

## STUDY QUESTIONS FOR STEP 4

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

**-record ideas quickly without the use of tools**

**-revise and refine sketches**

**-preliminary planning of a drawing w/o the use of tools**

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° apart.**

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

**-top**

**-front**

**-right**

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

**In order to make a multiview sketch you must first analyze the object. Then layout the views, block the views, locate details, and add the details. The next step is to darken visible lines, darken hidden lines, and finally add center lines.**

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

**A pictorial sketch shows you the overall shape of an object in 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?

**It is most commonly used because actual measurements are used and the shapes of arcs and circles and circles are 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?

**Perspective sketches 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 floor plan sketch is similar to a top view with the roof removed and shows interior wall, 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:

**-Steps: 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 & erase excess lines**

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

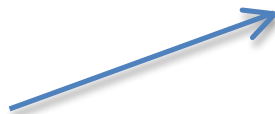
Horizontal lines



Vertical lines



Angular lines



Circular lines



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

**A construction line is used to aid you in laying out shapes and are very thin light lines that you should not have to erase**

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

**Visible lines are thick, solid lines and are used to show the outline or the visible edges of the object.**

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

**Hidden lines are medium thick, dashed lines and are used to show edges or surfaces on the inside of an 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 they do not need to be erased because because they are very thin light lines that are not extremely visible.**

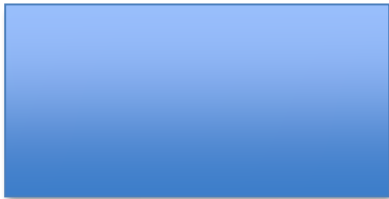
18. What shape does a circle become when sketched on a pictorial view?

**It becomes an ellipse.**

19. Is it necessary to sketch objects in the proper "proportions"? **Yes because it will then be easier to read and interpret.**

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

1" x 2" rectangle



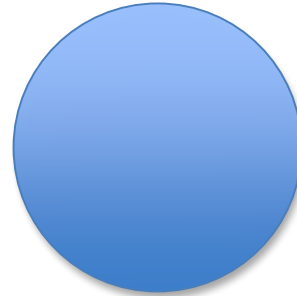
two 1.5" parallel lines 1/2" apart



two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

