

SUBJECT: TECHNICAL DRAWING

CLASS: SS 2

TOPIC: ORTHOGRAPHIC PROJECTION

ORTHOGRAPHIC PROJECTION.

This refers to when lines or projections are drawn parallel to each other, but are perpendicular to the plane of projection. It is also said to be a system of disintegrating an isometric or membership of a component which shows separately the three dimensions.

This system is applied during the importation and exportation of machines and material that cannot be conveyed to its destination on assembly. Such machines are dismantled and packaged in containers with manuals on how to couple them back in the assembly factory.

Types of orthographic projection.

There are two types of orthographic projection;

1. First angle orthographic projection and,
2. Third angle orthographic projection.

First angle orthographic projection

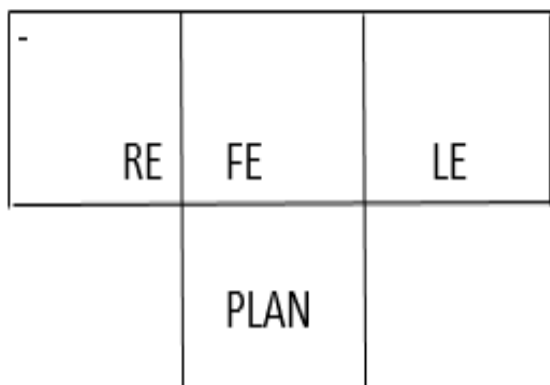
Here, the front elevation is drawn at the top with the plan under it. The right end view is drawn at the left hand side adjacent the front elevation, the left end view is drawn at the right hand side adjacent the front elevation.

Third angle orthographic projection

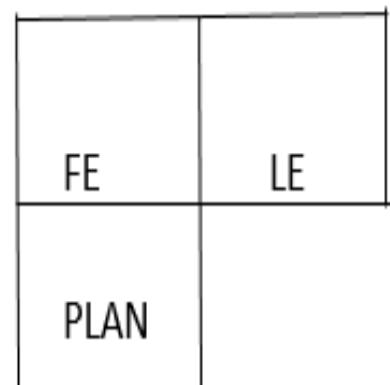
Under this, the front elevation is drawn below the plan, the right end view is drawn at the right hand side and the left end view is drawn at the left hand side.

Line diagrams of first and third angles orthographic and symbols.

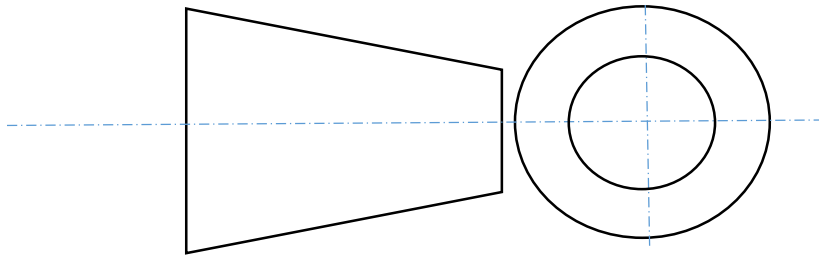
First angle.



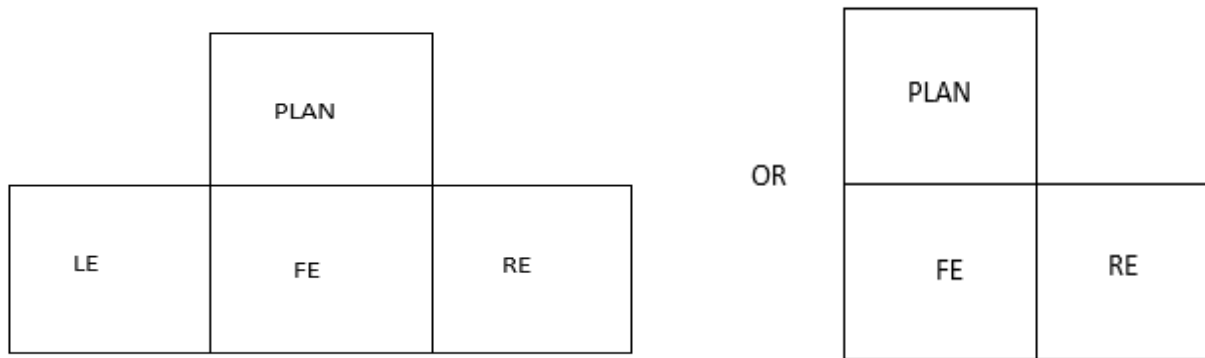
OR



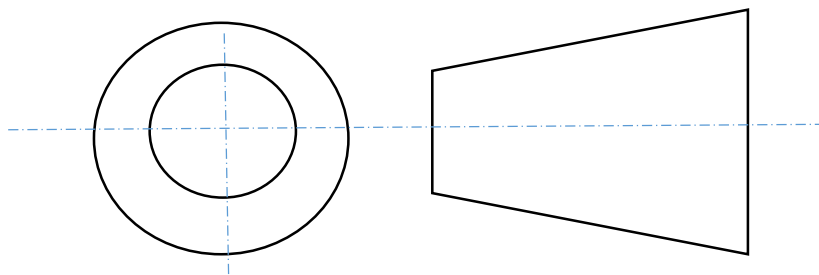
Symbol of first angle



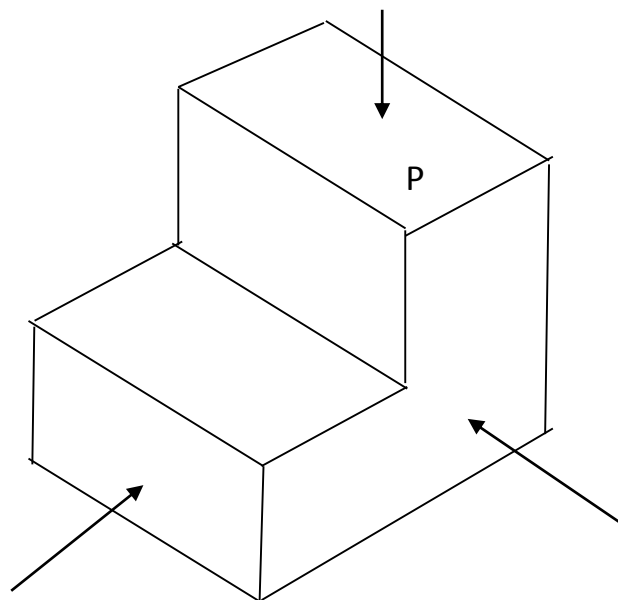
Line diagram of third angle



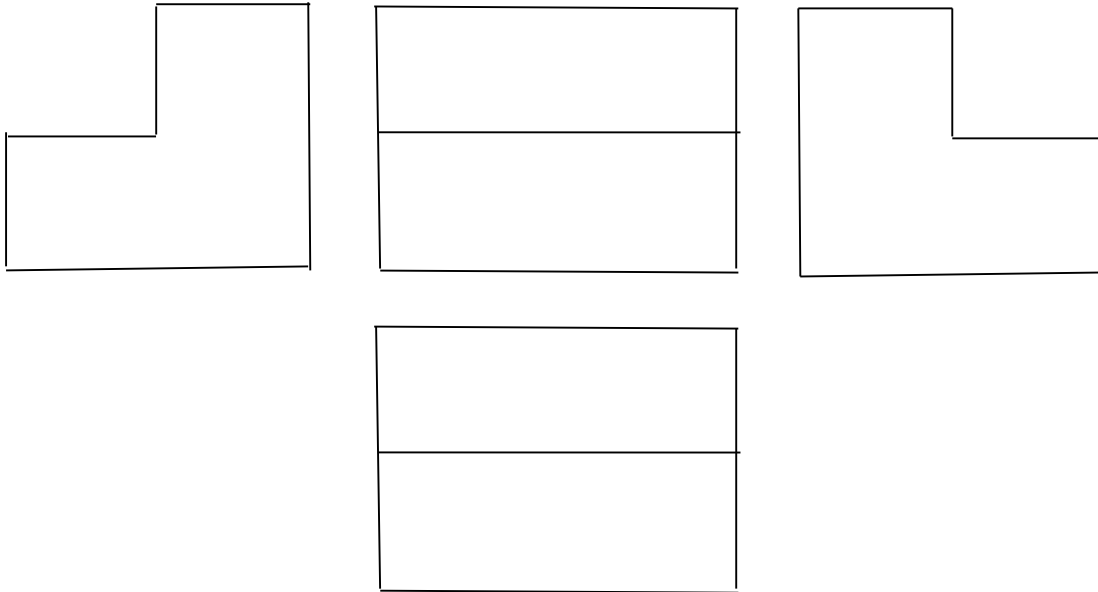
Symbol of third angle



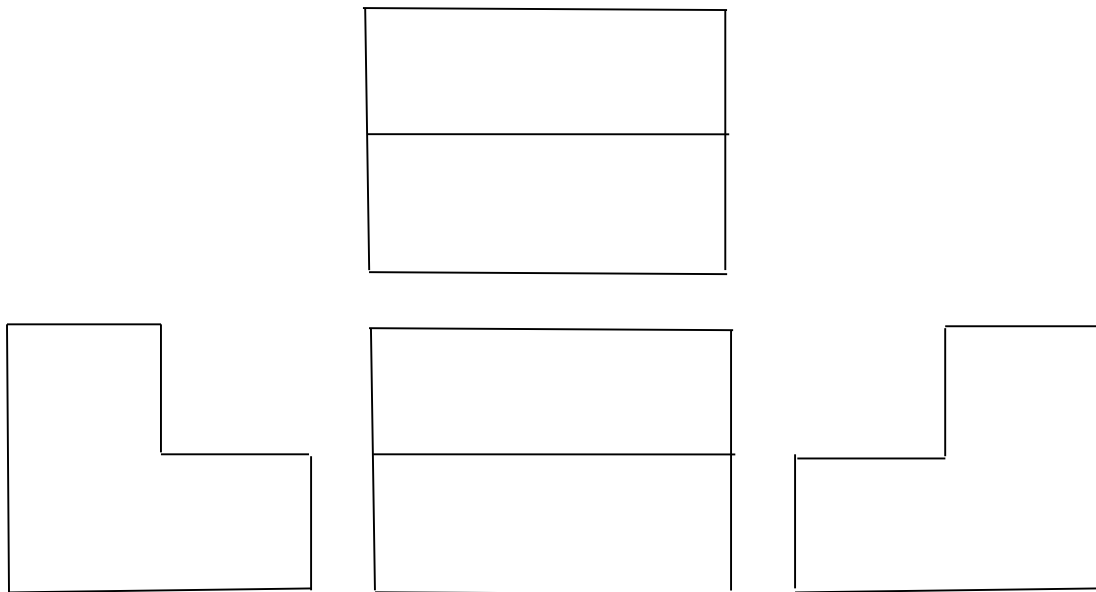
To dismantle a given isometric block into orthographic components or views.



In first angle



In third angle



ASSIGNMENT:

1. What is perspective projection?
2. List any two types perspective projection.