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## STUDY QUESTIONS FOR STEP 4

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

Sketching is used to record ideas very quickly or revise other ideas or help people plan things.

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

It shows the top, front, and right sides and what are on these different sides.

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

Front, top and right sides

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

First the object must be analyzed and the views layout. Make sure any odd parts are drawn carefully and locate all the small details. Add any details missed and darken all lines. Finally just add center lines.

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

It shows the overall shape of an object from just one direction.

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

Isometric, oblique and perspective are the different types.

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

It is the easiest to use because of measurements and the style it was drawn.

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

An oval.

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

It is the most realistic view of an object.

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

A floor plan is from above and an elevation is from the side and shows furniture and such.

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

First analyze the object and get the general layout. Next dimensions are added and construction lines are added in. Next locate details and add in details. Now darken visible lines and erase excess lines.

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

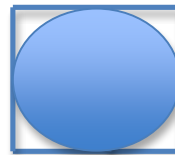
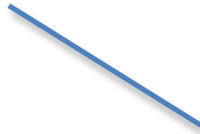
Horizontal lines



Vertical lines



Angular lines



Circular lines

13. Sketch an example of a "construction" line and explain how it is used:  
Construction lines are used to help establish an outline.

14. Sketch an example of a "visible" line and explain how it is used:  
Visible lines are the sides and edges of the object.

15. Sketch an example of a "hidden" line and explain how it is used:  
Hidden lines are used to help with the alignment of other lines.

16. Sketch an example of a "center" line and explain how it is used:  
Center lines are used for alignment of holes or arcs.

17. Is it necessary to erase "construction" lines? No Explain No because the lines should already be drawn lightly.

18. What shape does a circle become when sketched on a pictorial view?  
Circles become diamonds that represent the diameters.

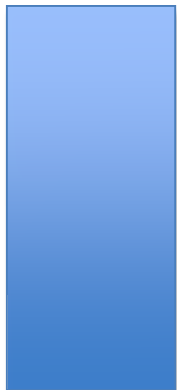
19. Is it necessary to sketch objects in the proper "proportions"?

Yes

Explain: Otherwise the object will look very strange.

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

1" x 2" rectangle



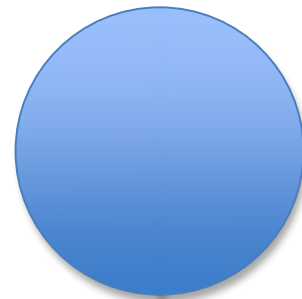
two 1.5" parallel lines 1/2" apart



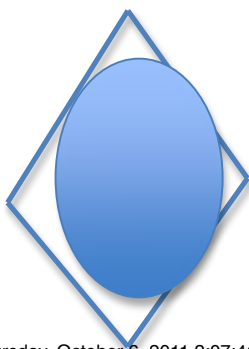
two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

