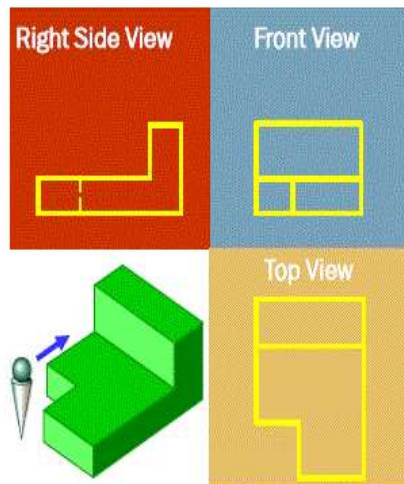




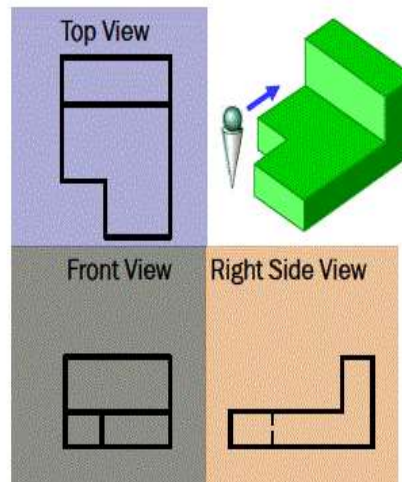
Free hand sketching of orthographic projection: -  
Courtesy: NPTEL material

## Views arrangement

1<sup>st</sup> angle system



3<sup>rd</sup> angle system

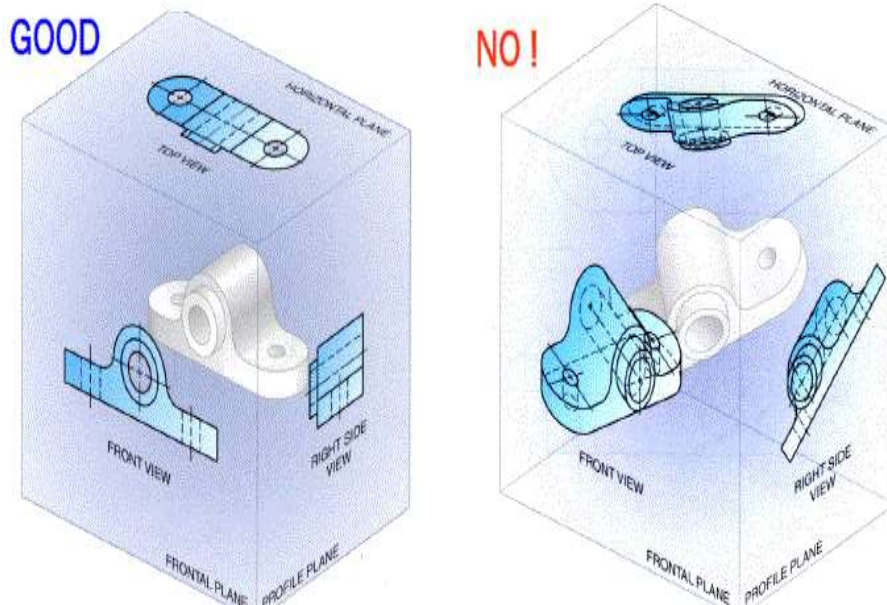


Note: First angle projection only we use



## Suggestions: Orient the object

1. The object should be placed in its **natural position**.
  2. The orthographic views should represent the **true size** and **true shape** of an object (as much as possible).
- 

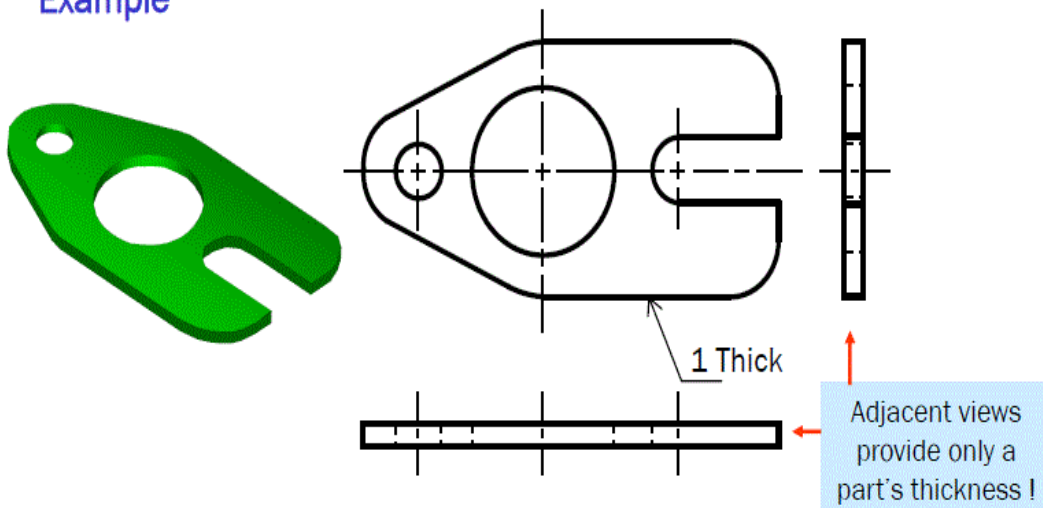




## Object that requires only **one**-view

- **Flat (thin) part** having a uniform thickness such as a gasket, sheet metal etc.
- **Cylindrical-shaped** part.

### Example

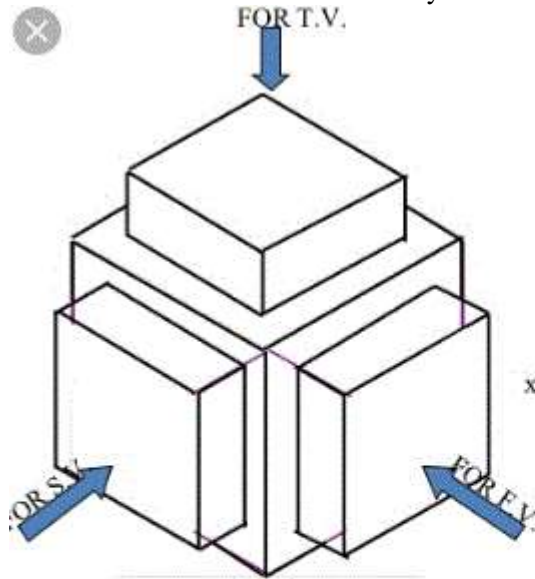




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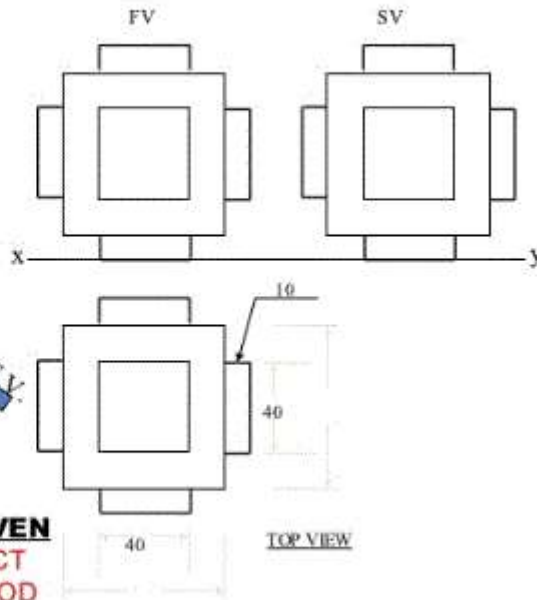


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ORTHOGRAPHIC PROJECTIONS

ALL VIEWS IDENTICAL



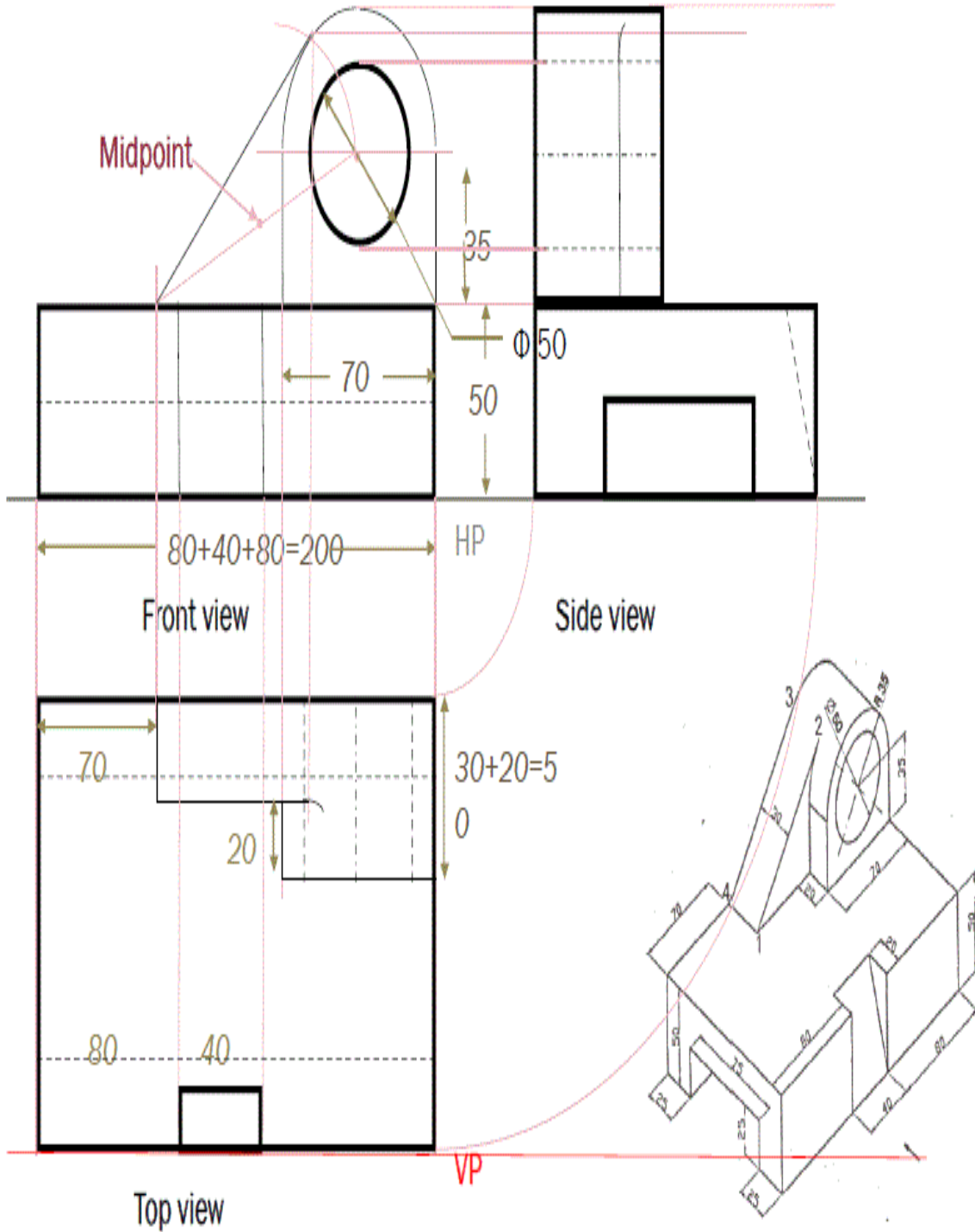
**PICTORIAL PRESENTATION IS GIVEN**  
**DRAW THREE VIEWS OF THIS OBJECT**  
**BY FIRST ANGLE PROJECTION METHOD**



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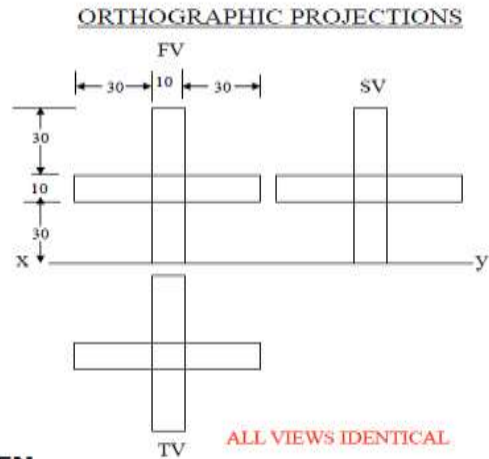
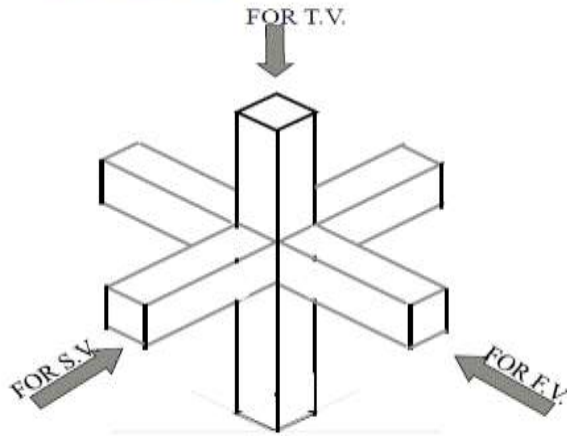


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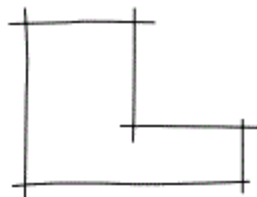


Example-8

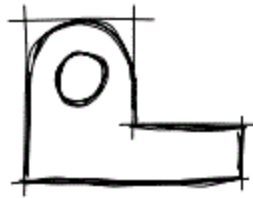


**PICTORIAL PRESENTATION IS GIVEN**  
DRAW THREE VIEWS OF THIS OBJECT  
BY FIRST ANGLE PROJECTION METHOD

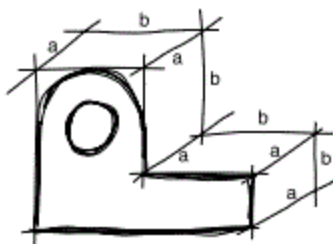
A



Step 1



Step 2



Step 3



Step 4

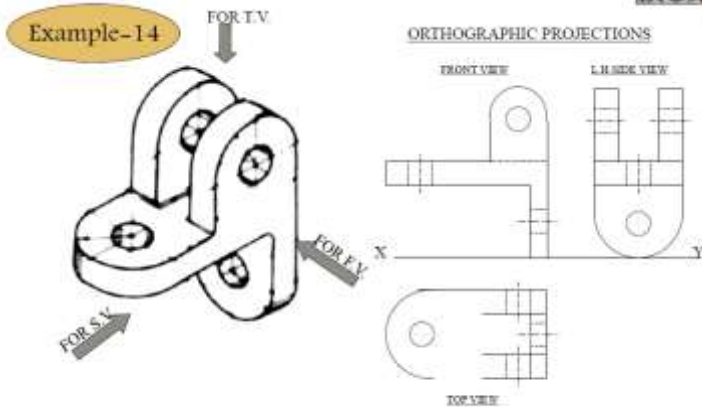




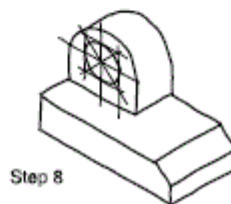
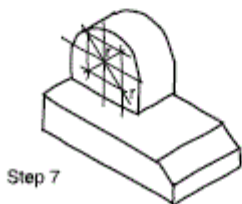
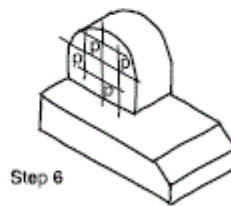
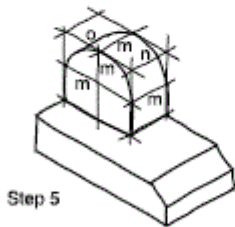
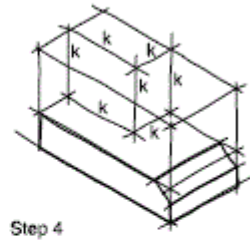
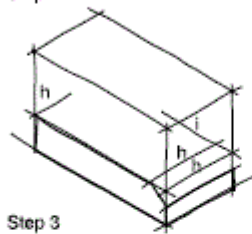
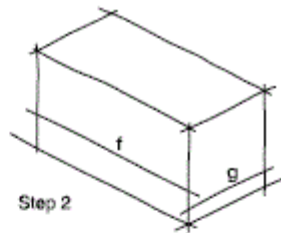
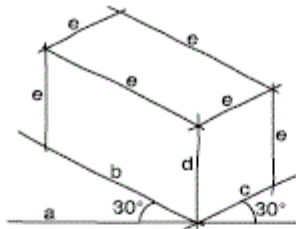
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**PICTORIAL PRESENTATION IS GIVEN**  
**DRAW THREE VIEWS OF THIS OBJECT**  
**BY FIRST ANGLE PROJECTION METHOD**



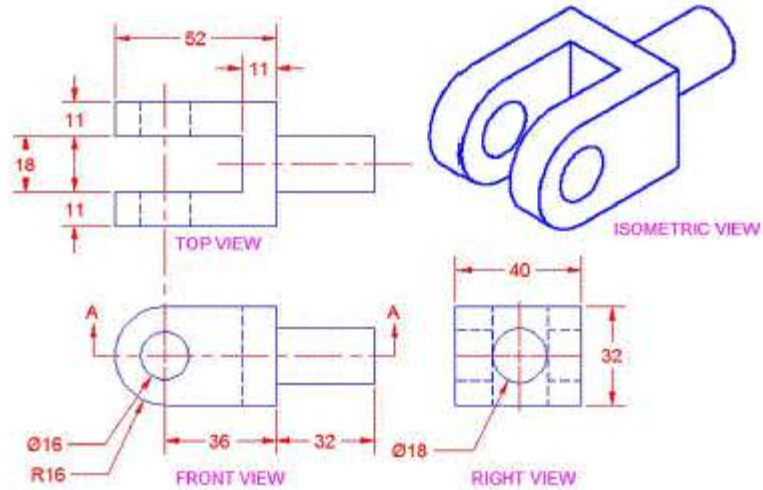


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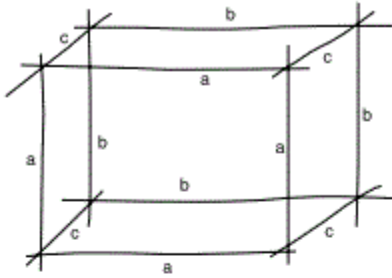
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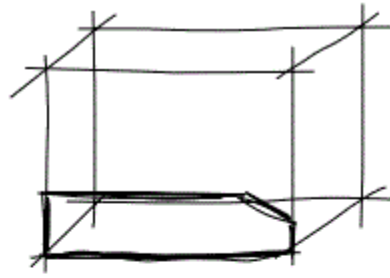
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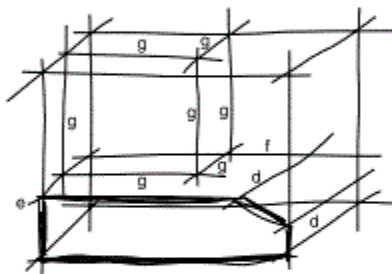
Faculty i/c: C.SENTHILKUMAR,ASP/MECH,



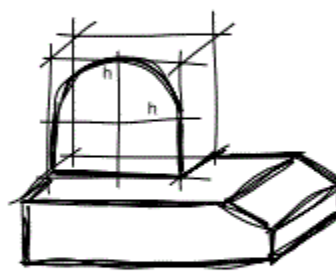
Step 1



Step 2



Step 3



Step 4



Step 5

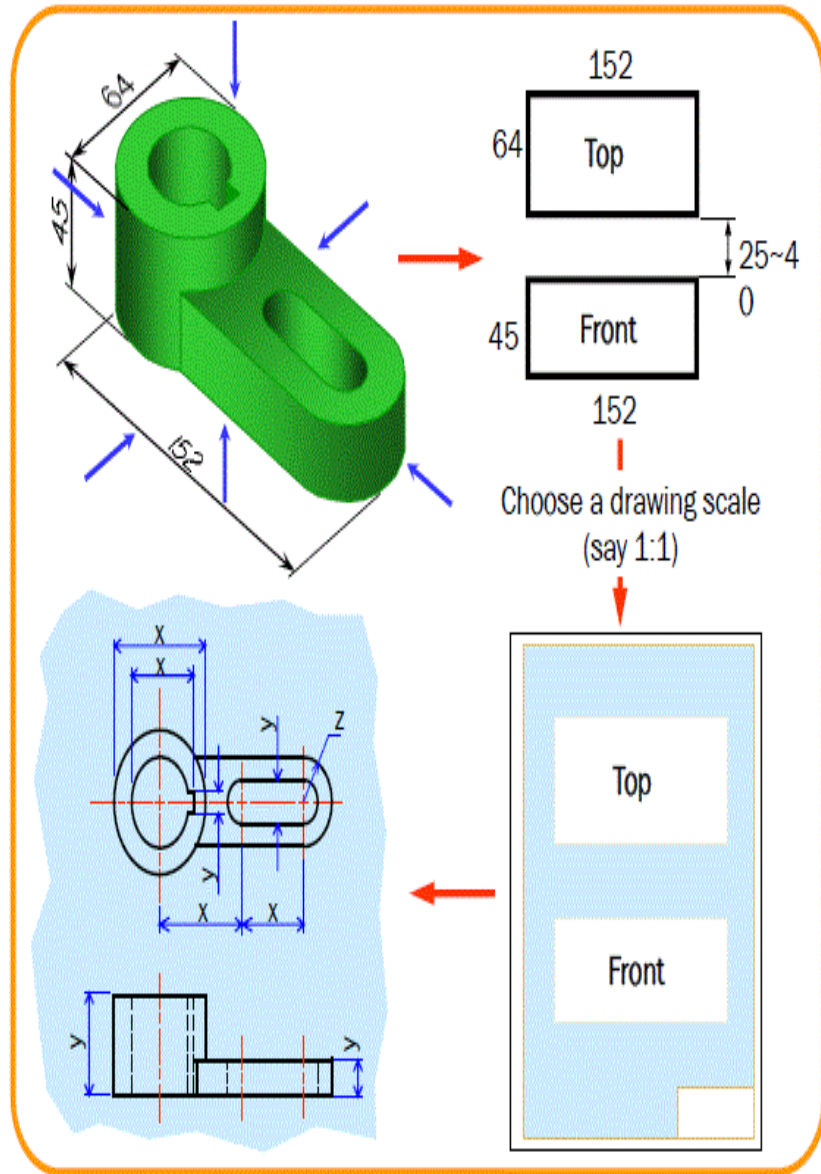


Step 6



# Steps for Orthographic Views

1. Select the necessary views
2. Layout the selected views on a drawing sheet.
3. Complete each selected views.
4. Complete the dimensions and notes.



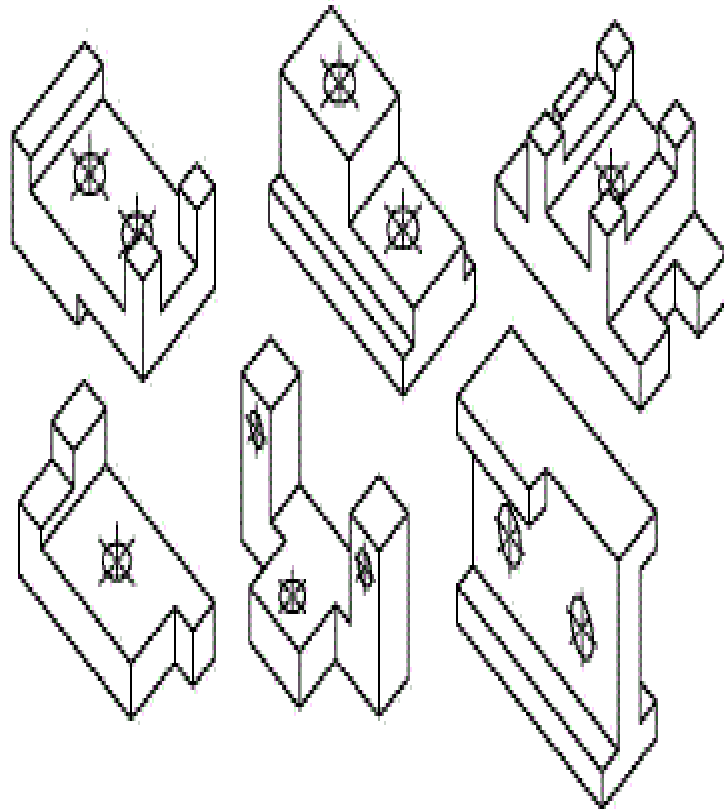


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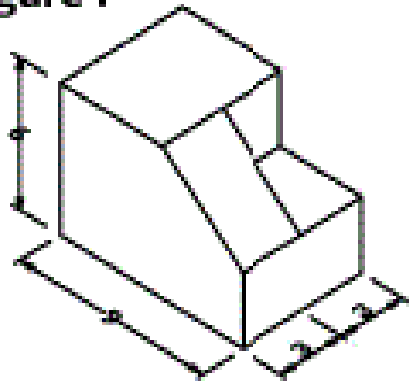
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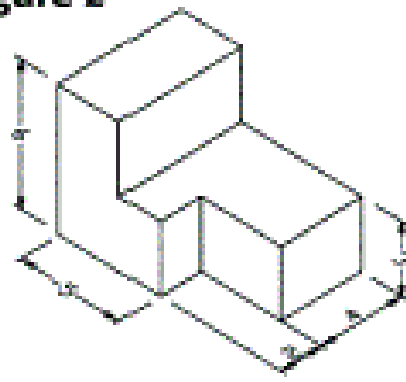


Solve it:

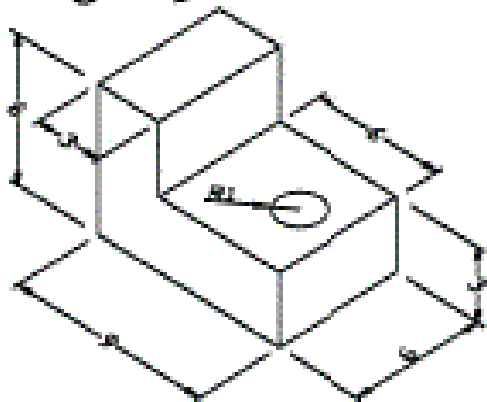
**Figure 1**



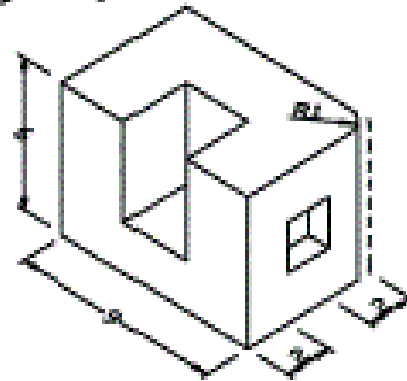
**Figure 2**



**Figure 3**



**Figure 4**



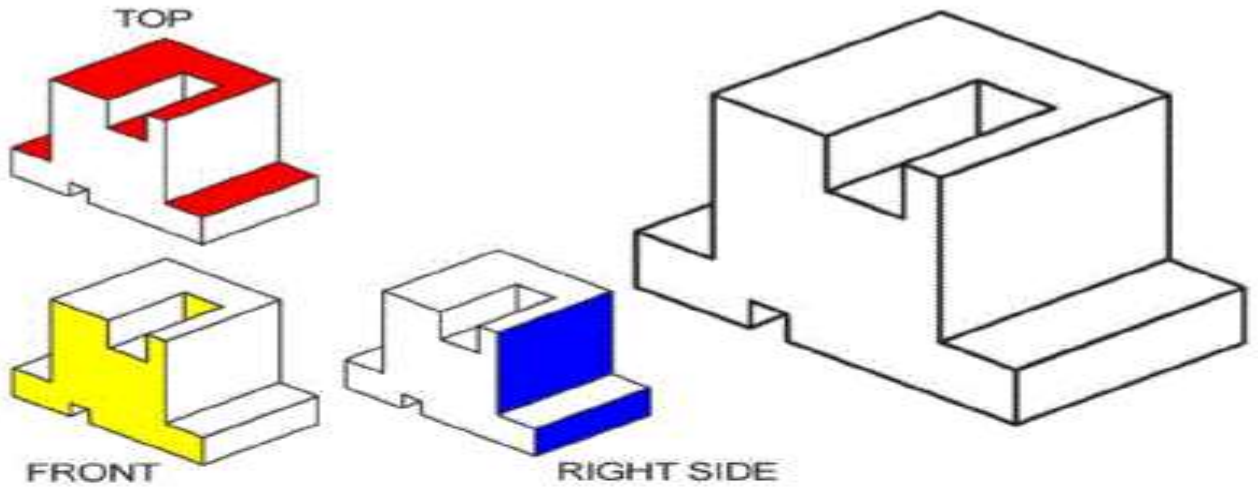


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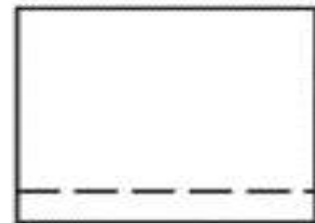
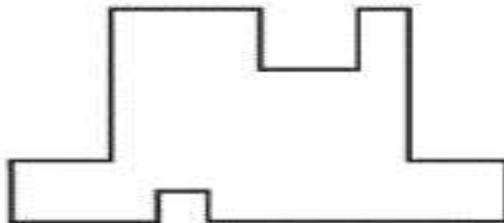


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**QUIZ:**



Fill in the missing lines





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**QUIZ:**

