



ME-160

Mechanical Engineering Drawing

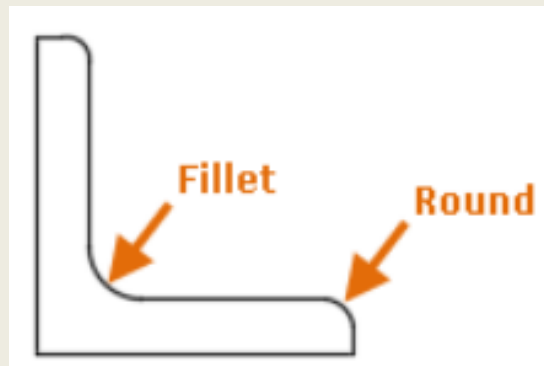
Rounds and Fillets

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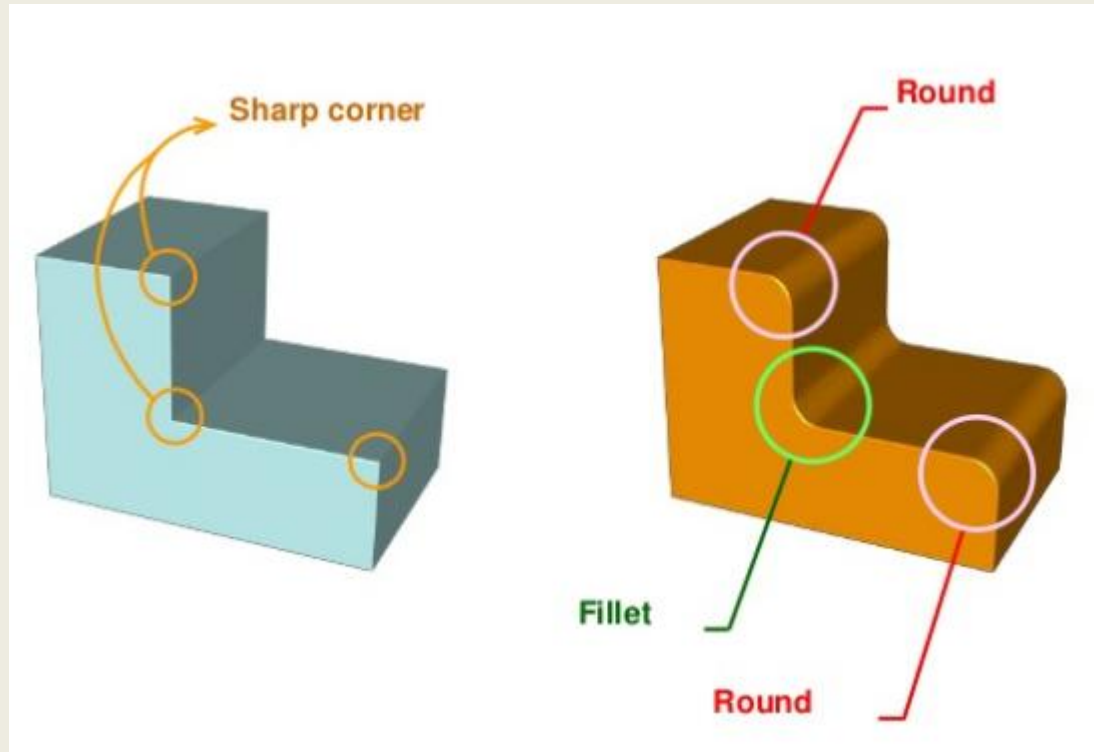
Course Teachers:
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Musanna Galib
Md. Rakib Hossain

What are Rounds and Fillets?

- A fillet or round connects two objects with a tangent arc in 2D
- An inside corner is called a *fillet* and an outside corner is called a *round*

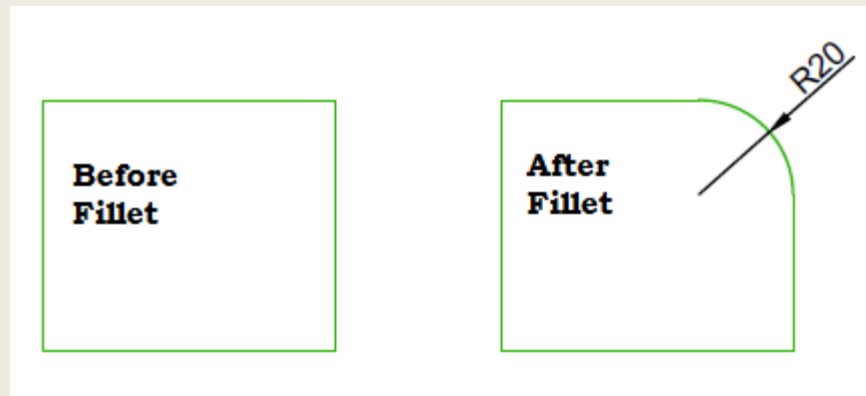


Rounds and Fillets in 3D



Purposes of use :

- The sharp internal corners are made rounded to avoid the possibility of stress crack
- The sharp external corners are made rounded for safety and appearance .



Lines

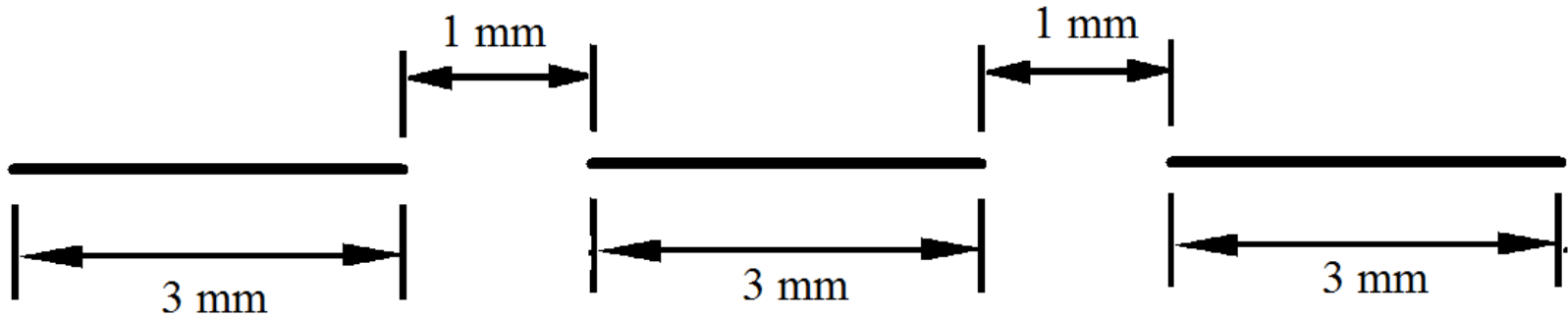
- Object Line : 100% thick
- Hidden Line: 50% thick
- Dimension, Extension Line: 25% thick
- Center Line : 50% thick
- Cutting Plane Line : 125% thick
- Hatchet line :25% thick

Object Line

Thickness: 100 %

Hidden Line

Thickness: 50 %



Center Line

Thickness: 50 %

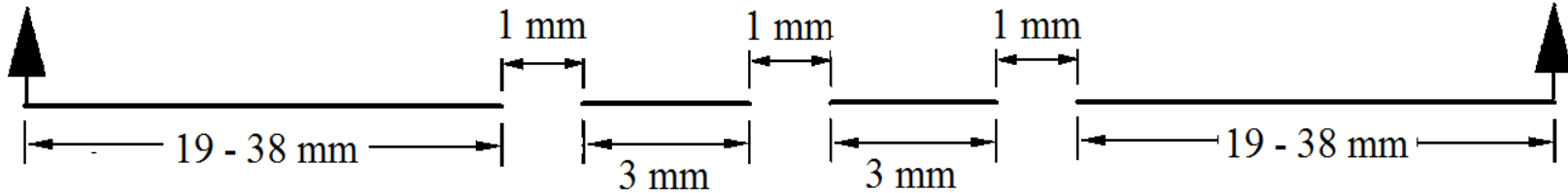
Dimension and
Extension Lines

Light
3.000

Thickness: 25 %

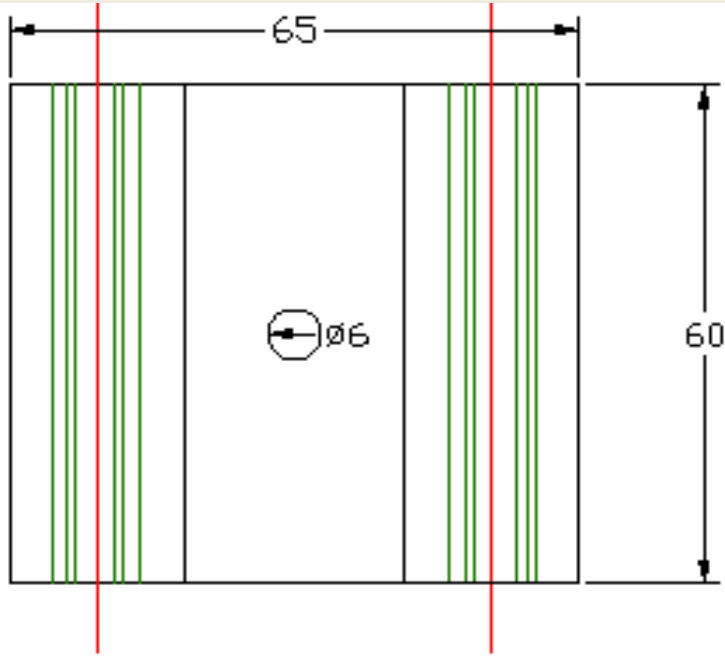
Thickness: 125 %

Section Line

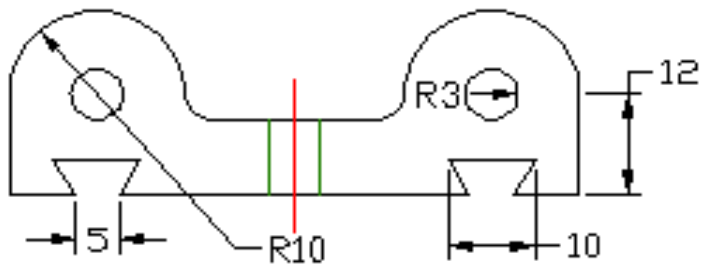
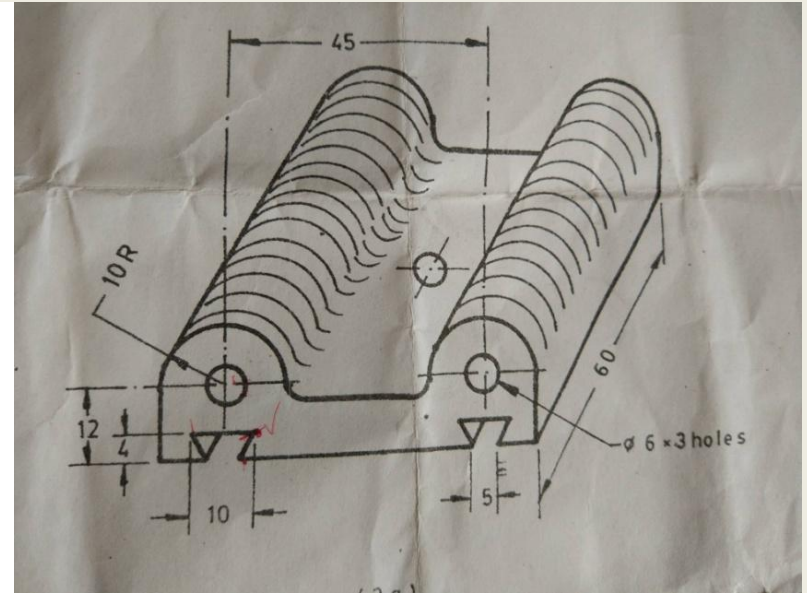


N.B.: All Percentages are with respect to the object line

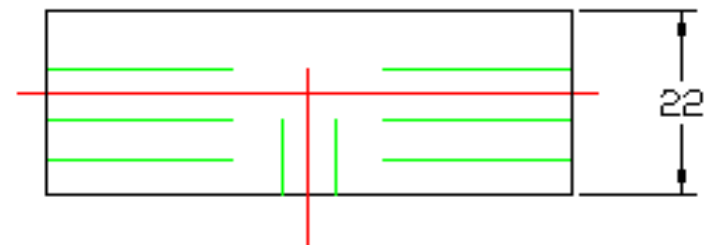
First Problem



TOP VIEW

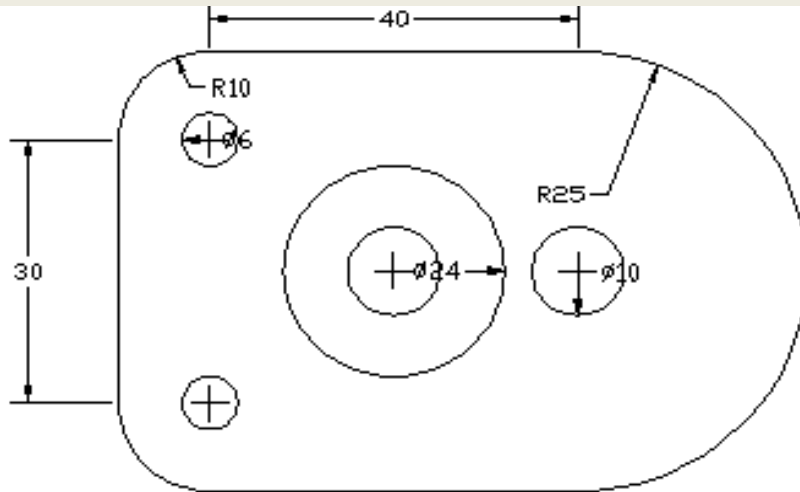


FRONT VIEW

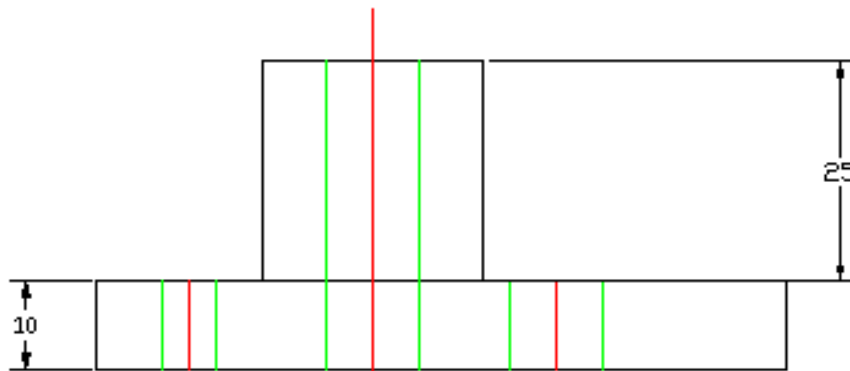


R.H.S VIEW

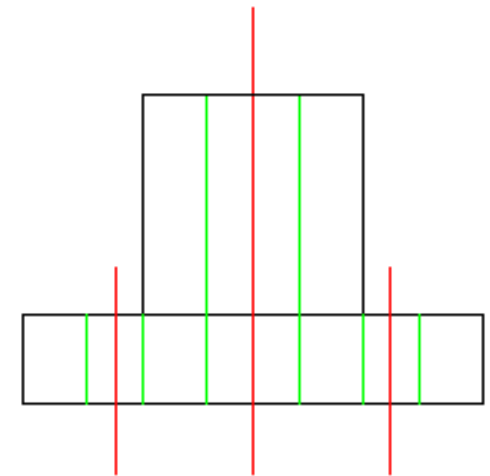
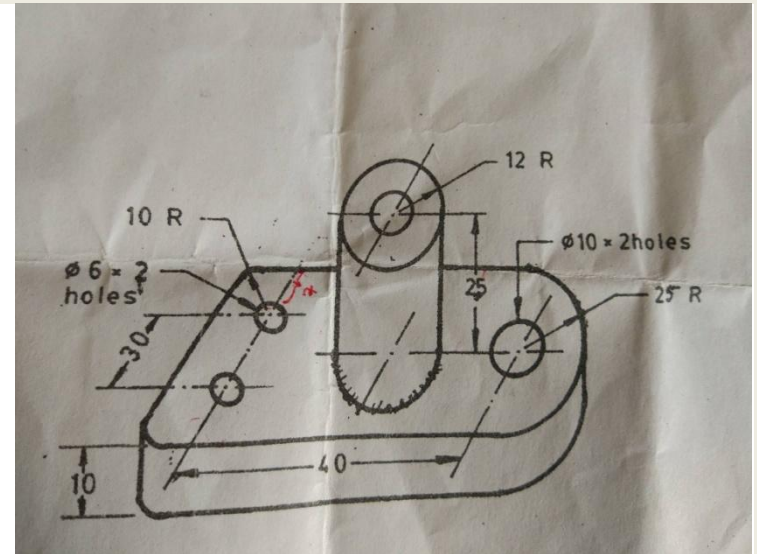
Second Problem



TOP VIEW



FRONT VIEW



R.H.S VIEW

Persist Until Succeed !!!