

AGWHPHYE, LAWRENCE ATINDORH
 181FAIG031008
 CIVIL ENGINEERING
 ASSIGNMENT

- 1) A section of an object is produced by cutting an object by an imaginary plane, removing one or more parts and thus revealing a view of the effects of the dissection. They are represented by a cut on the drawing elevation.
 - a) The same applies to millimeters.
 - b) A dimension line should never coincide with an object line or a center line, nor should it be an extension of these lines.
 - c) Half section: This is a view of an object showing one-half of the view in section. The diagonal lines on the section drawing are used to indicate the area that has been theoretically cut. These lines are called section line or cross-hatching. The lines are thin and are normally drawn at a 45° angle to the major outline of the object.
 - A) Leader lines are terminated
 - a) with a dot, if they end within the outlines of an object.
 - b) with an arrow head, if they end on the outline of an object.
 - c) without dot or arrow head, if they end on a dimension line.
- 2) All dimension, extension and lead or lines should be thin, sharp, dark lines.
 - a) Dimensions shown with dimension lines and arrowheads should be placed to be read from the bottom of the drawing.
- 3) Extension lines indicate the points between which the dimension figures apply.
- 4) Each dimension should be terminated by arrowhead pointing in opposite directions.
- 5) All dimensions should be given in decimal format.
- 6) When all dimensions on a drawing are given in inches, the inch marks are omitted, the

should be five times more than the original size. The measurement of the line is multiplied by five.

Scale 1:10

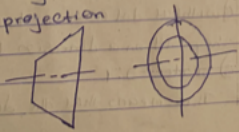
A drawing at a scale of 1:10 means that the object is 10 times smaller than in real life. Scale 1:1

7) An orthographic projection is a means of representing three dimensional drawings. The elements are the front view, side view and plain view.

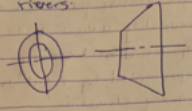
8) It is called an orthographic projection when the figure is drawn in first or third angle elevation.

9) First angle projection: This is a way of showing a 3D object on a 2D piece of paper and it shows what a part looks like from each direction.

Symbol for first angle projection



b) Third angle projection is the opposite of first angle projection. This is a method of orthographic projection which is a technique in portraying a 3D design using a series of 2D views.



Objectives

- | | | |
|-----------------|----|----------------------|
| direction | 1 | A = Reference plane |
| isometric angle | 2 | B = false |
| method | 3 | C = Directly |
| projection | 4 | B = 120° |
| angle in | 5 | A = 60° |
| isometric sign | 6 | B = Rivet |
| isometric 2D | 7 | C = Crowning |
| | 8 | B = 45° |
| | 9 | A = a circle |
| | 10 | A = an ellipse |
| | 11 | C = cylinder |
| | 12 | A = cone |
| | 13 | A = journal bearing |
| | 14 | C = 55° |
| | 15 | D = Horizontal plane |