

STUDY QUESTIONS FOR STEP 4

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

It is used to quickly record ideas on paper. It helps in preliminary planning of drawings before using tools. The sketches can also be revised and refined for presentations to clients and/or supervisors.

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

It shows the shape of an object from different 90 degree angles, including views from the top, front and right side

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

top, front and side

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

Study the object. Layout the views. Establish the outline of each view. Look for details. Add the details. Darken any lines needed. Darken any lines that represent hollow portions. Add center lines to locate the center of holes and arcs.

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

It shows the shape of an object from only 1 side.

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?

It is the most common because it is the easiest to make. It is the easiest because actual measurements are used and arc and circle shapes are all consistent.

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

The overall shape should be an oval.

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

It provides the most realistic view of the object, but is difficult to make because all the lines are shortened.

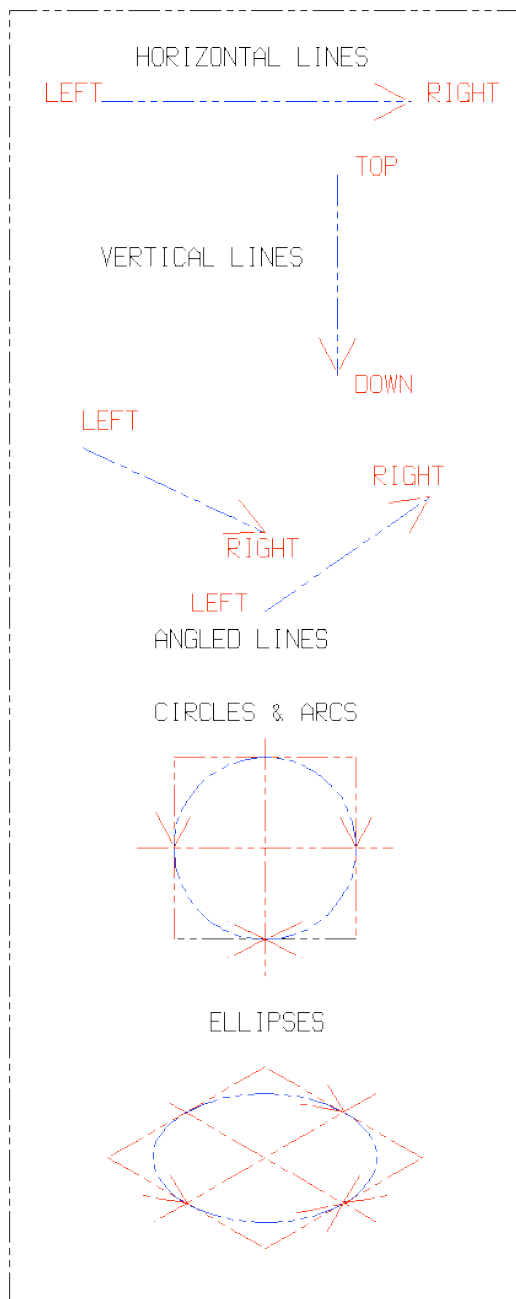
10. What does a "floor plan" and an "elevation" show you about a building?

The floor plan is a sketch of the house from an aerial view with the roof off, showing the interior walls, window, doors, appliances, fixtures, built in cabintry and stairways. The elevation is a frontal view, showing the height of the house.

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

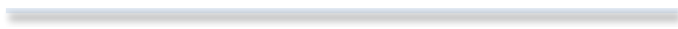
Study the object. Layout the axis. Add dimensions to the axis with height and depth. Sketch a light box that the object will fit in. Use light pencil to find and draw the details. Darken visible lines. Erase all extra lines.

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



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

Construction lines are used to layout preliminary shapes



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



Visible lines are thick, solid lines used to show the outline of an object.

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



Hidden lines are medium thick lines used to show edges or surfaces on the inside of the object or behind the top, front or side surfaces.

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



Center lines are thin lines composed of long and short dashes and are used to locate the center point of holes or the central axis of a cylinder.

17. Is it necessary to erase "construction" lines? No Explain: No, because the lines should be very light so there is no erasing needed.

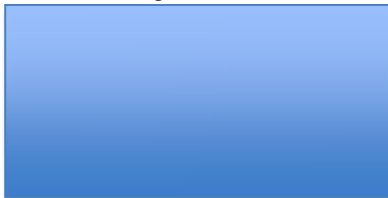
18. What shape does a circle become when sketched on a pictorial view?

An oval

19. Is it necessary to sketch objects in the proper "proportions"? Yes, or else the picture will look a lot different than the real shape

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

1" x 2" rectangle



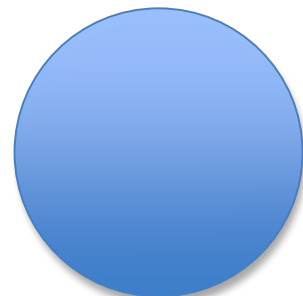
two 1.5" parallel lines 1/2" apart



two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

