## Introduction to Technical Drawing Technology Education Department

Name Babak Baniasad

## STUDY QUESTIONS FOR STEP 4

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

You can record ideas quickly, revise your ideas, and make plans.

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

When it show the object from many points of view

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

Top Front Right Side

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

Look at the object Plan it out Sketch it Add details Bolden lines Bolden hidden lines Add lines in the centers

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

It shows the overall shape of an object from one point of view

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?

Because it shows 3 sides of the object in one picture.

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

**Cylindrical** 

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

A realistic view

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

They show the shape of the building

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

Observe the object Make a plan Add dimensions Sketch it Add details **Darken Lines** Erase hidden lines

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

Angular lines

Horizontal lines

Circular lines

Vertical lines

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



The are used to show the depth and shape of unseen areas of the object

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

A line that is visible

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

A line that is hidden

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

It is used to label the center of an object

17. Is it necessary to erase "construction" lines? No Explain: You may want to see what is behind the object you are making

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

## An oval

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

Explain: Scale can change, but everything must be to proportion

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







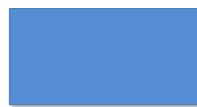
 $30^\circ,\,60^\circ$  &  $90^\circ$  triangle a  $45^\circ,\,45^\circ$  &  $90^\circ$  triangle



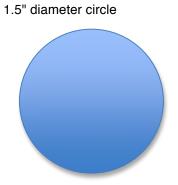
2" isometric ellipse



two 3/4" perpendicular lines



1" x 2" rectangle



two 1.5" parallel lines 1/2" apart