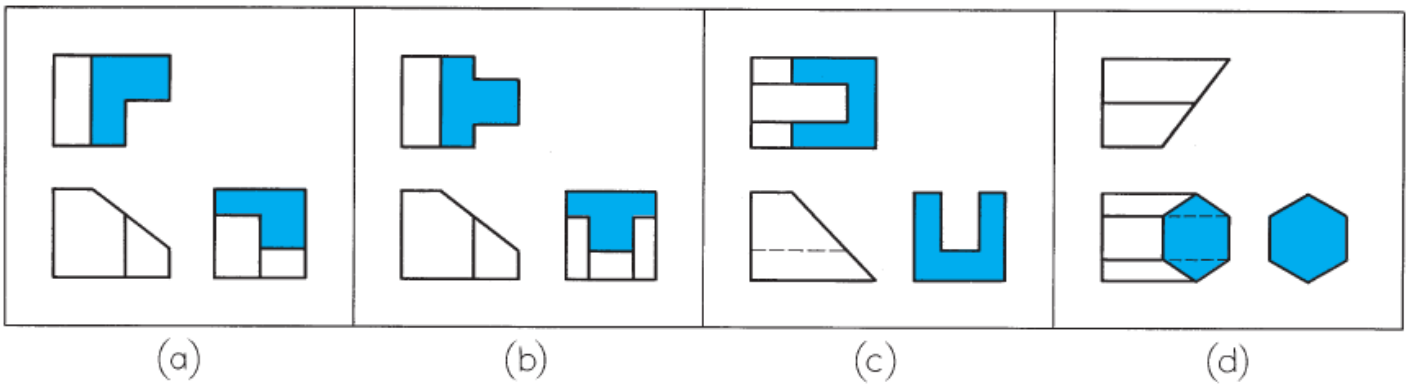


FIGURE 6.22 Similar Shapes.

- A surface viewed from several different positions, will have certain number of _____ _____.
- An L-shaped surface will appear as an L-shaped figure _____ _____
- This repetition of shapes is one of the best methods for analyzing views.

Normal Surfaces and Edges

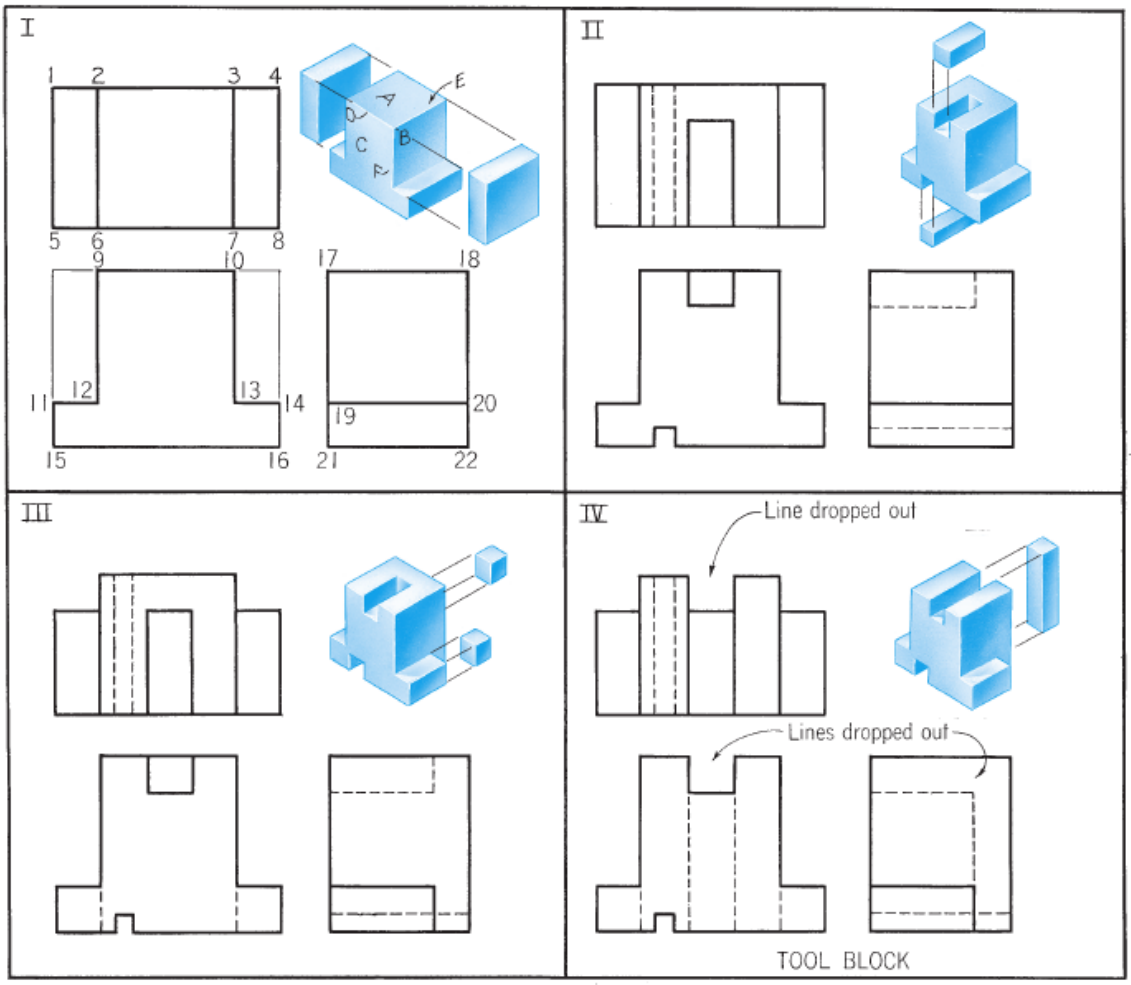


FIGURE 6.24 **Machining a Tool Block—Normal Surfaces and Edges.**

- A normal surface_____. It appears in _____ and _____ on the plane to which it is _____, and as a vertical or horizontal line on adjacent planes of projection.
- Walk yourself through the steps of the object and how the drawings change as the object is modified.
- Are the faces shown in each projection, true shape and size?
- A _____ is a line that is perpendicular to the plane of projection. It appears as a _____on the plane of projection to which it is _____ and as a _____ in true length on adjacent planes of projection.
- Look at Figure 6.24, I above. Edge D, is perpendicular to the profile plane of projection and appears as point #_____ in the side view. It is parallel to the _____ and _____ _____of projection and is shown true length at #'s _____ in the front view and #'s _____ in the top view.

Inclined Surfaces and Edges

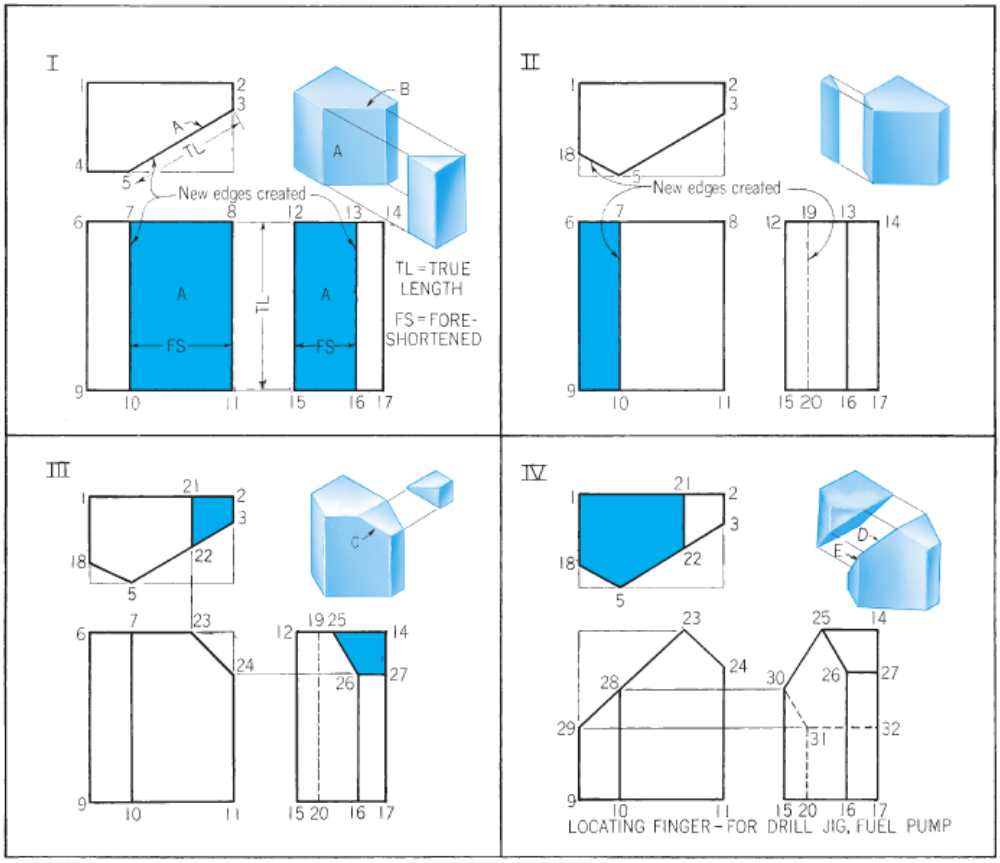


FIGURE 6.25 Machining a Locating Finger—Inclined Surfaces.

- An inclined surface is _____

_____

- An inclined surface projects as a straight line on the plane to which it is _____. It appears foreshortened (FS) on planes to which it is _____, with the degree of foreshortening being _____.
- Figure 6.25 above, shows four stages in machining a locating finger, producing several inclined surfaces.
- Notice in Fig. I, surface A, is more foreshortened in the right side view than in the front view because the plane _____

_____.

- Notice how in Fig. 6.25IV, in the top view, shown as a visible surface, 1-21-22-5-18 and in the side view as an invisible surface #'s _____, while the surface does not appear in true size in any view, it does have _____

_____

- To obtain the _____ of an inclined surface it is necessary to construct an _____

_____

- An _____edge is a line that is parallel to a plane of projection but inclined to adjacent planes. It appears true length on the plane to which _____

_____

- See inclined edge B, in Figure I, it is _____ in the top view, and _____ in the Front and Right side view.

Oblique Surfaces and Edges

- An oblique surface is a _____. Since it is not perpendicular to any plane, it cannot appear as a _____in any view. Since it is not parallel to any plane, it cannot appear _____ in any view. Thus, an oblique surface always appears as _____surface in all three views.

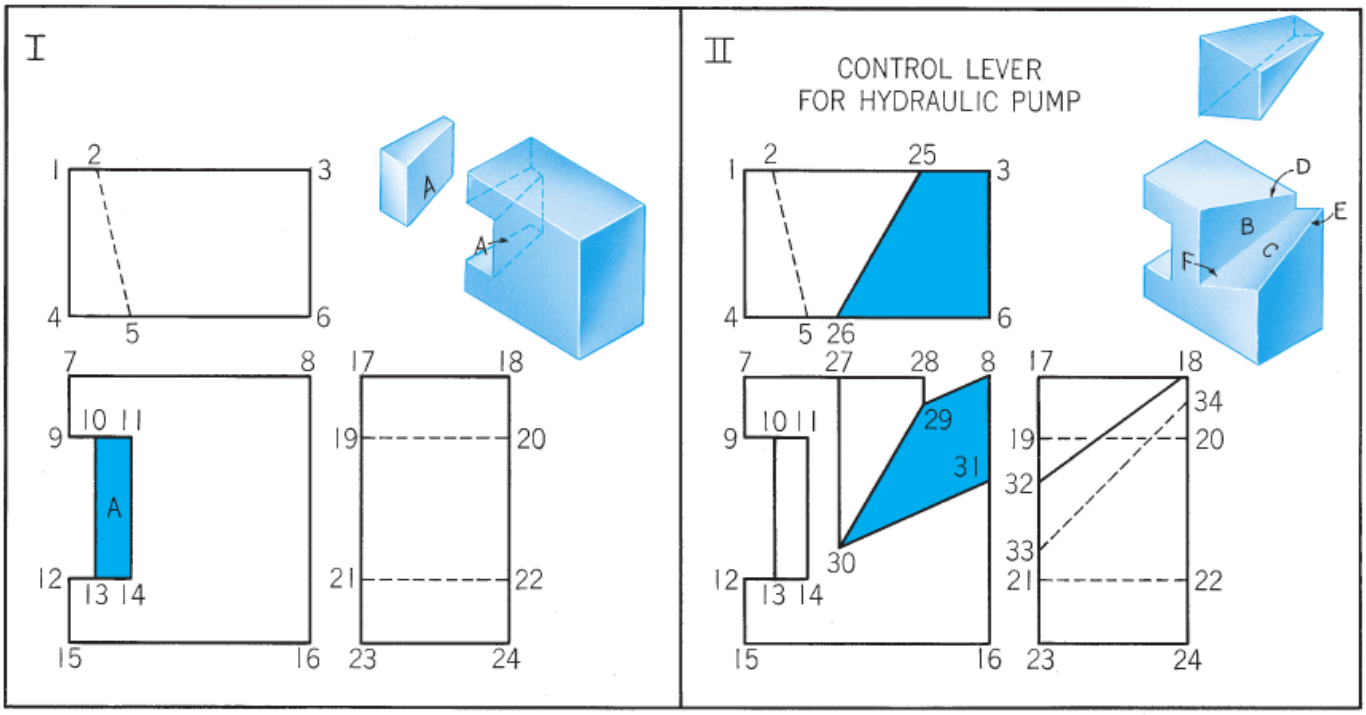


FIGURE 6.26 Machining a Control Lever—Inclined and Oblique Surfaces.

- In Figure 6.26II above, oblique surface C, appears in the top view at 25-3-6-26, and in the front view at 29-8-31-30. What is its numbering in the side view?
- To obtain the true size of this oblique surface, or any other, it is necessary to construct _____

_____

- An oblique edge is a line that is _____to all planes of projection. Since it is not _____to any plane, it cannot appear as a point in any view. Since it is not _____ to any plane, it cannot appear true length in any view. An oblique edge appears _____ in every view.
- See Fig 6.26II, oblique edge F appears in the top view at #'s _____, in the front view at #' _____, and in the side view at #'s _____.