

STUDY QUESTIONS FOR STEP 4

1. List three (3) uses for freehand sketches:

Sketching allows people to record their ideas quickly on paper without the use of tools. You can also revise your sketches to make them better. Sketching is also helpful in preliminary planning of a drawing.

2. What does a "multiview sketch" show you about an object?

A multiview sketch shows you the actual shape of an object from different directions that are 90 degrees apart.

3. List the three (3) principle views that are shown on a multiview sketch:

The three principle views that are shown on a multiview sketch are top, front, and right side.

4. List in your own words the steps to follow in the making of a multiview sketch:

1. Analyze the Object
2. Layout the Views
3. Block in the Views
4. Locate Details
5. Add Details
6. Darken Visible Lines
7. Darken Hidden Lines
8. Add Center Lines

5. What does a "pictorial sketch" show you about an object?

A pictorial sketch shows the overall shape of an object from one direction.

6. List the three (3) principle types of pictorial sketches:

The three principle types of pictorial sketches are isometric, oblique, and

perspective.

7. Why is the "isometric pictorial sketch" the most commonly used type of pictorial view?

The isometric pictorial sketch is the most commonly used type of pictorial view because it is the easiest to create.

8. What overall shape should an object have to utilize an "oblique view"?
The overall shape should be a cylinder.

9. What does a "perspective sketch" show you about an object?
A perspective sketch shows you a realistic view of the object.

10. What does a "floor plan" and an "elevation" show you about a building?
A floor plan sketch is similar to a top view with the roof removed and shows interior walls, windows, doors, appliances, fixtures, built-in cabinetry and stairways. An elevation is similar to a front view and shows the height of the structure plus exterior materials like siding, doors, windows, trim and roofing.

11. List in your own words the steps to follow in the making of a pictorial sketch:

1. Analyze the object
2. Layout the axis for an isometric sketch
3. Add dimensions to the axis
4. Block in the views
5. Locate details
6. Add details
7. Darken visible lines
8. Erase excess lines

12. Show and label with arrows the recommended methods for sketching the following lines:

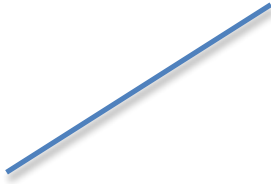
Horizontal lines



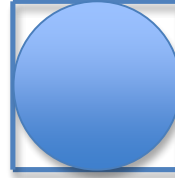
Vertical lines



Angular lines



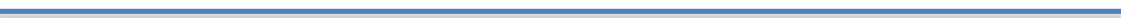
Circular lines



13. Sketch an example of a "construction" line and explain how it is used:



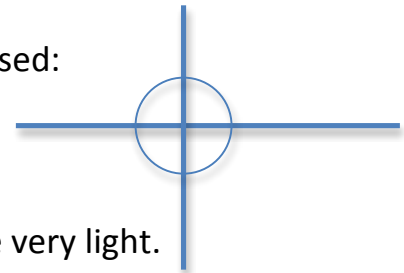
14. Sketch an example of a "visible" line and explain how it is used:



15. Sketch an example of a "hidden" line and explain how it is used:



16. Sketch an example of a "center" line and explain how it is used:



17. Is it necessary to erase "construction" lines?

It is not necessary to erase construction lines, because they are very light.

18. What shape does a circle become when sketched on a pictorial view?

They look like diamonds that represent the diameter of the circle.

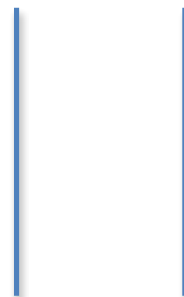
19. Is it necessary to sketch objects in the proper "proportions"?

It is necessary to sketch objects in proper proportions, because the dimensions are important in actual manufacturing.

1" x 2" rectangle



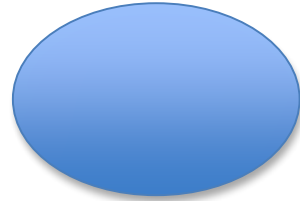
two 1.5" parallel lines



two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



30°, 60° & 90° triangle a 45°, 45° & 90° triangle

