

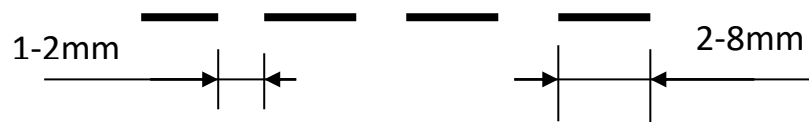
Types of lines

In Engineering Drawing, we make use of different lines and line styles to convey the desired message. These lines differ in (i) thickness and (ii) style. Typical uses of these lines are summarized below.

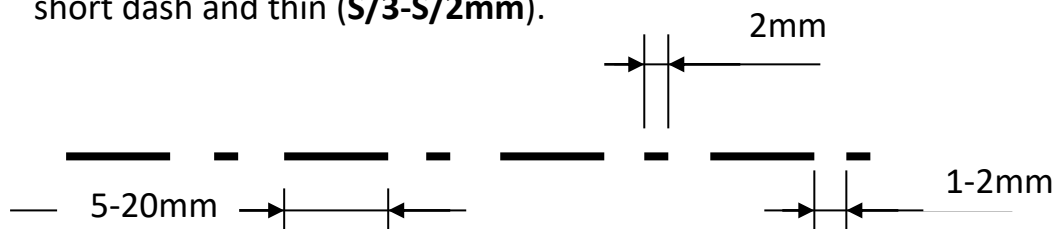
1. **Visible lines:-** Visible lines represent visible edges and boundaries, continuous and thick about **(0.5-0.6mm)** symbol with S.



2. **Hidden lines:-** Hidden lines represent hidden edges and boundaries, dash and medium thick (**S/2-2S/3mm**).

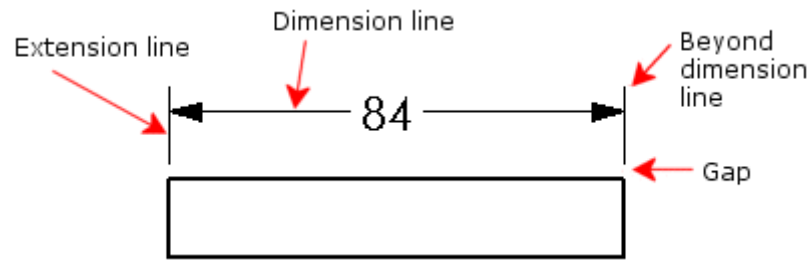


3. **Center lines:-** Center lines represent axes of symmetry, long dash-short dash and thin (**S/3-S/2mm**).



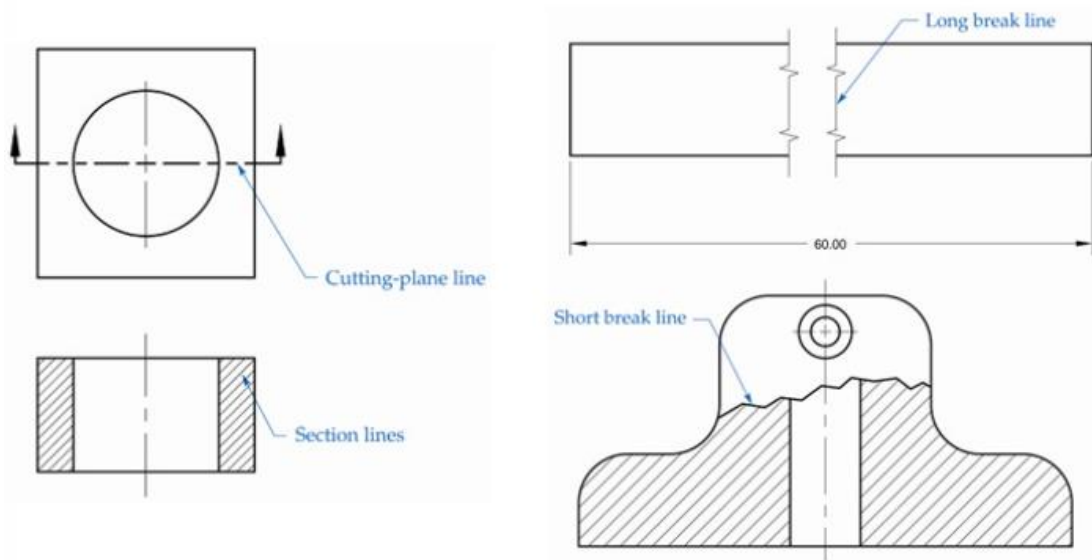
4. **Dimension lines:-** Dimension lines are used to show the size of an object. A dimension line is placed between two extension lines and is terminated by arrowheads, which indicates the direction and extent of the dimension.

5. **Extension lines:-** Extension lines project from the desired points of a part to further indicate which portion of the part is being dimensioned.



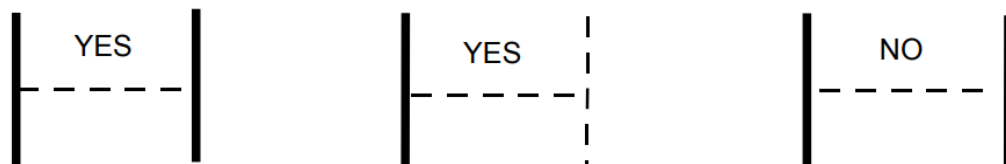
6. Section lines:- section lines are used to show areas that have been cut by the cutting plane. Also, it are grouped in parallel line patterns and usually drawn at a 45° angle.

7. Break lines:- break lines are used to show imaginary breaks in objects, a break line is usually made up of a series of connecting arcs.

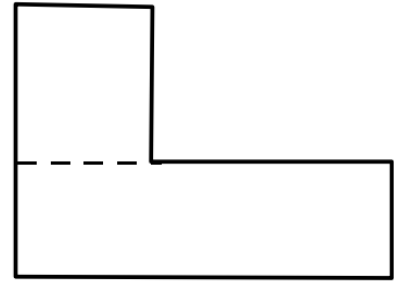
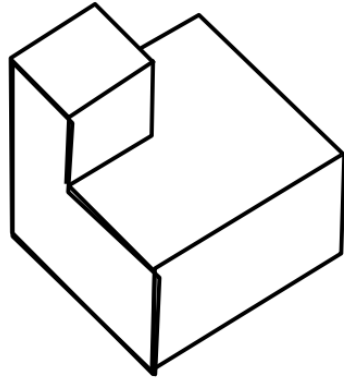


Hidden lines

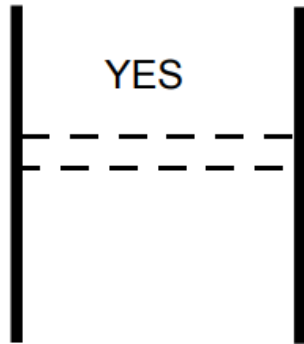
1- Each end of a hidden line should touch the object line.



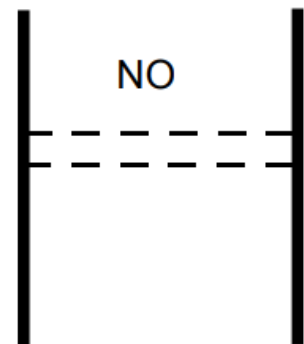
2- A hidden line should not touch an object if it is an extension of the surface the object line represents.



3- The strokes of parallel hidden lines that are relatively close together should be staggered'

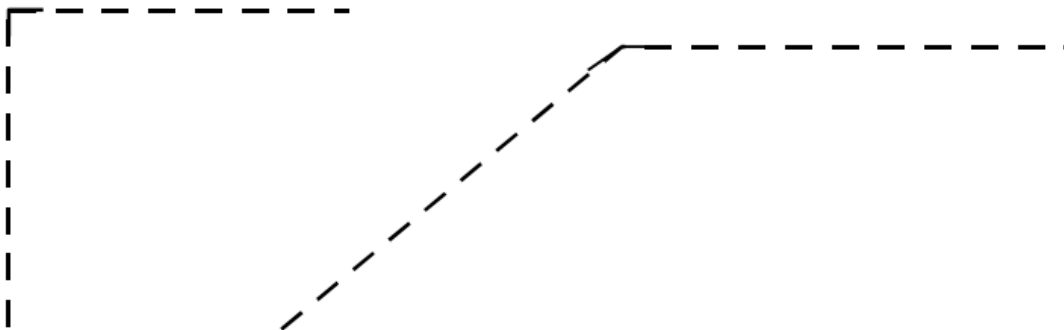


YES

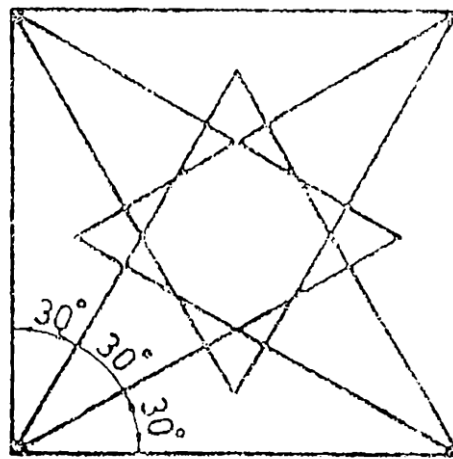
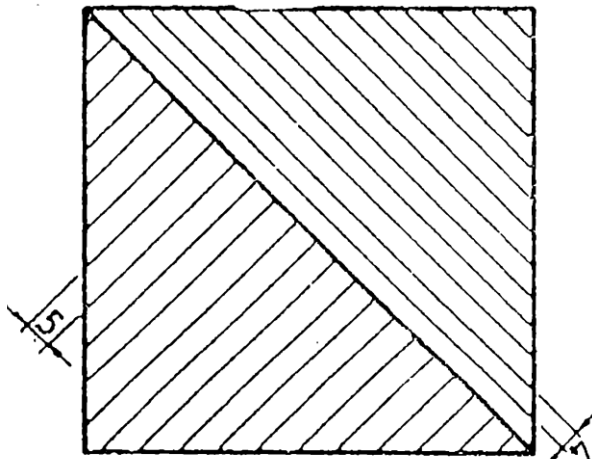
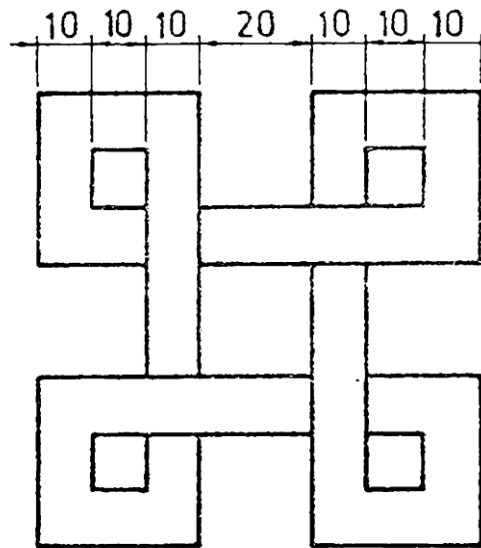
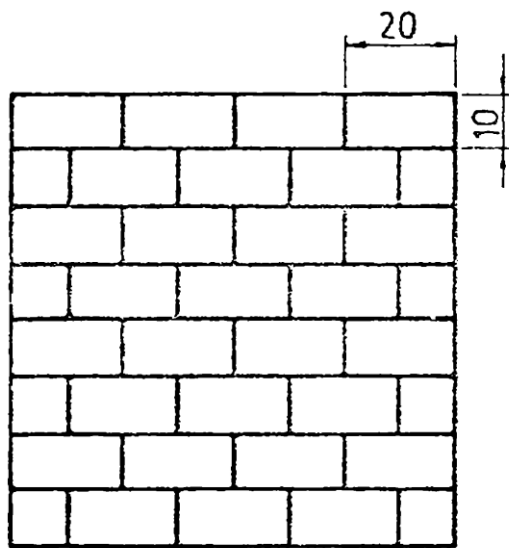


NO

4- Corners of hidden lines should be solid.



Homework 1



Remember you drawn the right column in the classroom.