

SUBJECT: BASIC TECHNOLOGY
TOPIC: FREEHAND SKETCHING
CLASS: JS1
WEEK: 5
DATE: 5TH FEBRUARY 2024

FREEHAND SKETCHING

5.1 DEFINITION OR MEANING

Freehand sketching is the process of making drawing without any professional materials except a pen, eraser, paper and the likes.

Freehand sketching is one of the quickest methods by which the shape of an object can be communicated to others without using any drawing instrument except a pen or a pencil.

Examples of free hand sketches are: cup, jug, orange etc.

Uses of Freehand Sketching

1. It is used to transfer the idea of an engineer's abstract world to the real world in 2D and 3D.
2. It is used for daily communication in the engineering world as drawing is the international language of engineering.
3. Its drawing is also used to quickly present an idea in a graphical form to non-technical peoples.

Advantage of Freehand Sketching

Freehand sketching is of advantage because a good sketch reduces the amount of writing needed to describe an object.

5.2 TECHNIQUE OF SKETCHING

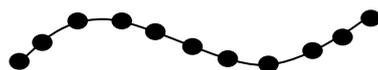
Sketching a Straight line:

A straight line is defined as the shortest distance between two points. We can use freehand to draw a fairly straight line by the following procedures:

1. Put a dash or dot far enough to the right-hand side of the paper.
2. Start to draw a line from the left-hand side to join the dash or dot with your eyes fixed on the point.

Sketching a Curve:

To draw a curve by freehand, it will be necessary to plot some points not too far from each other at different levels, like this:

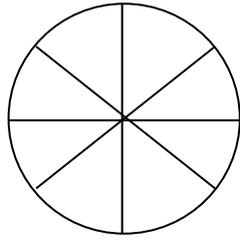


With the points in position, attempt to draw curves by joining the dashes or dots.

Sketching a Circle:

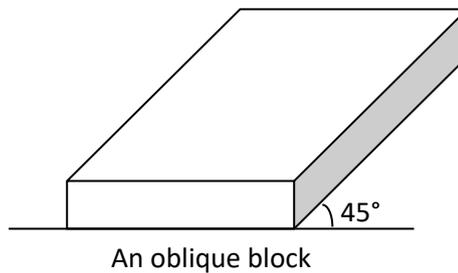
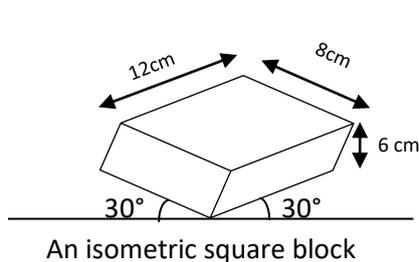
To draw circles, the easiest way is to draw lines which are equal in diameter to the circle in different directions. Each line must be as faint and straight as possible, each crossing one another at a central point.

Now, join the points by little curves from the top of each line. Try to draw other circles by means of joining two large curves having half the size as radius and full size in diameter.



Sketching a Square Box:

This can be sketched in an isometric or oblique view. Isometric views have the vertical height and the base lines inclined at 30° to the horizontal. Oblique views have the height vertical and one baseline inclined at 45° to the horizontal while the second base line is horizontal. Once it is decided which view to represent, the block is drawn by using a series of straight lines both vertical and horizontal, applying the techniques discussed earlier.



Sketching an Irregular Edge:

Figures with irregular edges are best drawn by first sketching a regular or square block which can completely contain the object. The shape is then carefully shaped by using dotted lines joined to show the desired shape with appropriate curves.

ASSIGNMENT:

1. What is freehand sketching?
2. Name the instruments used in freehand sketching.
3. Briefly describe the technique of sketching a straight line and circle.
4. State one advantage of freehand sketching.