

ELIKWU Emmanuel
ENG 232
18/ENG06/021
Mechanical

- 1 To represent a sectioned surface on a drawing, lines are drawn at angle 45° and are spaced about $1/8''$ apart.
- 2 Principles of dimensioning
 - I All dimensions information necessary to define a part clearly and completely shall be shown directly on a drawing
 - II Each feature shall be dimensioned once only on a drawing.
 - III Dimensions shall be placed on the view or section that shows clearly, the corresponding features
 - IV As far as possible, on a drawing, dimensions should be expressed in one unit only, preferably in millimeters, without showing the unit symbol (mm) unit on the drawing.
 - V No more dimensions than are necessary to define a part shall be shown on the drawing. No feature of a part shall be defined by more than one dimension in any direction.
- 3) Full sections: This is when the cutting plane passes through the object. It should be noted that all visible edges behind the plane must be shown or the view will be incomplete. Hidden detail lines however are not shown on a sectional view unless needed to describe the object completely.

half section: symmetrical objects may be shown to advantage by half sections, that is with one half drawn in section and the other as an outside view.

4 By arrow terminator used to point to an edge of an item
By dot " " " " " a face
By architectural tick can be used for referring to multiple parallel edges.

5 5:1 It means the original measurement is 5 times as small

1:10 It means the original measurement is 10 times bigger

diameter = \varnothing

radius = R

Square = SQ

Spherical radius : ~~SR~~ SR

Objectives

B

B

C

B

A

9 A

10 ~~A~~

11 C

12 A

13 B

14 C

15 D