

Name ____Jorie Shapiro_____
Technical Drawing

STUDY QUESTIONS FOR STEP 4

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

- 1.To Record ideas of a designer quickly without tools.
2. Also to revise and refine sketches for a presentation.
3. Plans out the layout of the product before tools are involved.

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

Multiview sketch shows all the different views and dimensions of the object. Also the sketch has different lines that are used to tell how the object is created.

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

1. Top 2. Front 3. Left or Right side

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

1. Choose all different view that will be drawn of the object
2. At lower left corner make four dashes vertically that represent the height. Then at lower right corner make four dashes horizontally to represent the length and width of the object.
3. Lightly sketch the outline of each view.
4. Lightly sketch changes in design and other small holes or rounded corners.
5. Make small boxes to represent diameter or holes or radius' of rounded corners.
6. Make thick solid lines to show visible edges
7. Medium thick dashed lines should show interior or hollow edges
8. Thin long and short dashed line should show the center of holes and arcs.

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

Pictorial sketches show details of the object.

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

1. Oblique 2. Isometric 3. Perspective

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

It is the most common because the sketch shows the right size of each side.

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

The object should be a cylinder or a circular form of something.

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

A perspective sketch shows one view of the object.

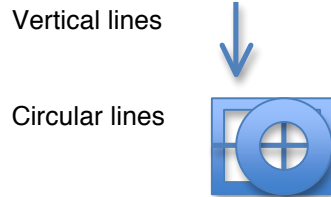
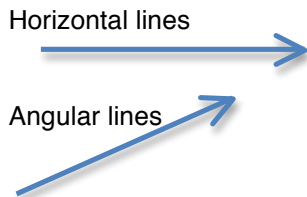
10. What does a "floor plan" and an "elevation" show you about a building?

A floor plan shows the layout of the building in a 2D view

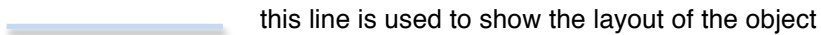
11. List in your own words the steps to follow in the making of a pictorial sketch:

1. Study object to make the correct size of the pictorial view.
2. Sketch 3 axis' that forms in the shape of a Y
3. Estimate the length and width of the object. Make a dash at these points.
4. Lightly sketch the construction lines.
5. Make light lines to indicate little changes in the shape where there's rounded corners or holes.
6. Make a light line that's in the shape of a diamond to show the radius of the holes
7. Visible edges should be shown with thick dark lines
8. Erase all the extra lines that aren't needed.

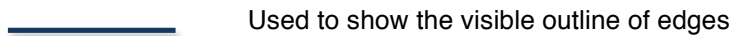
12. Show and label with arrows the recommended methods for sketching the following lines:



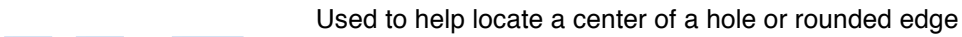
13. Sketch an example of a "construction" line and explain how it is used:



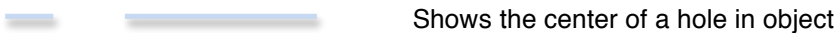
14. Sketch an example of a "visible" line and explain how it is used:



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



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



17. Is it necessary to erase "construction" lines? No Explain:

Because they show the outline of the object

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

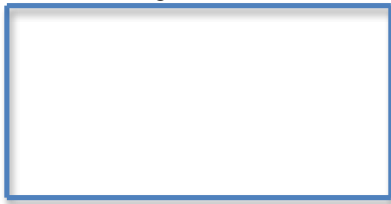
It becomes a cylinder.

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

Explain: Because then the picture will be ruined and the sketch wont make sense of what the object is.

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

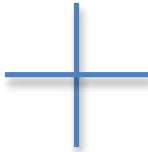
1" x 2" rectangle



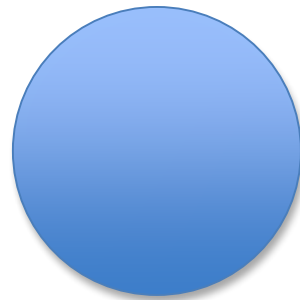
two 1.5" parallel lines 1/2" apart



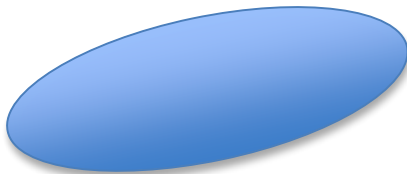
two 3/4" perpendicular lines



1.5" diameter circle



2" isometric ellipse



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

