

STUDY QUESTIONS FOR STEP 4

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

- To record ideas quickly by drawing them
- To revise these drawings from rough sketches to final
- Revise the idea to the point where it is presentable to clients or supervisors

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

The different sides and angles of the shape or idea.

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

Top, front and right side.

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

Step 1: Choose a point to draw from which it will give the most detail. After, continue by measuring the length, width, and height. Then by selecting an appropriately proportioned grid size to represent your unit of measurement.

Step 2: Use dots or dashes to represent the height and width of your object. Change proportions if an inch cannot fit between the lines.

Step 3: Do a very light sketch to establish the outline of each different view.

Step 4: Use very light construction lines show change on the shape and to show holes or rounded corners on your object.

Step 5: Start adding more and more details.

Step 6: Darken the visible lines.

Step 7: Darken your hidden lines.

Step 8: Use center lines to show the location of the center of holes and arcs.

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

It shows the overall shape of your idea from only one direction.

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

Isometric, Oblique, and Perspective

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

Because it is the easiest.

8. What overall shape should an object have to utilize an "oblique view"?

A cylinder-like shape

9. What does a "perspective sketch" show you about an object?

The most realistic view of your object / idea.

10. What does a "floor plan" and an "elevation" show you about a building?

The floor plan shows how the house would look on the inside, say if the roof was removed and you were over the house looking down at it. The elevation shows the height of the building.

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

Step 1: Study the object and choose a pictorial view for it.

Step 2: Draw out your object at one point, to which the point must have an axis that goes 30° from the right and from the left above the horizontal. To which it will have a "Y" form.

Step 3: Add dimensions to your axis.

Step 4: Sketch light construction lines.

Step 5: Locate details.

Step 6: Add more detail.

Step 7: Darken the visible lines.

Step 8: Erase unnecessary lines.

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

Horizontal lines



Vertical lines



Angular lines

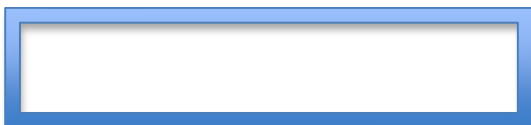


Circular



lines

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



Lightly draw lines to show simple details or form a basic design.

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



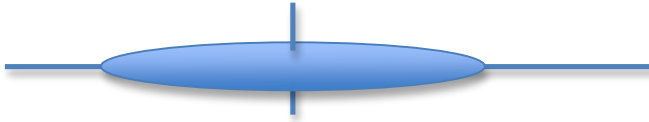
15. Sketch an example of a "hidden" line and explain how it is used:



They are used to show edges.

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

To show perspective



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

Explain:

When you are making a final draft, otherwise keep them, because they are used to layout preliminary shapes.

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

Oval

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

Explain: Unless it is too big to fit on the paper that you are drawing on, then yes.

20. Make freehand sketches of the following using appropriate "proportions" in the space below :

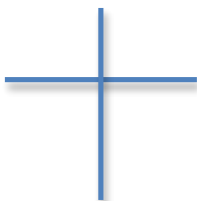
1" x 2" rectangle



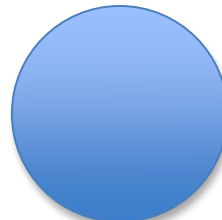
two 1.5" parallel lines 1/2" apart



two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

