

## STUDY QUESTIONS FOR STEP 4

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

Making quick sketches. Showing your ideas on paper. Making your point to others.

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

It shows you more than one side of the object.

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

Front View Right side view Top View

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

Analyze the object, layout the views, block in the views, locate details, add details, darken visible lines, darken hidden lines, add center lines.

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

To see the detail of the object without using many views.

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

oblique, isometric, and perspective.

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

They show the true size of each side drawn.

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

A cylinder of a circular form

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

It shows difference perspectives of an object.

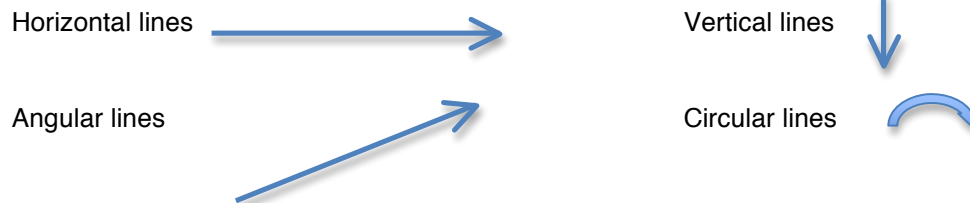
10. What does a "floor plan" and an "elevation" show you about a building?

It shows your multi views of a building in detail and in scale.

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

Analyze the object, layout the axis for an isometric sketch, add dimensions to the axis, block in the views, locate details, add details darken visible lines, erase excess 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 very thin, light lines and are used to layout preliminary shapes. Construction lines should not have to be erased

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

Visible or object 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? \_\_\_\_\_ Explain: Yes

Because it helps to lay out the shapes.

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

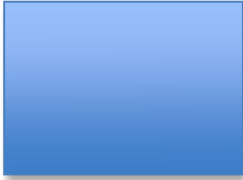
Ellipse

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

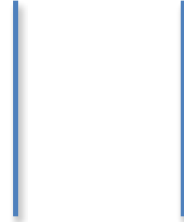
Explain: **The more accurate it is, the easier it is to read.**

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

1" x 2" rectangle



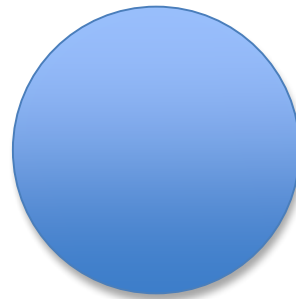
two 1.5" parallel lines 1/2" apart



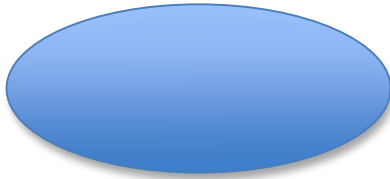
two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

