

AZUKA ONYINYE ANASTASIA

1. A sectioned surface is represented by cutting an object by section plane.
2. Principles for dimensioning a drawing are;
 - Dimension lines should follow the shape symbol
 - Extension lines should project beyond the dimension line
 - Center line dimension is wrong. Dot should be placed by a small dash
 - Dimensions should be written in capital.
 - To avoid confusion and possibility of error no dimension should be repeated twice on any sketch
 - Dimensions and notations must be placed on the sketch where they can be clearly and easily read.
 - Hidden lines should meet without a gap.
 - Radius symbol should precede the dimensions
 - Avoid dimensioning over objects
 - All dimensions should be given a format
 - Dimensions shown with dimension lines and arrowheads should be placed to be read from the bottom of the drawing.
3. Half section is a view of an object showing one half of the view in the section. The diagonal lines on the section drawing are used to indicate the area that been theoretically cut. These lines are called section lining or cross-hatching.

If the imaginary cutting plane passes through the entire object, splitting the drawn object in two with the interior of the object revealed, this is called a full section. Full section is the most widely used sectional view. It is possible to section an object whenever a closer look intentionally is desired.
4. Leader lines are lines that terminate in an arrowhead or a dot. We use arrowheads when leader lines terminate the outline of an object and we use dots when leader lines terminate within the outline of the object or the surface of the object.
5. A scale of 5:1: A 50mm line is to be drawn at a scale of 5:1 i.e. 5 times more than its original size.

A scale of 1:10: this means that the object is ten times smaller than in real life scale 1:1.
6. Shape identification.

Diameter - ϕ

Radius- R

Spherical radius- SR

Square□

7. Elements are:

- The object.
- The plane of projection.
- The point of sight
- The rays of sight

An orthographic projection (also called an orthogonal) is the simplest type of projection which consists of merely projecting points and vectors in a perpendicular fashion into a plane. They are parallel projections in which the lines of sight are perpendicular to the projection plane.

8. When three dimensional objects are represented in two dimensions it is called an orthographic projection
9. The first angle projection is gotten when the object is placed in the first quadrant meaning its placed between the plane of projection and the observer.

The third angle of projection is gotten when the object is placed below and behind the viewing planes meaning the plane of projection is between the observer and the object.

OBJECTIVES.

1. Reference plane.
2. Reference plane is parallel to the plane of view.
3. It can be projected directly.
4. 120°
5. Metric thread is 60°
6. Rivet.
7. Crowning.
8. 45°

9. Circle
10. An ellipse.
11. Cylinder
12. Cone.
13. Journal bearing
14. 55°
15. Horizontal plane