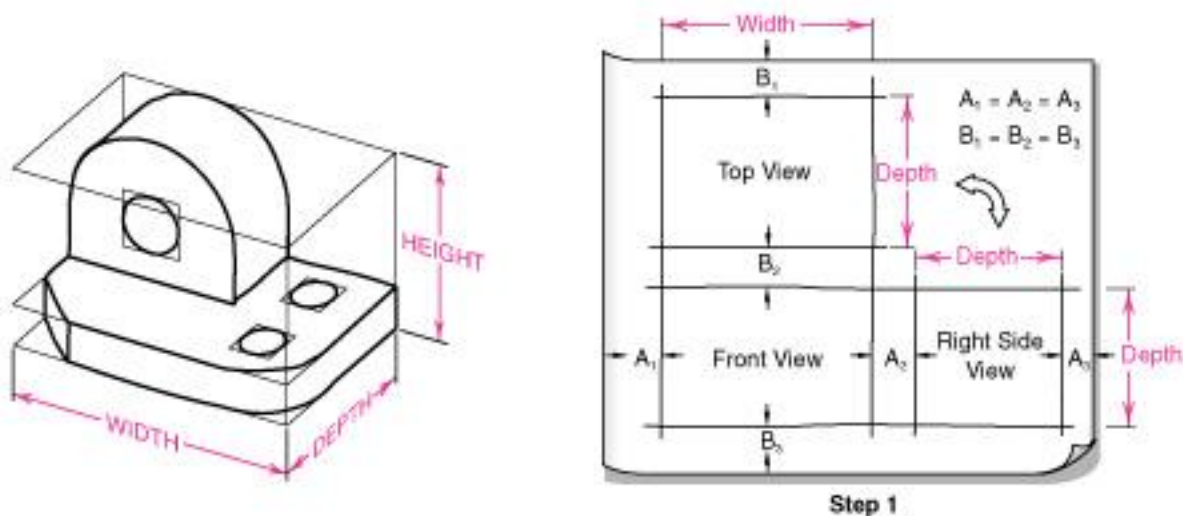


Engineering Drawing

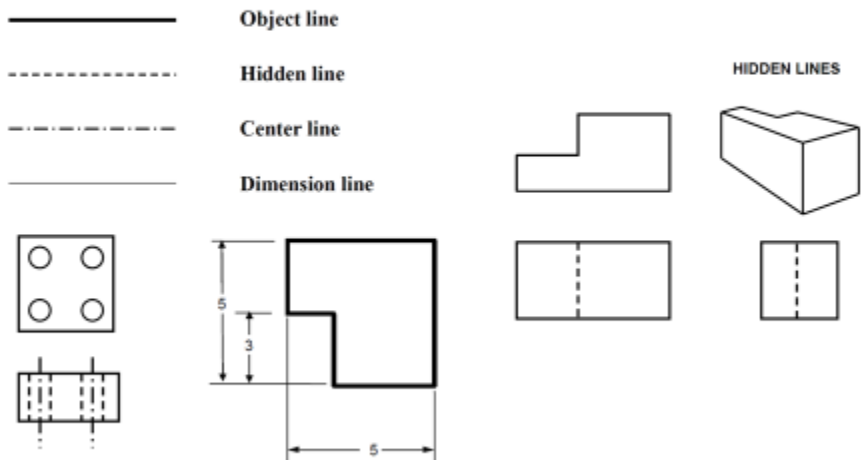
This semester at Penn State, I learned the importance of the multi-view, isometric view, and the types of lines needed to create them. Dimensioning is also an important aspect of these projects and it is important to dimension only the vital sections so that a part can more easily be manufactured.

Multi View

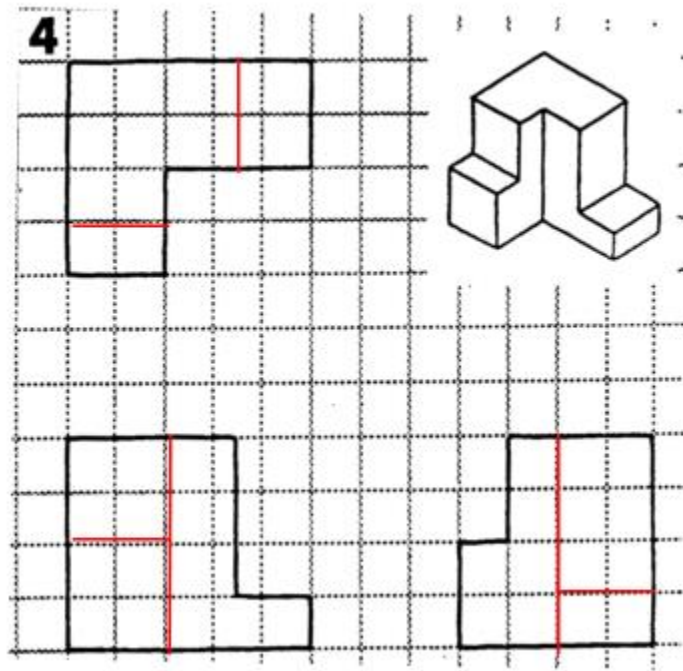


Line Types

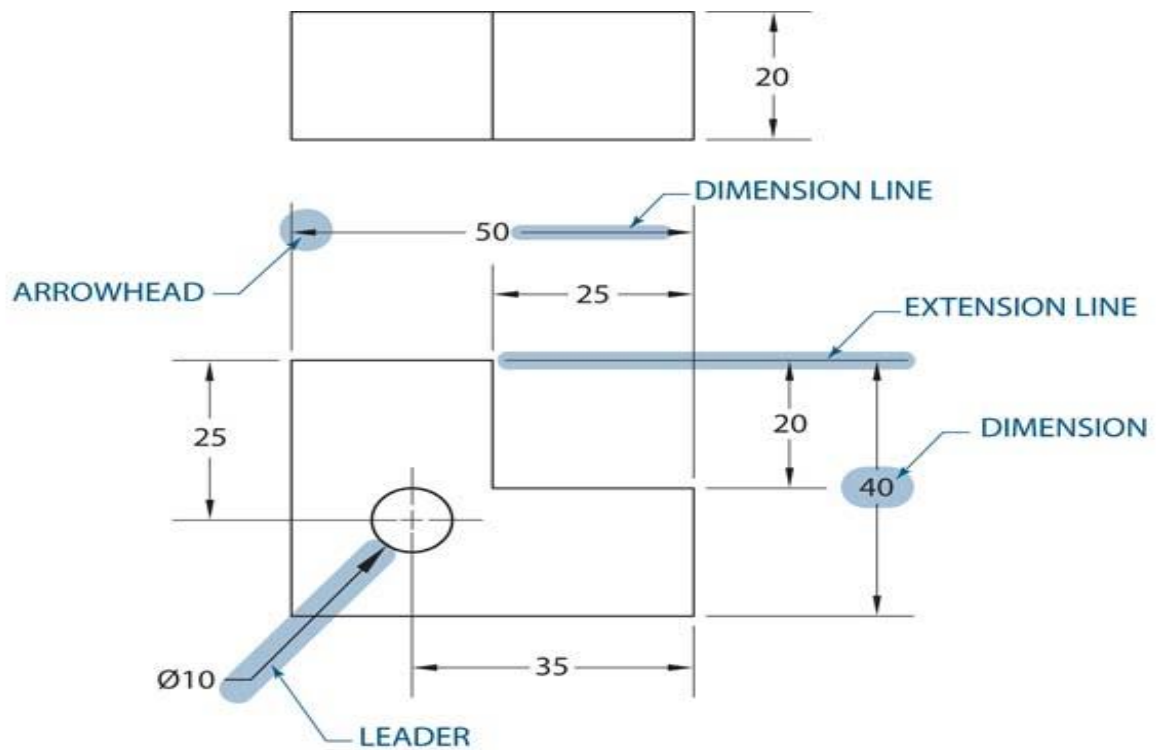
Basic Lines



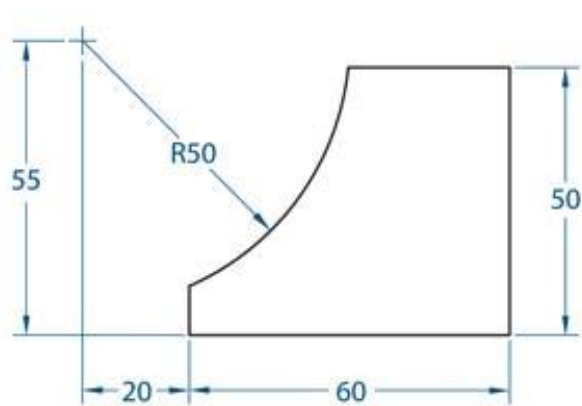
Example of Multi-View Drawing



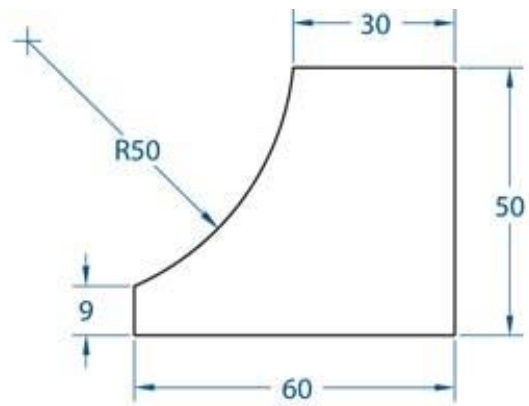
Dimensioning Terminology



Important to Clearly Dimension Parts that are Measurable

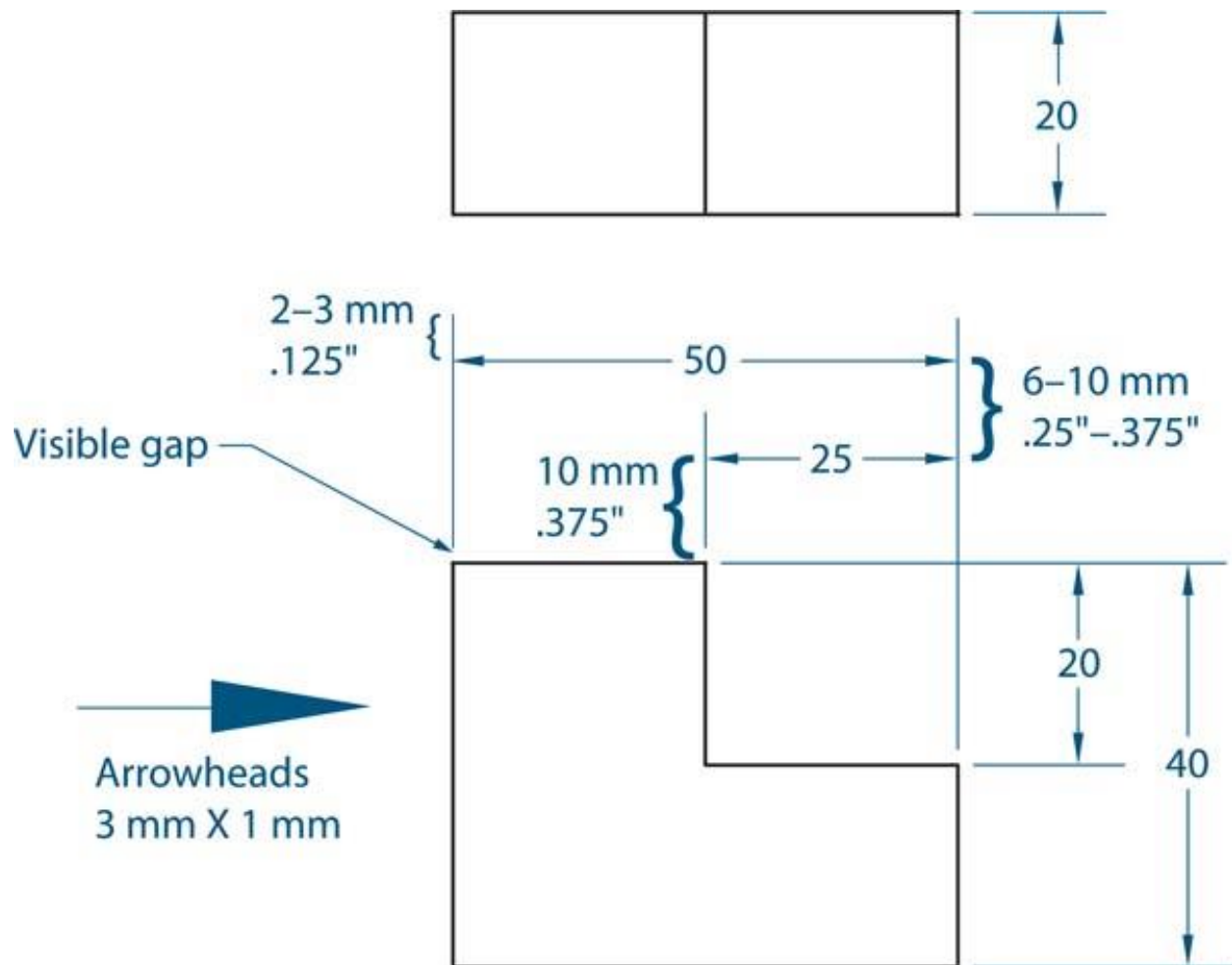


(a) **POOR!**



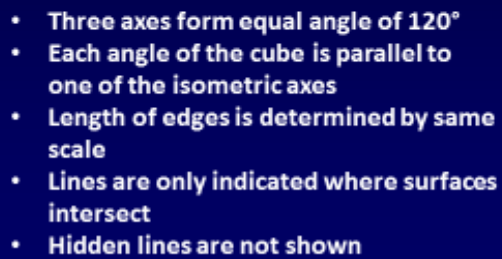
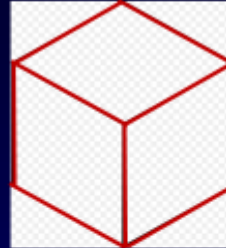
(b) **Better**

Space Dimensions to Ensure Model is Clear



Isometric Views

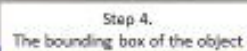
Isometric Projection



- Three axes form equal angle of 120°
- Each angle of the cube is parallel to one of the isometric axes
- Length of edges is determined by same scale
- Lines are only indicated where surfaces intersect
- Hidden lines are not shown

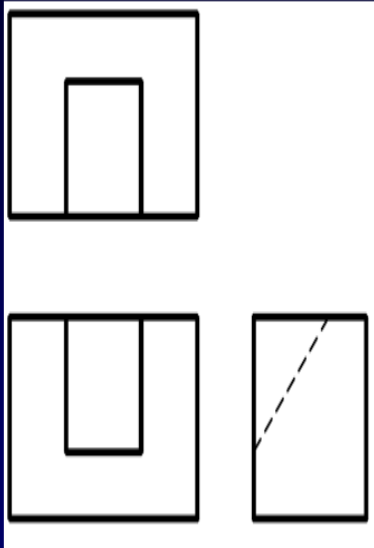
Drawing Isometric Views

Drawing Isometric Projection



Isometric Drawing Example

Exercise 4



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