

STUDY QUESTIONS FOR STEP 4

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

- *Presentation to their supervisors or clients*
- *Record their ideas quickly*
- *Preliminary planning of a drawing or layout before using tools*

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

Front View, Side view, and top view of an object, using different views to show details

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

- *Top View*
- *Side View*
- *Front View*

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

1. *Analyze 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?

Shows the overall shape of an object from one direction.

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

- *Isometric*

- *Oblique*
- *Perspective*

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

To create as actual measurements are used and the shape of arcs and circles is consistent on all surfaces

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

The cabinet oblique sketch is best used for furniture or cylindrical shaped objects as a normal front view is used

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

Provide the most realistic view of an object but are more difficult to create as all distances must be shortened

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

A Sketch that is similar to a top view with the roof removed and shows interior walls, windows, doors, appliances, fixtures, built-in cabinetry and stairways

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

1. *Analyze Object*
2. *Layout The Axis for an Isometric Sketch*
3. *Add dimension to the axis*
4. *Block in the views*
5. *Locate Details*
6. *Add Details*
7. *Darken Visible Lines*
8. *Erase Excess Lines*

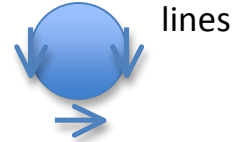
12. Show and label with arrows the recommended methods for sketching the following lines:



Angular lines



Circular



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

Preliminary Layout work

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

Outline of an object

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

Interior Edges, Non-Visible Surfaces, Hollow Areas

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



17. Is it necessary to erase "construction" lines? *NO* Explain: *Stay light with out smudging*

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"? *Yes*

Explain: *Sketch needs to be as proportional as possible to show others*

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

1" x 2" rectangle
1/2" apart



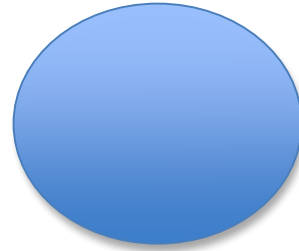
two 1.5" parallel lines



two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

