

1. How do you represent a sectioned surface on a drawing?

It can be represented with 45 degree hatching lines

2. List out the various principles to be followed while dimensioning a drawing

RULES for the use of the dimension form.

- All dimension, extension, and leader lines should be thin, sharp, dark lines (.5mm/2H)
- Dimensions shown with dimension lines and arrowheads should be placed to be read from the bottom of the drawing (unidirectional system).
- All dimensions should be given in decimal format. When dimensions are given in inches, leading zeros are omitted from dimension values less than 1.00
- A dimension line should never coincide with an object line or a center line, nor should it be an extension of these lines. Both, however, may be used as extension lines
- Crossing of extension lines or dimension lines should be avoided if possible. Where such crossings are unavoidable, there should be no break in either of the lines. However, if extension lines cross dimension lines through the arrowheads, the extension line may be broken.

3. Explain the terms,

(a) half section, - A half-section is a view of an object showing one-half of the view in section, A half section view is effective only on symmetrical objects, and its main purpose is to show an object's internal and external construction in the same drawing.

(b) Full section- When a cutting plane line passes entirely through an object, the resulting section is called a full section

4. How are leader lines terminated?

The leader line should be terminated in an arrowhead

5. What do you understand by

, (a) scale = 5:1

that is the line is 5 times more than its original size

and (b) scale = 1:10?

-that is the line is 10 times less than its original size

6. Give the shape identification symbols for the following:

(a) diameter- \varnothing

, (b) radius,- R

(d) spherical radius- SR

(e) Centre line,-



(f) long break-

7. what is an orthographic projection?

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7. what is an orthographic projection?

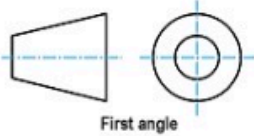
Orthographic projection is a means of representing three-dimensional objects in two dimensions. It is a form of parallel projection, in which all the projection lines are orthogonal to the projection plane, resulting in every plane of the scene appearing in affine transformation on the viewing surface..

When is a projection of an object called an orthographic projection?

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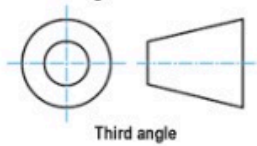
8. Explain the following, indicating the symbol to be used in each case:

- (a) First angle projection,- In this, the object is imagined to be in the first quadrant. Because the observer normally looks from the right side of the quadrant to obtain the front view. First angle projection is a method of creating a 2D drawing of a 3D object. It is mainly used in Europe and Asia and has not been officially used in Australia for many years.



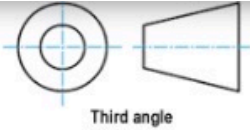
- (b) Third angle projection- In this, the object is imagined to be placed in the third quadrant.

Again, as the observer is normally supposed to look from the right side of the quadrant to obtain the front view, in this method, the projection plane comes in between the observer and the object.



OBJECTIVES

- To project the auxiliary view, an imaginary plane known as
 - Reference Plane
- Reference plane is parallel to the direction of view
 - True
- Dimension of one side of the inclined surface can be.....projected on the reference plane
 - Directly
- In isometric projection the three edges of an object are inclined to each other at
 - 120°
- The angle between the flanks of a metric thread is



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A. True
3. Dimension of one side of the inclined surface can be.....projected on the reference plane
C. Directly
4. In isometric projection the three edges of an object are inclined to each other at
(b) 120°
5. The angle between the flanks of a metric thread is
(a) 60°
6. Which one among the following represents a permanent fastener
b) Rivet
7. The convexity provided on the rim of the solid web cast iron pulley is called
c) Crowning
8. Section lines are generally inclined with the base, at an angle of
b) 45°
9. The isometric view of a sphere is always
a) a circle
9. In isometric projection, the four center method is used to construct
(a) an ellipse
10. Cylinder
11. Cone
12. A footstep bearing is a
b) thrust bearing
13. The angle between the flanks of B.S.W. thread is
c) 55°
15. Top view is projected on the
d) Horizontal Plane