

ENGINEERING GRAPHICS

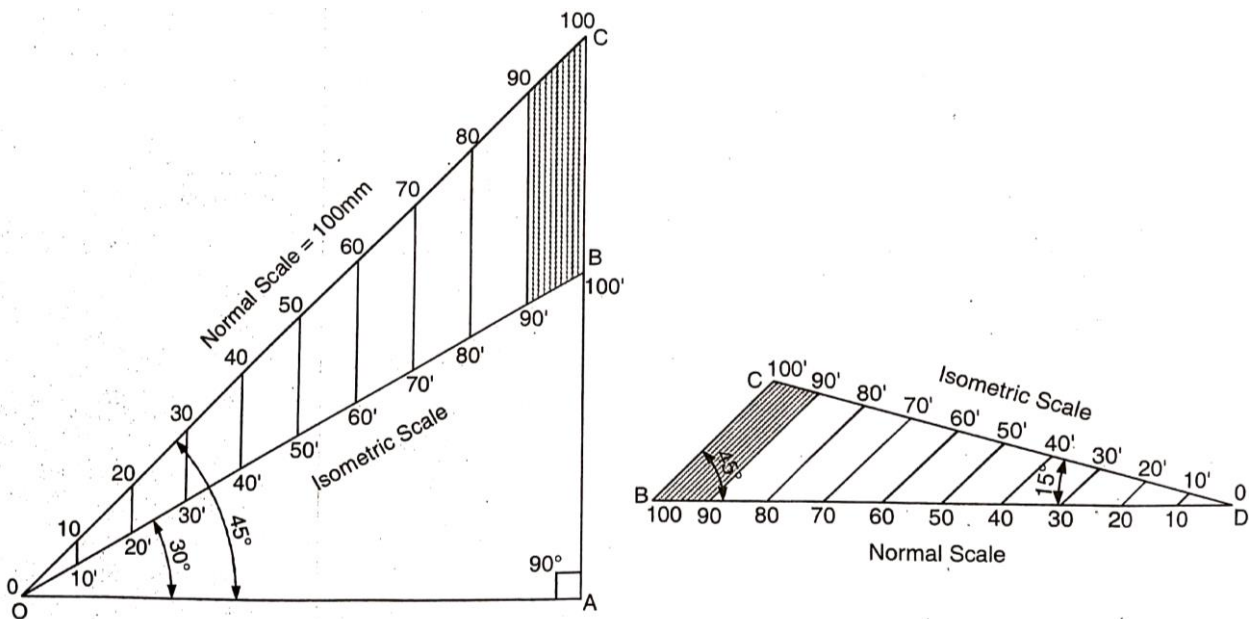
UNIT-4

ISOMETRIC VIEW/PROJECTIONS

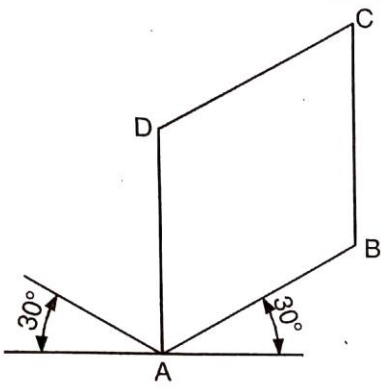
INTRODUCTION

In Engineering drawing orthographic view shows only two dimensions of the object. From two dimensions it is difficult to understand the object. Few technically sound people can understand these drawings. Whereas, three dimensional view (Pictorial projections) can be easily understood by persons without any technical knowledge. The processes to convert two dimensional views in to the pictorial projection is known as Isometric drawing. Isometric drawing is a type of pictorial projection in which the three dimensions of the solids are not only shown in one view, but their actual shape and size can be measured directly from it.

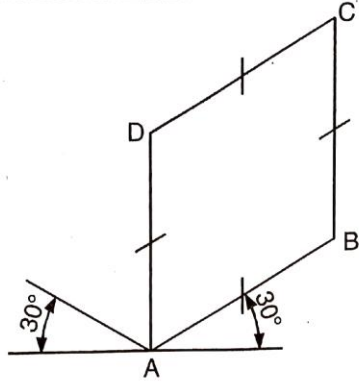
Isometric Scale:



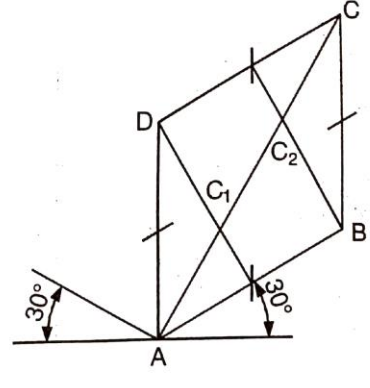
Isometric Circle:



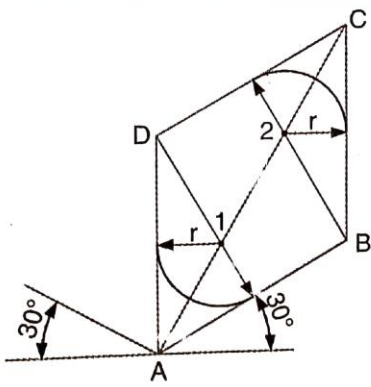
(a)



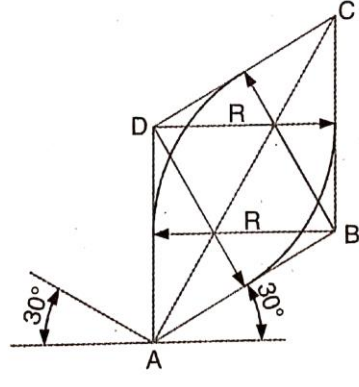
(b)



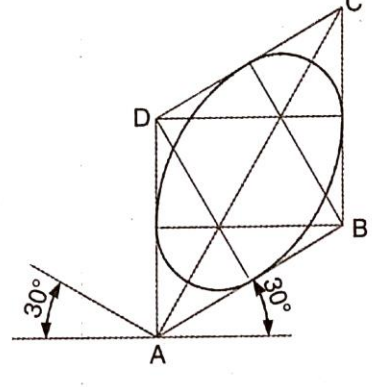
(c)



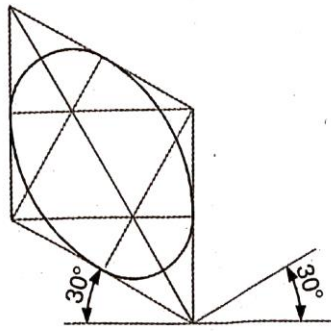
(d)



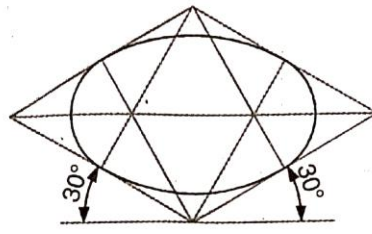
(e)



(f)

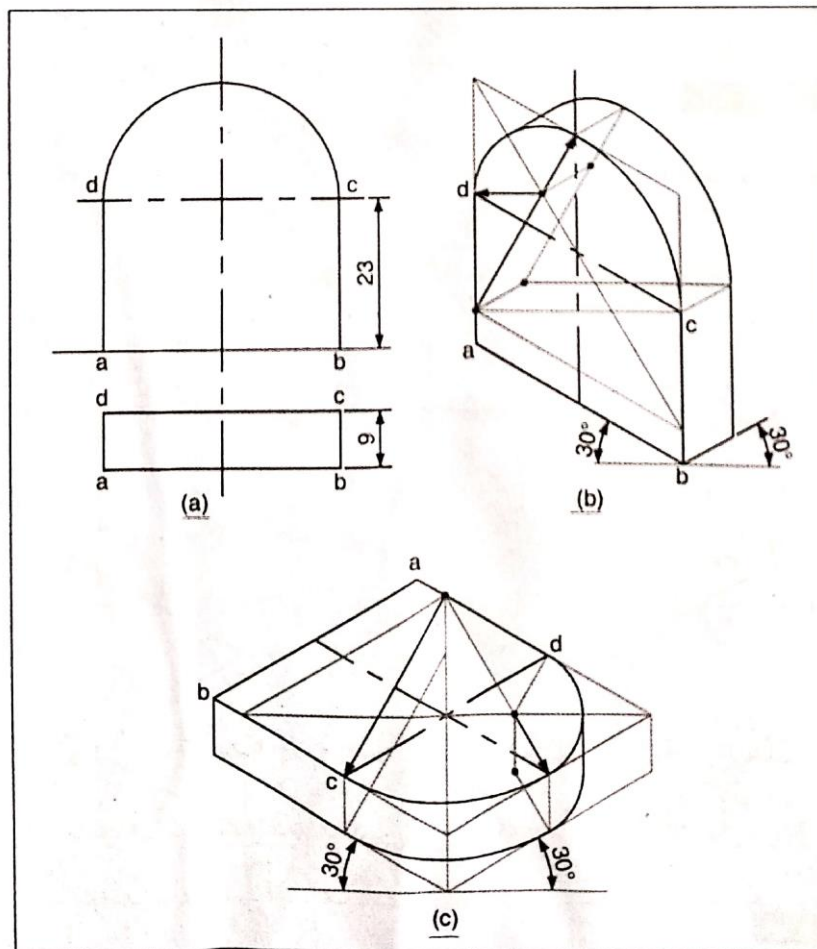
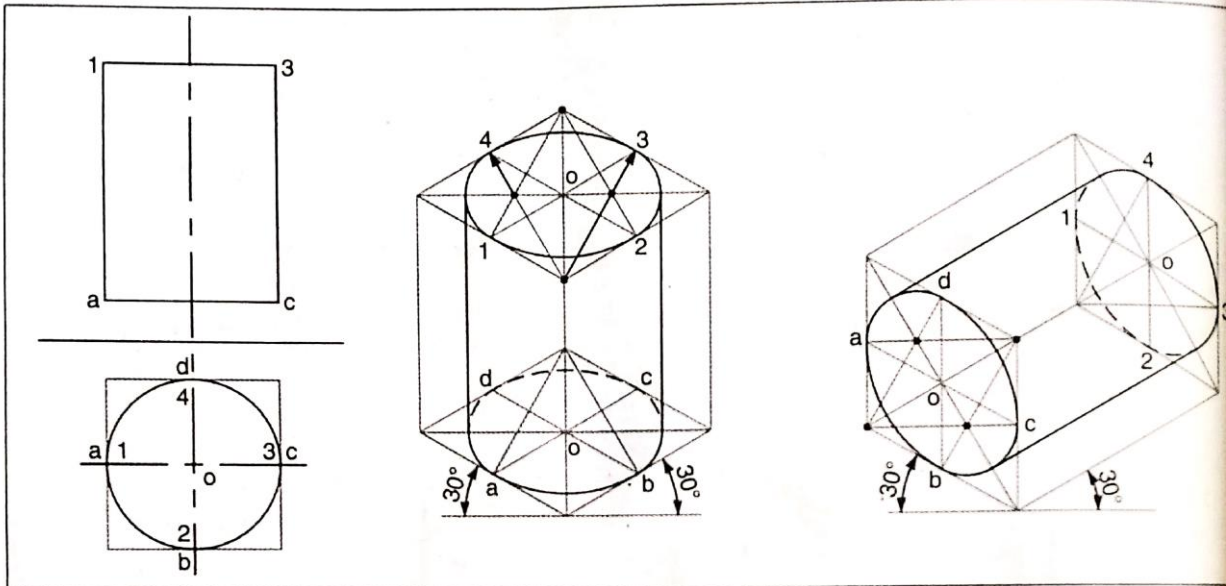


(g)

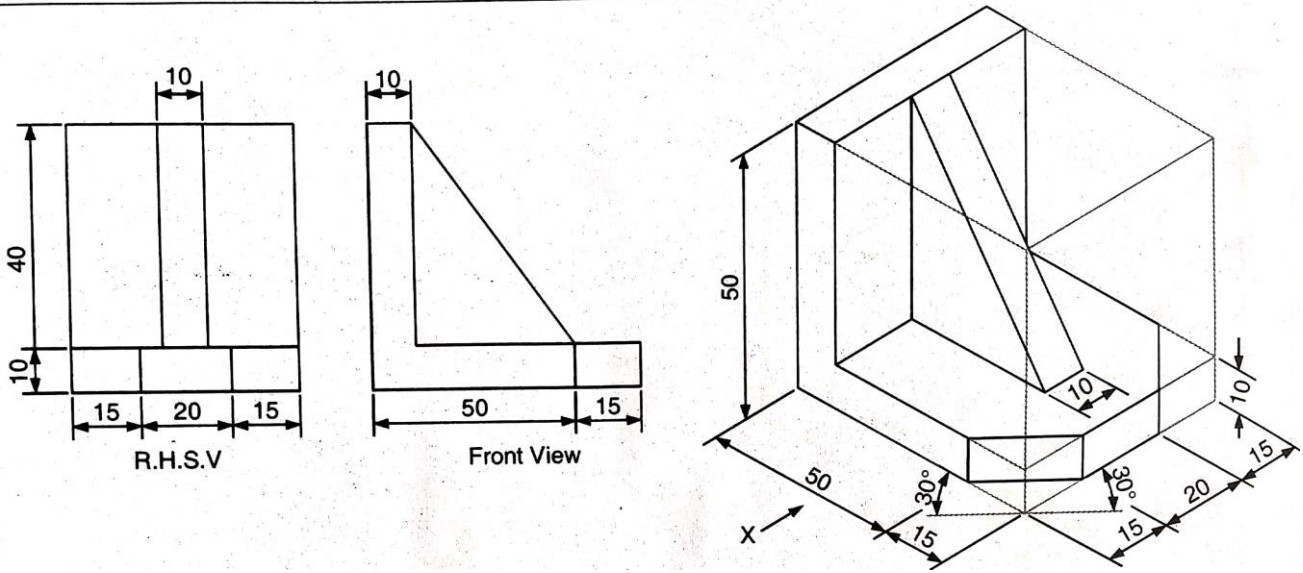


(h)

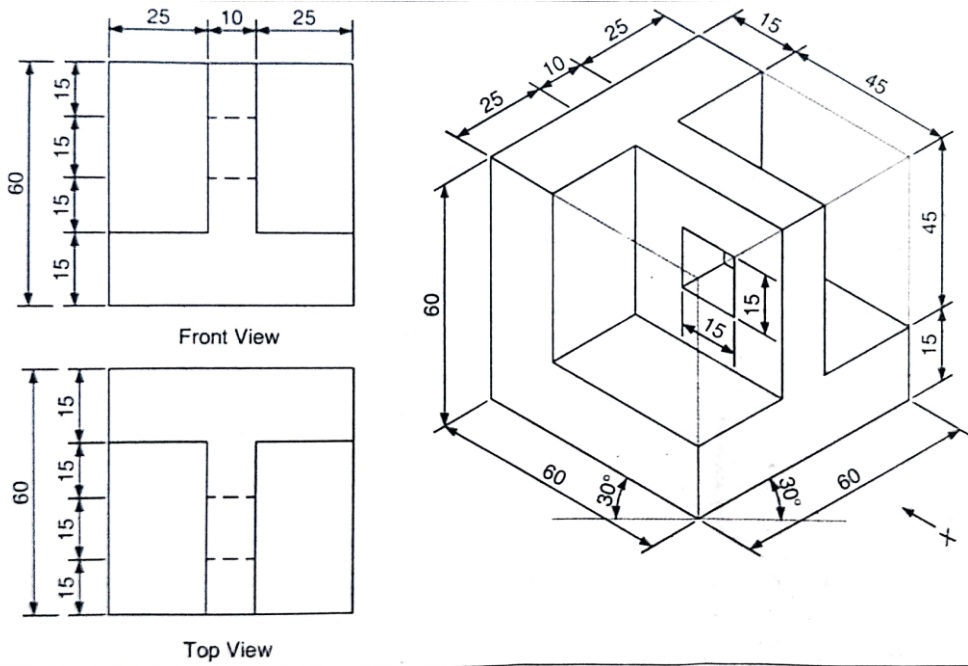
Isometric Solid



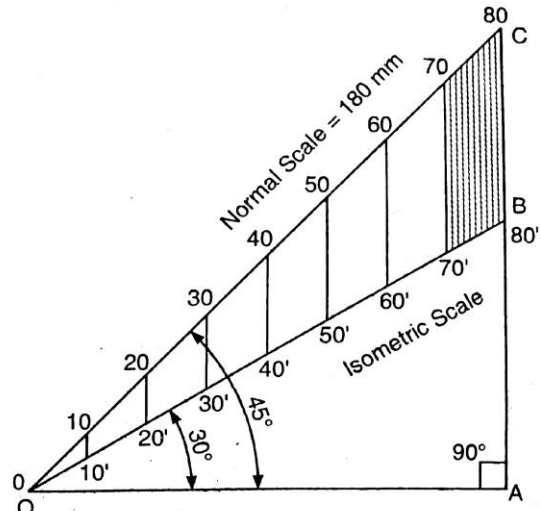
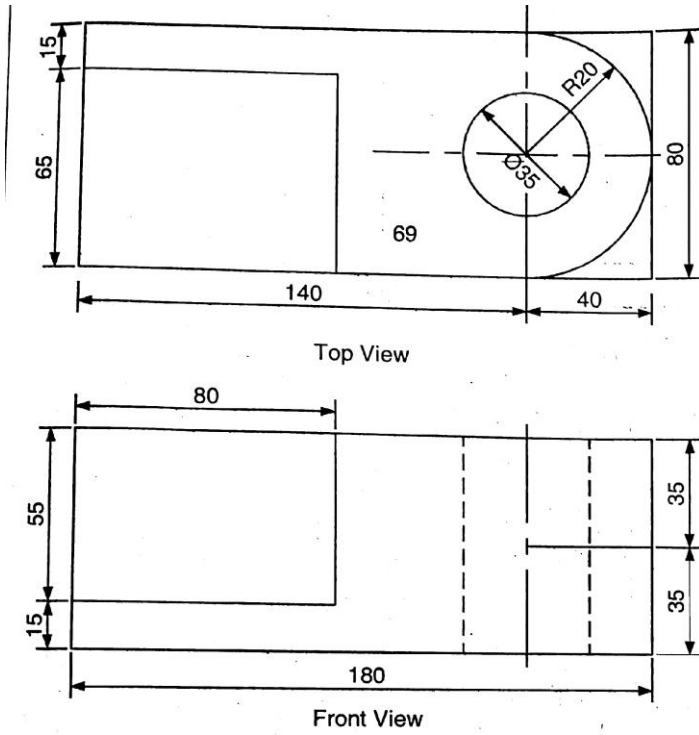
Ex.1 Draw Isometric view for given RHSV and Front view



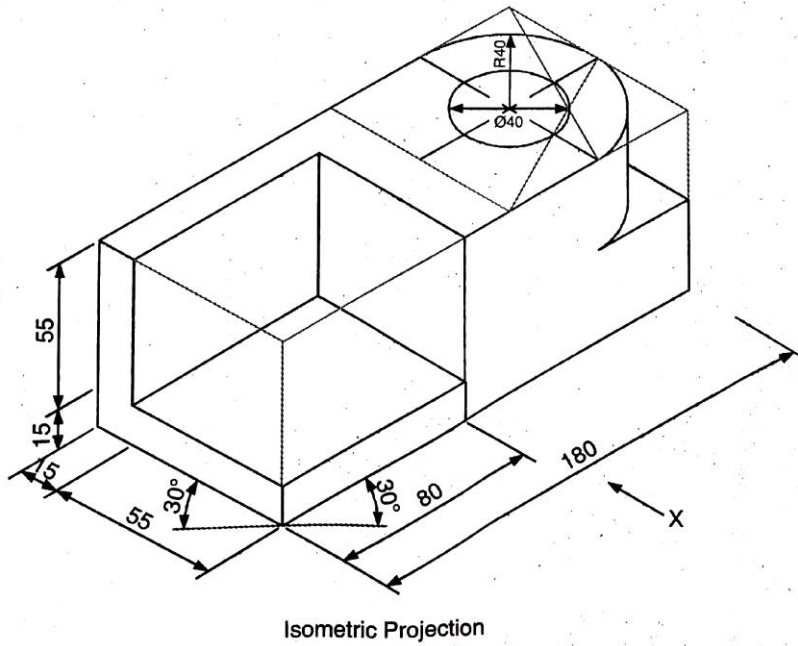
Ex.2 Draw Isometric Drawing for given FV and TV



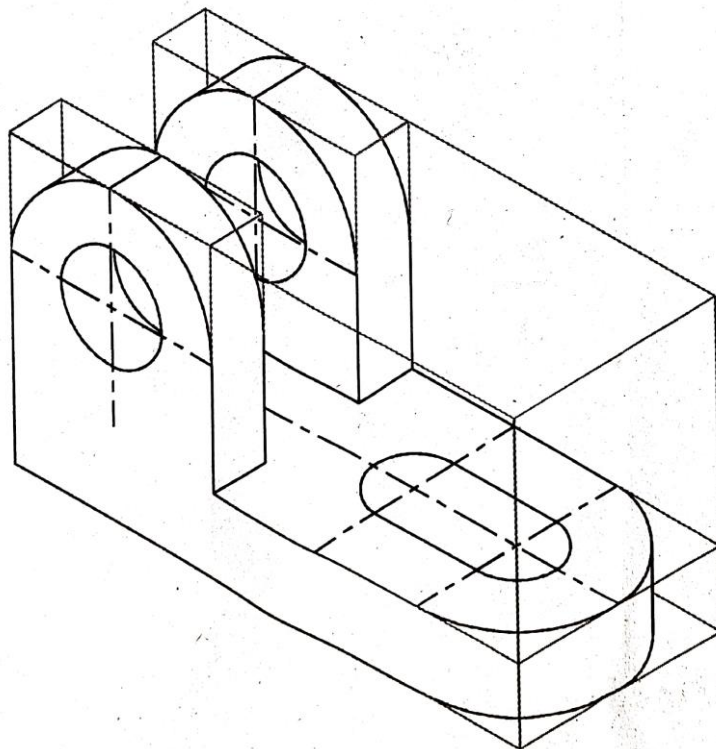
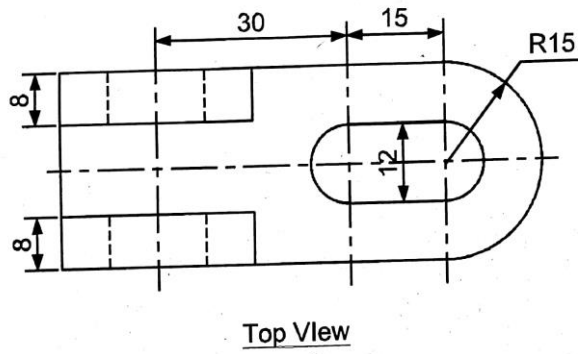
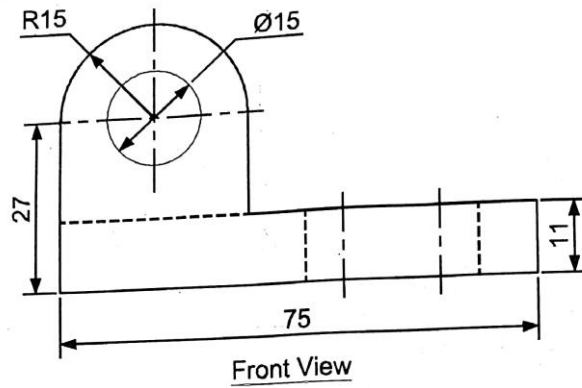
Ex.3 Draw Isometric Projection for given views



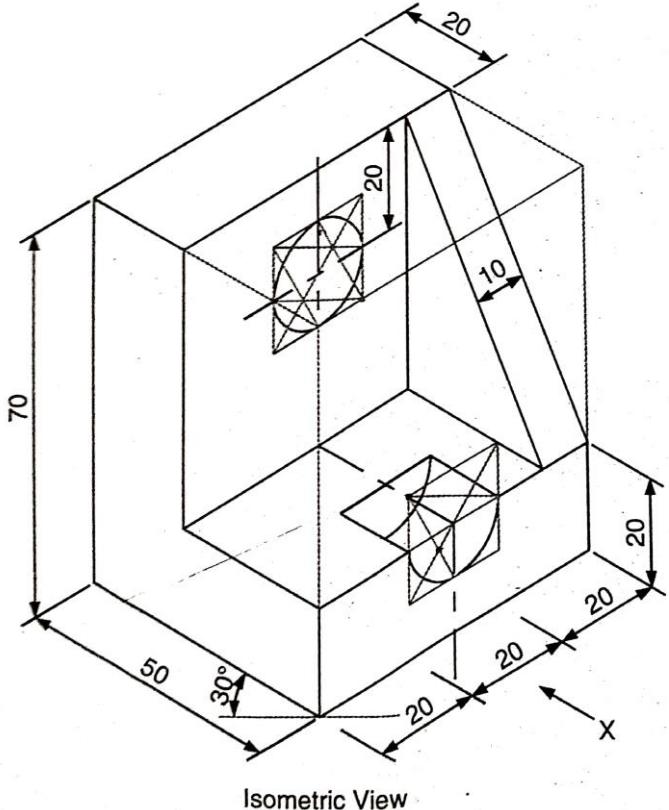
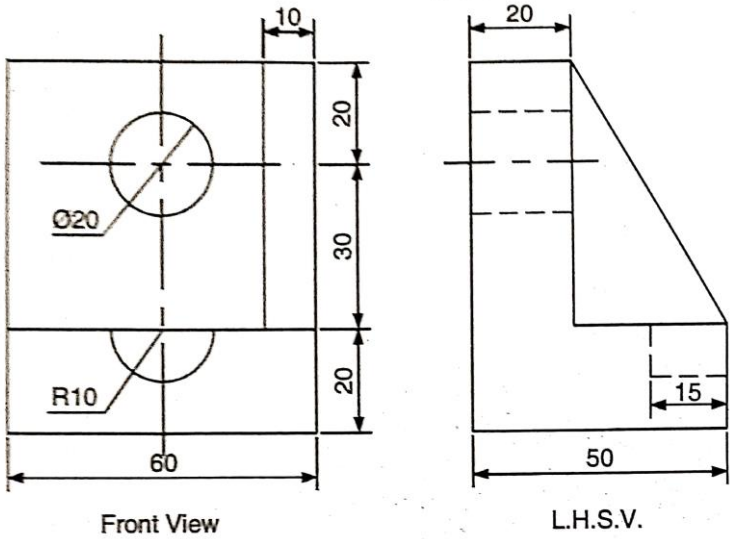
$$\begin{aligned} \text{Isometric Scale} &= 0.816 \times \text{Normal Scale} \\ &= 0.816 \times 180 \\ &= 146.70 \text{ mm} \end{aligned}$$



Ex-4 Draw Isometric View for Shown Front view and Top view



Ex 5. Draw Isometric Drawing for given Front View and LHSV



Ex.2 Draw Isometric Drawing for given FV and TV

