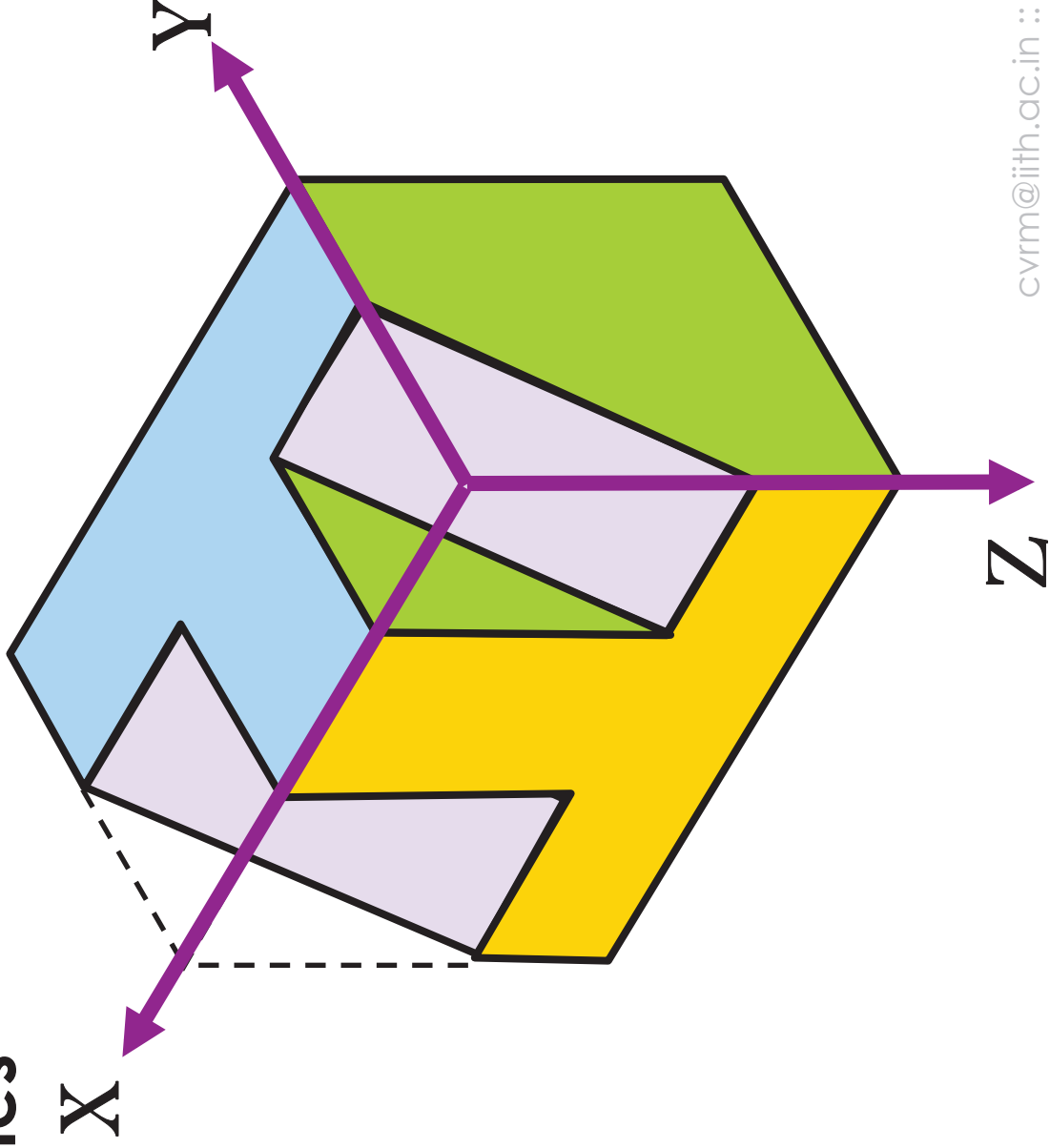


3D Viewing of an object from any point in space



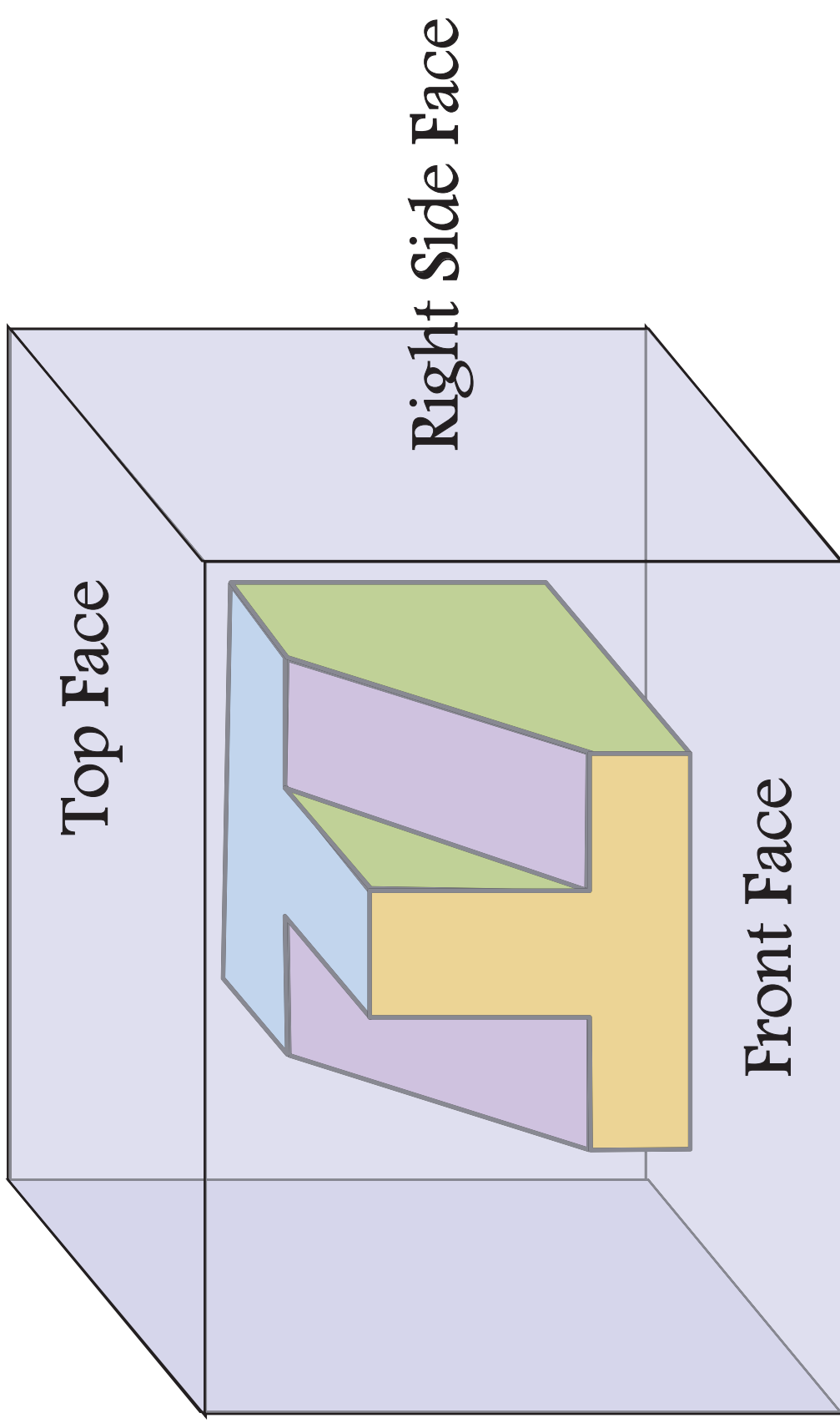
Orthographic projections

- Each object can be seen to have principle planes

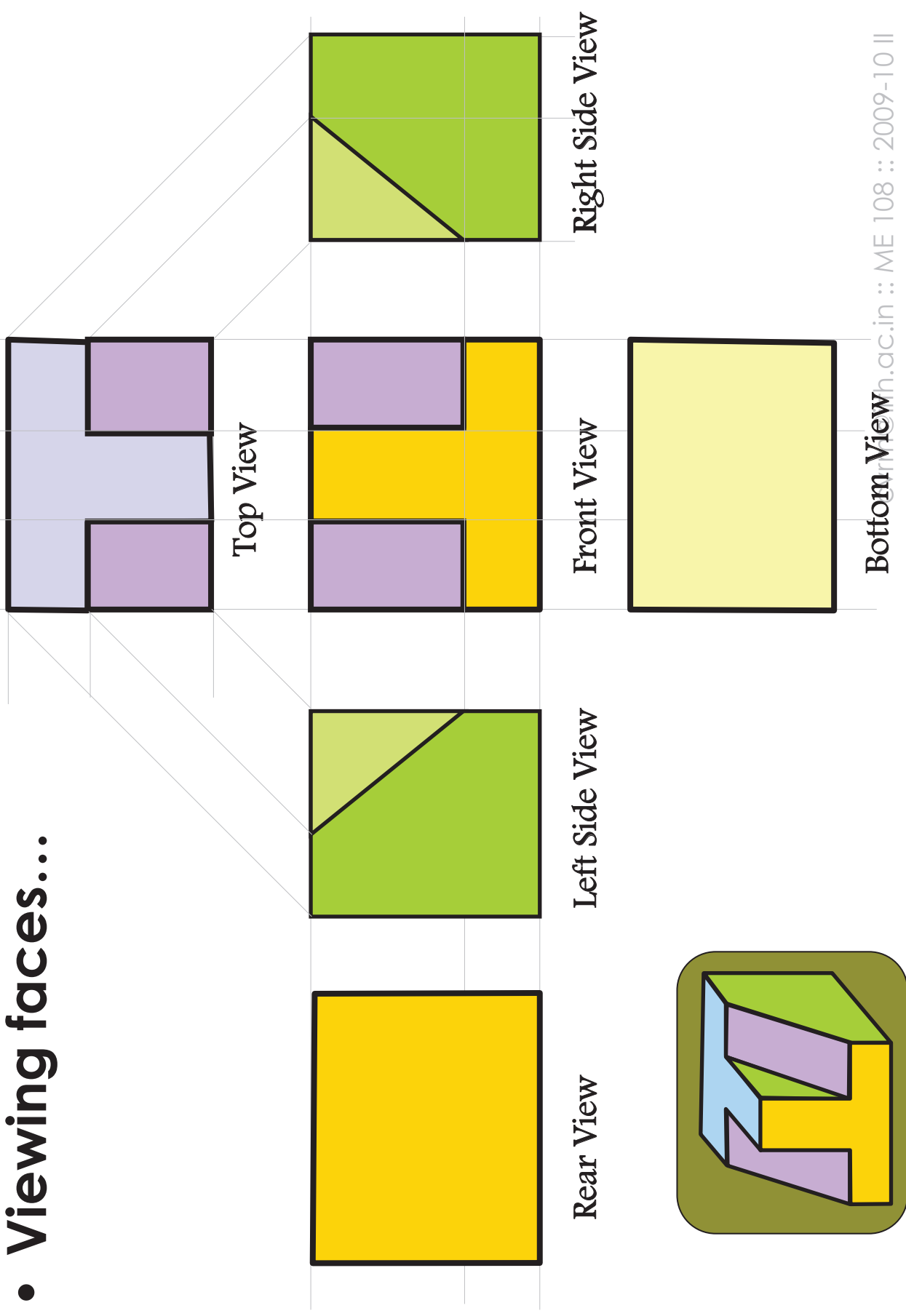


Transparent Viewing Box

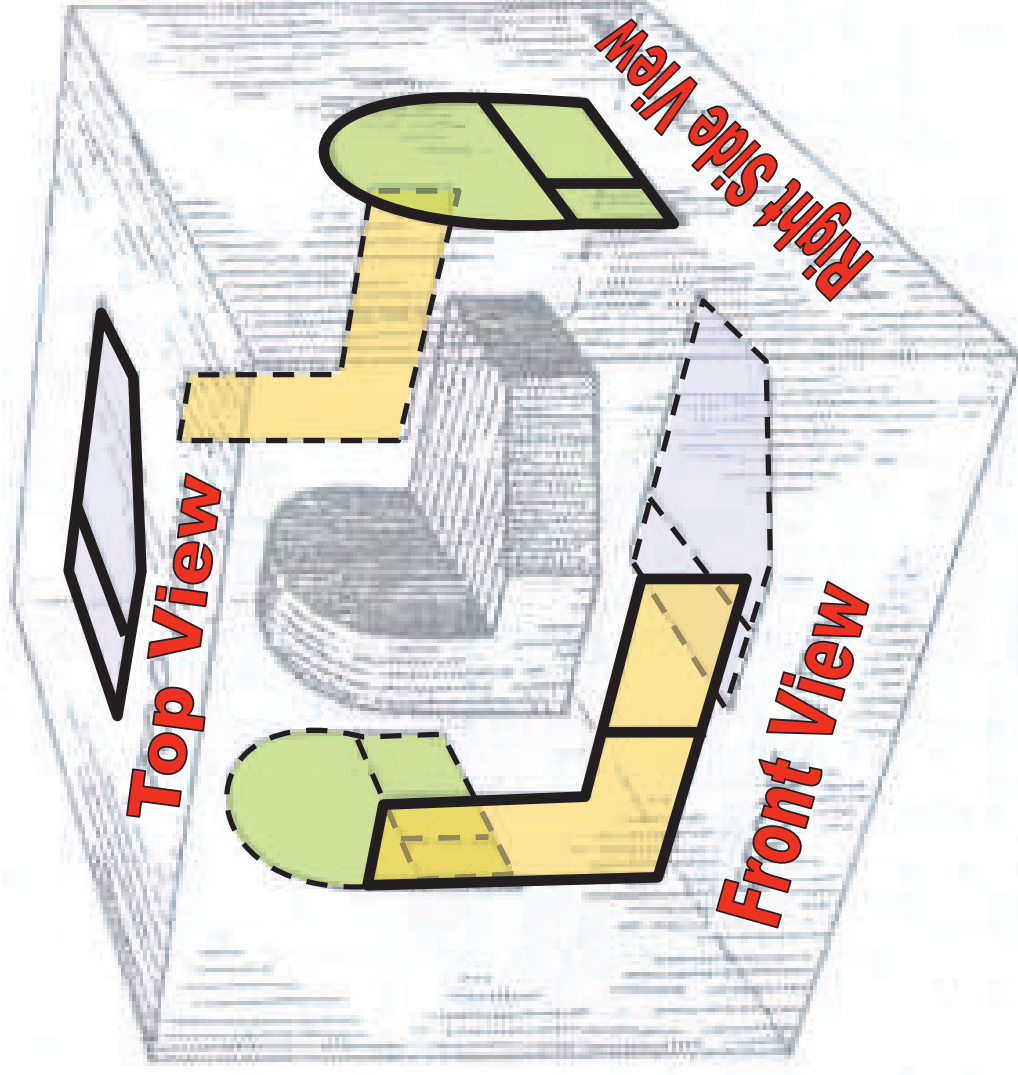
- Viewing faces



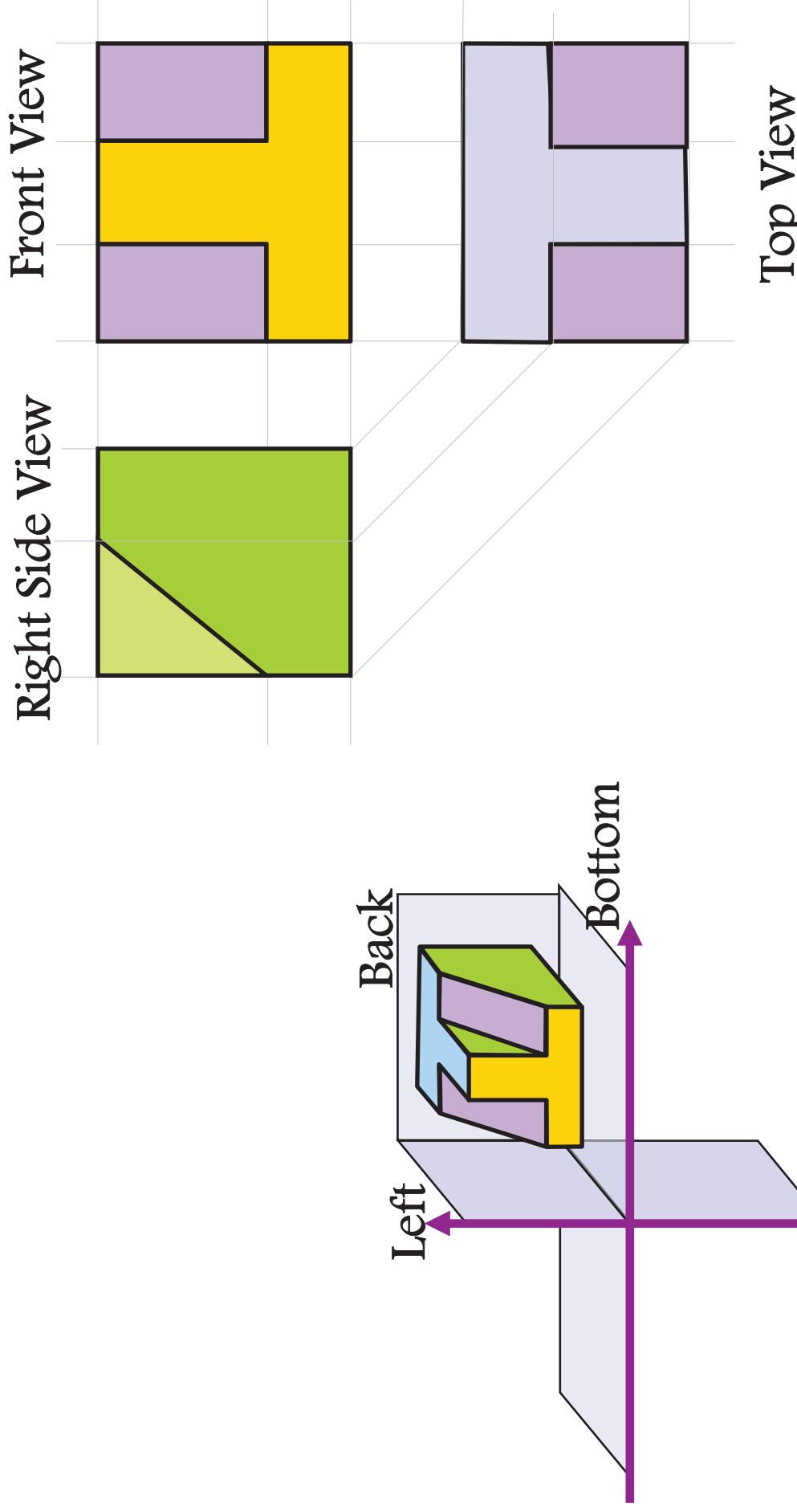
- Viewing faces...



Transparent Viewing Box



- **FIRST Angle Projection**
 - Object in front of plane



- **Five types of line styles used**

- Visible lines



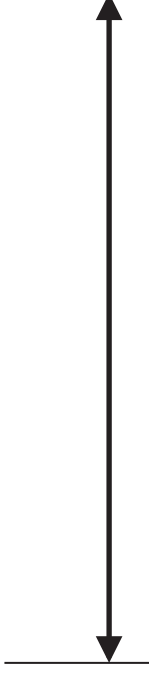
- Hidden lines



- Centerlines



- Dimension lines

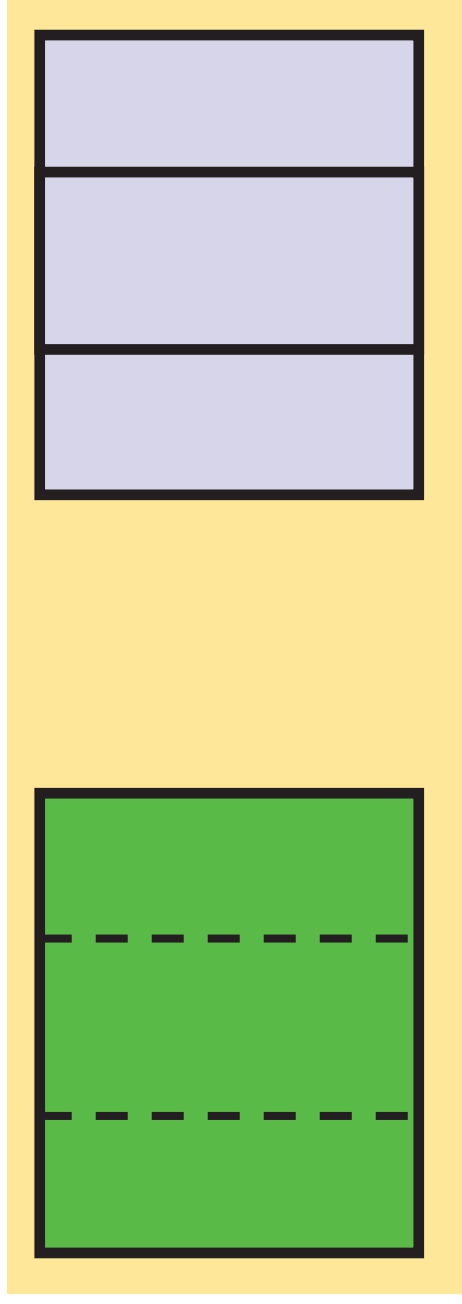


- Construction lines

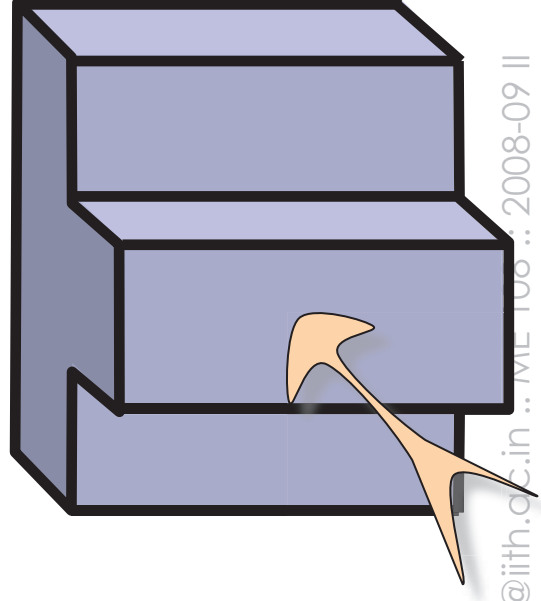
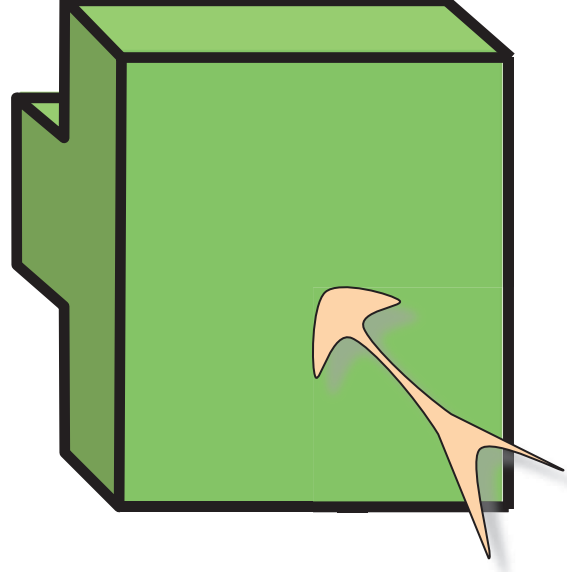


- **Visible & Hidden lines**

- Boundaries

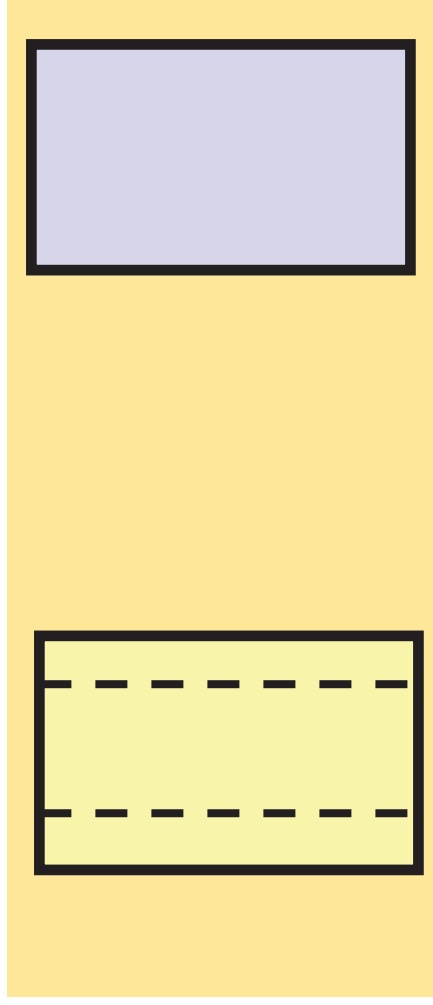


Orthographic View

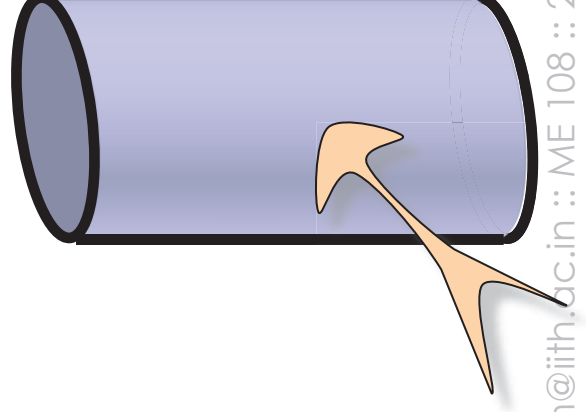
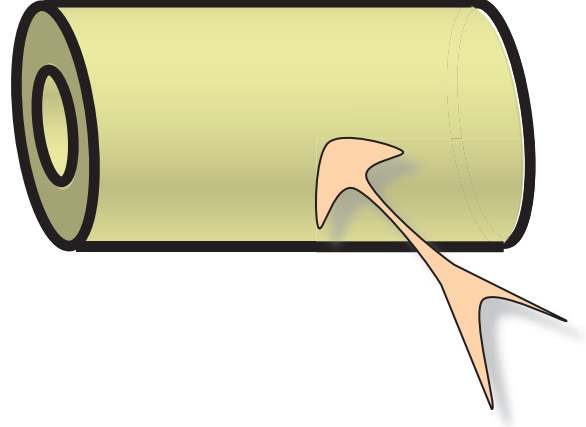


- **Visible & Hidden lines**

- Boundaries

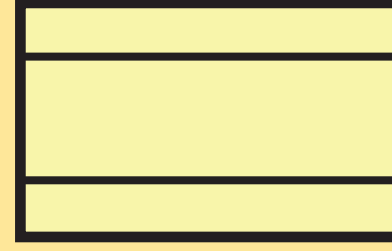
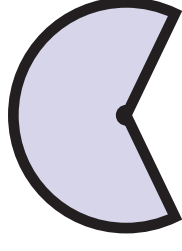


Orthographic View

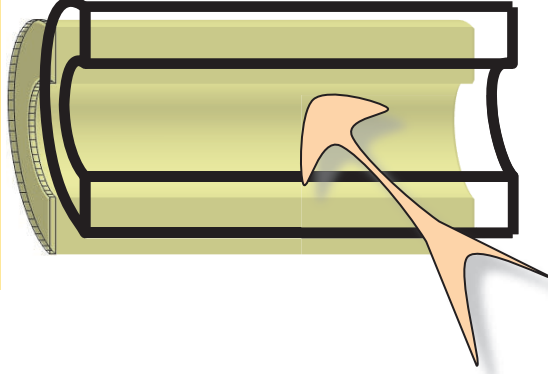
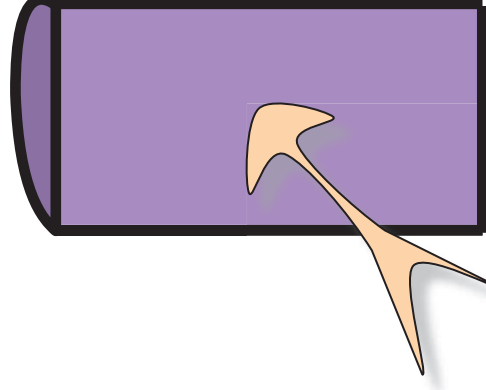
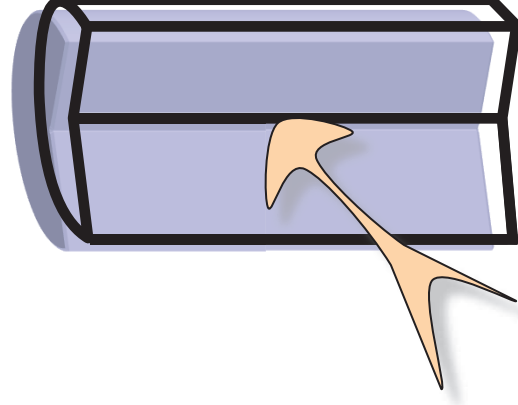


- **Visible & Hidden lines**

- Surfaces meet

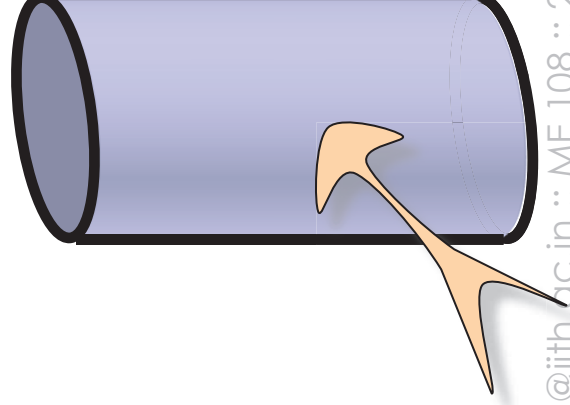
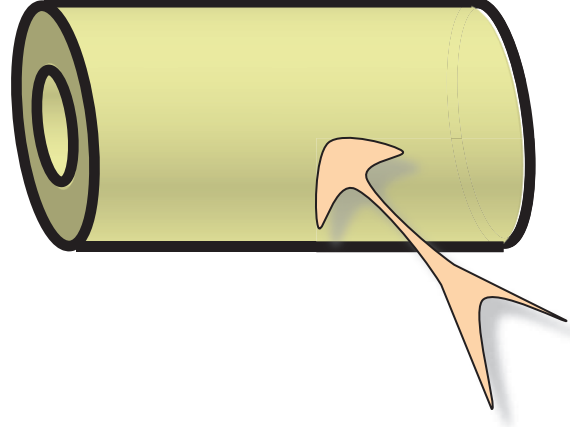
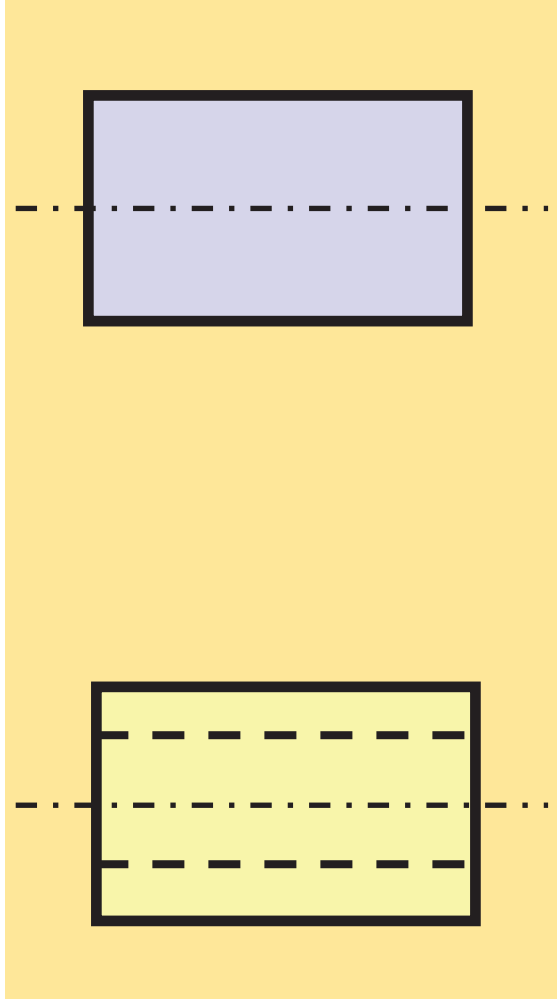


Orthographic View



- **Centerlines**
 - Axial Symmetry

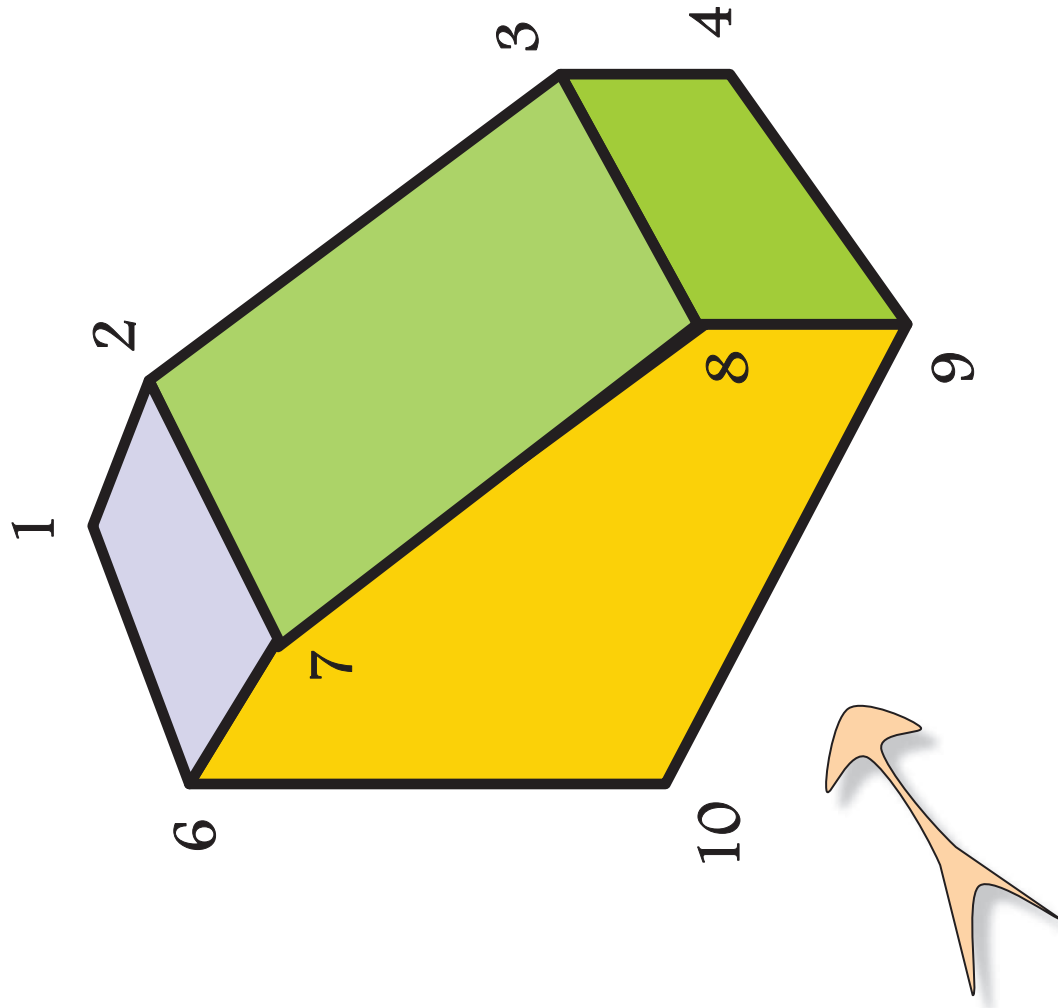
Orthographic View



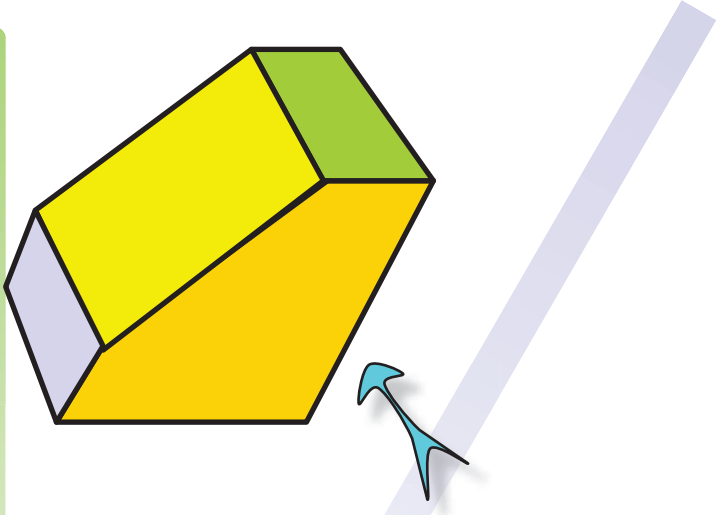


Examples

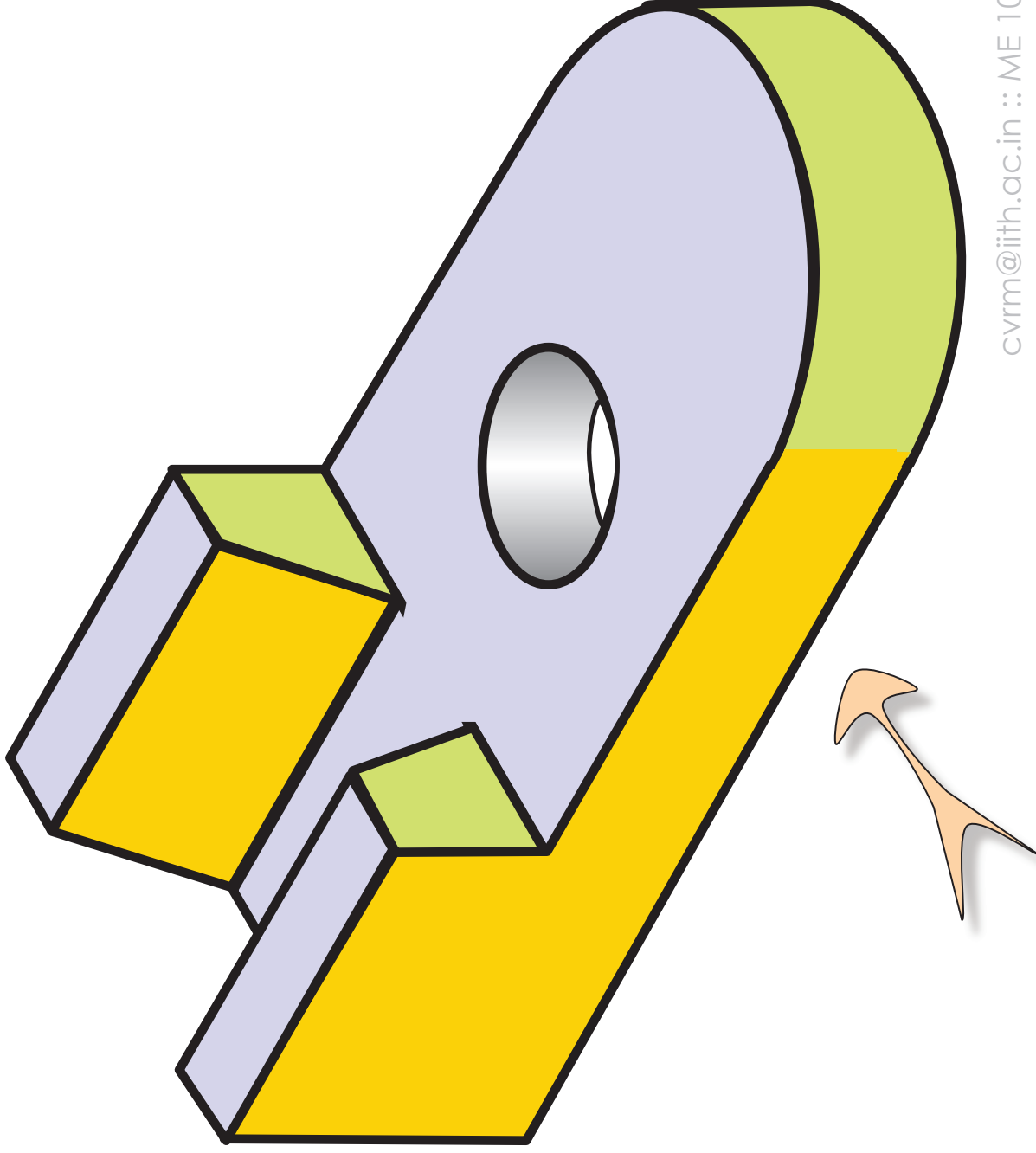
Example 1



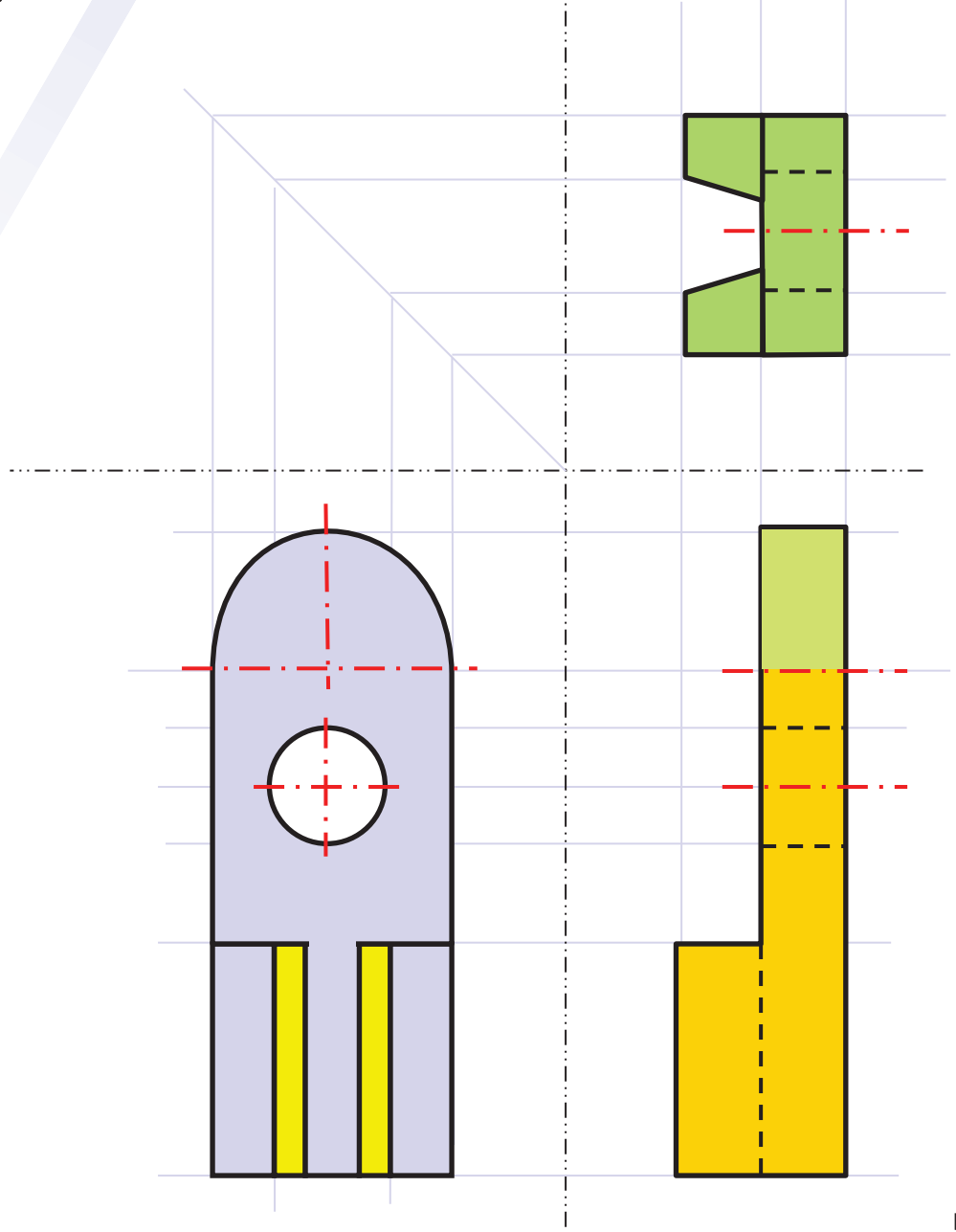
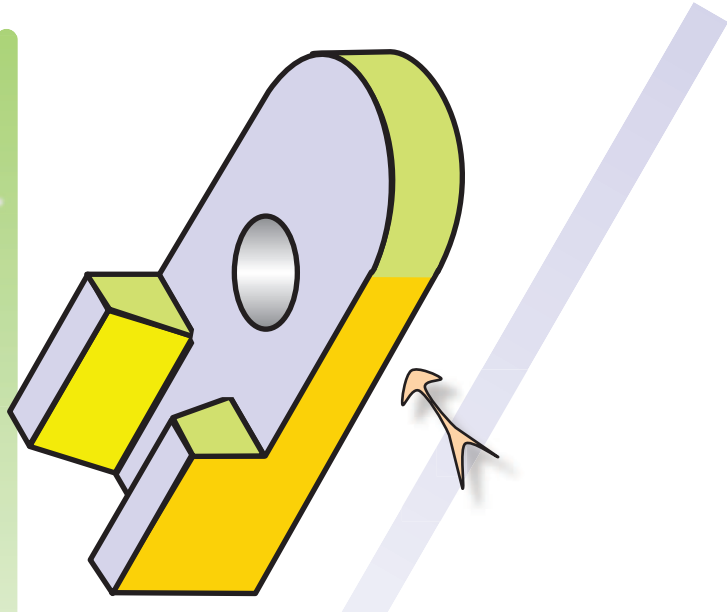
Example 1



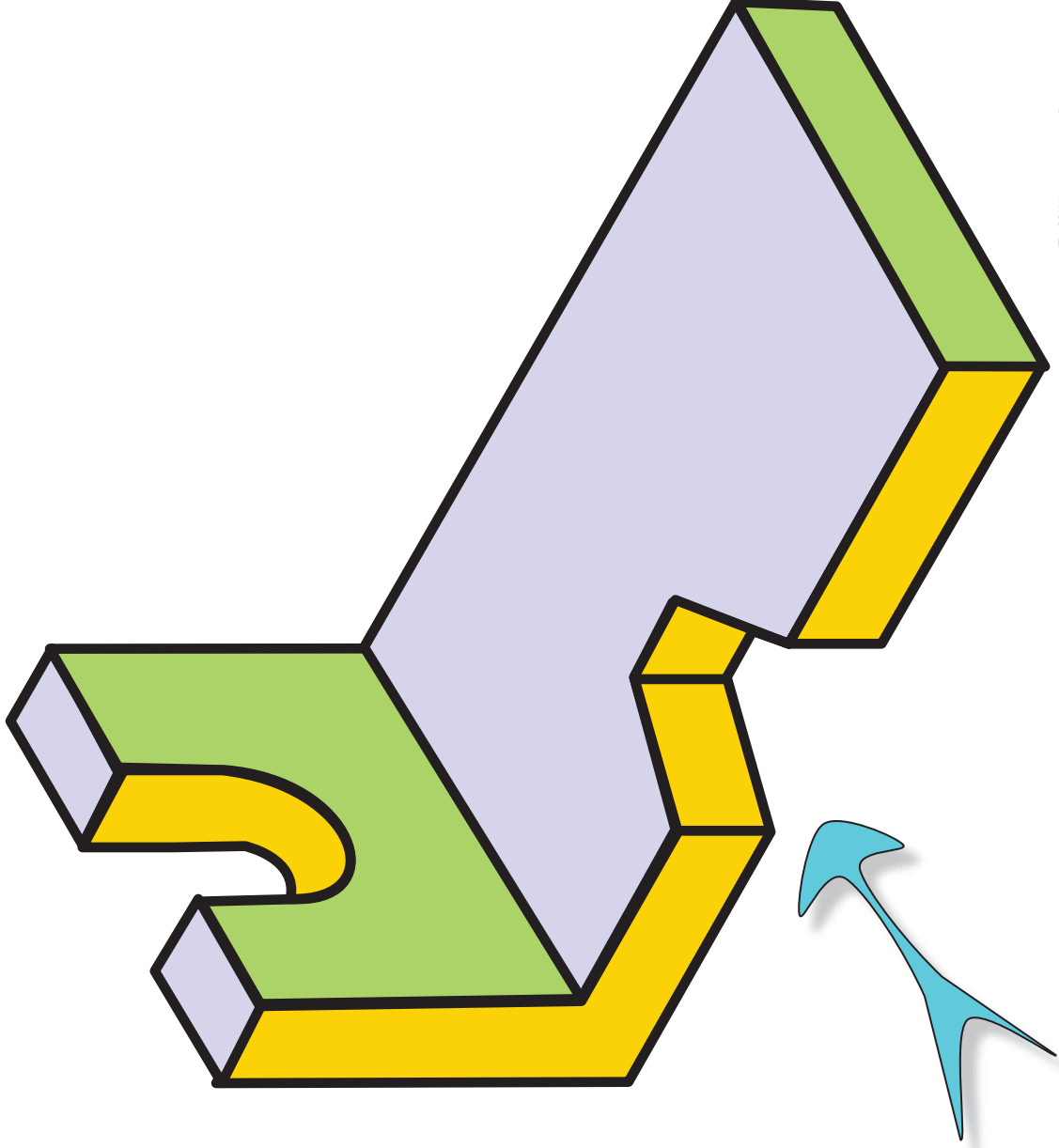
Example 2



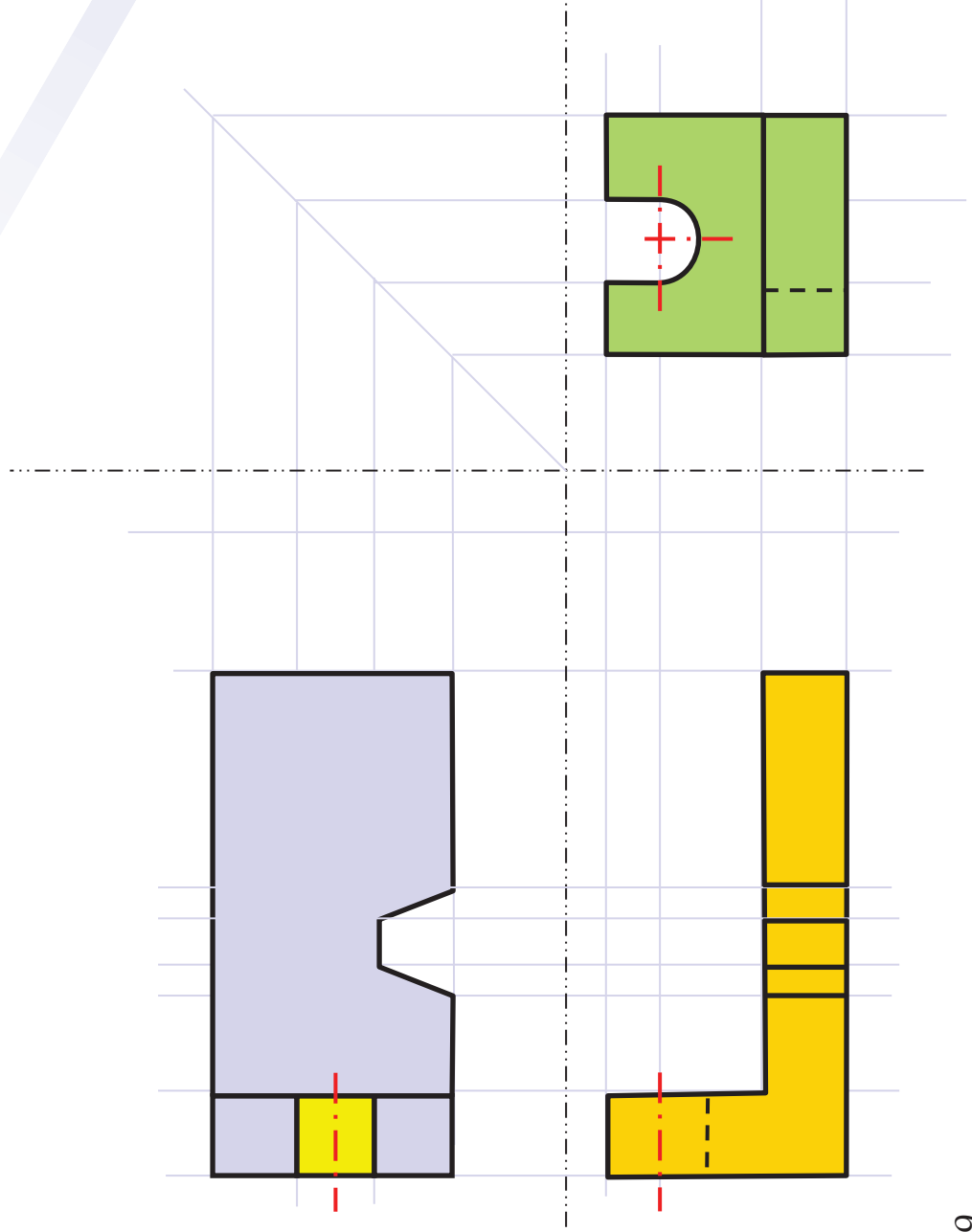
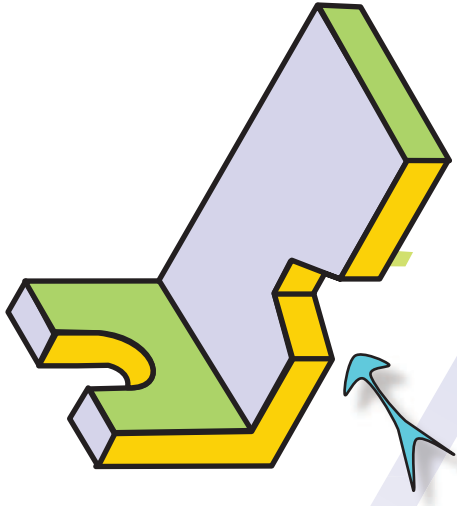
Example 2



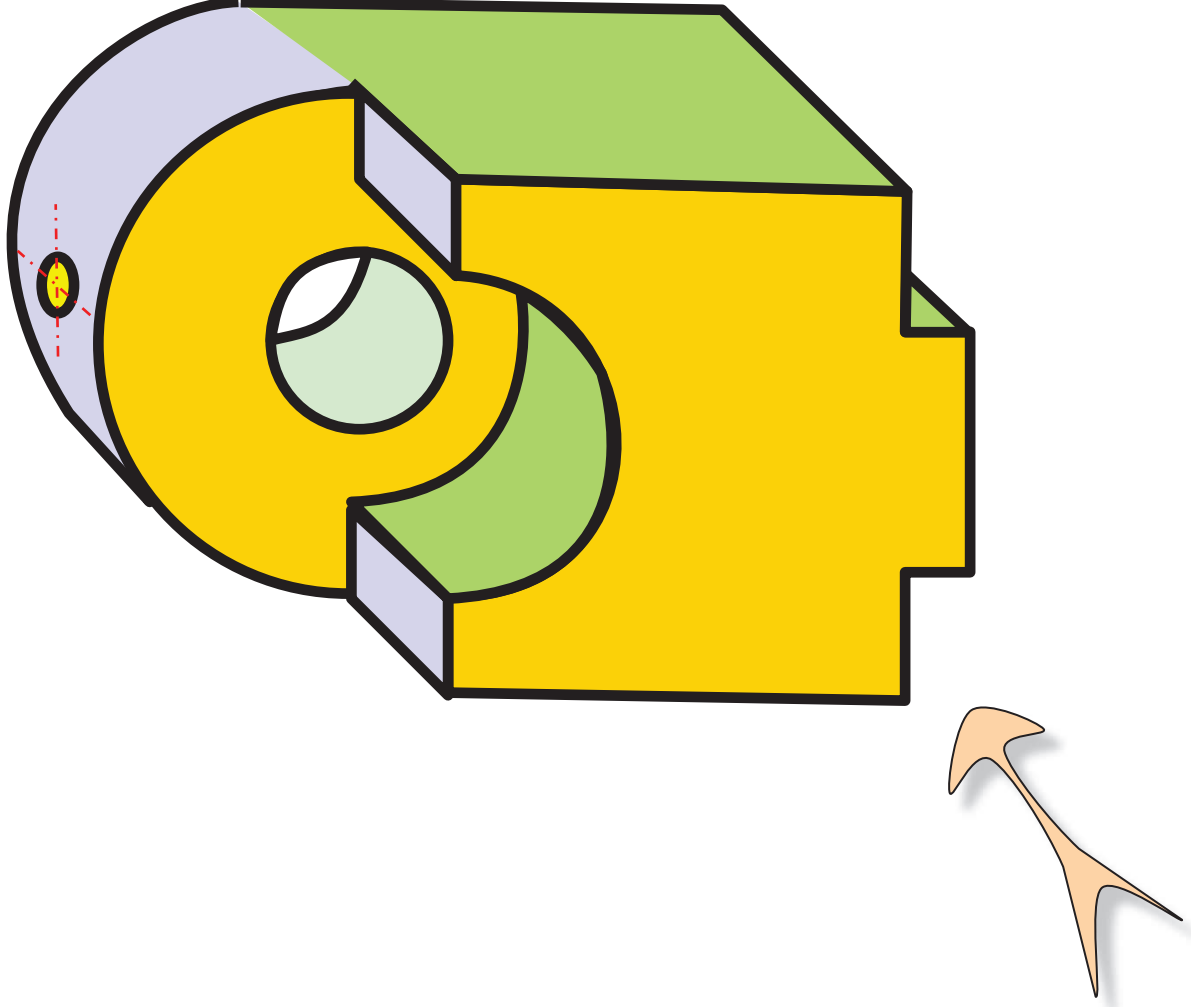
Example 3



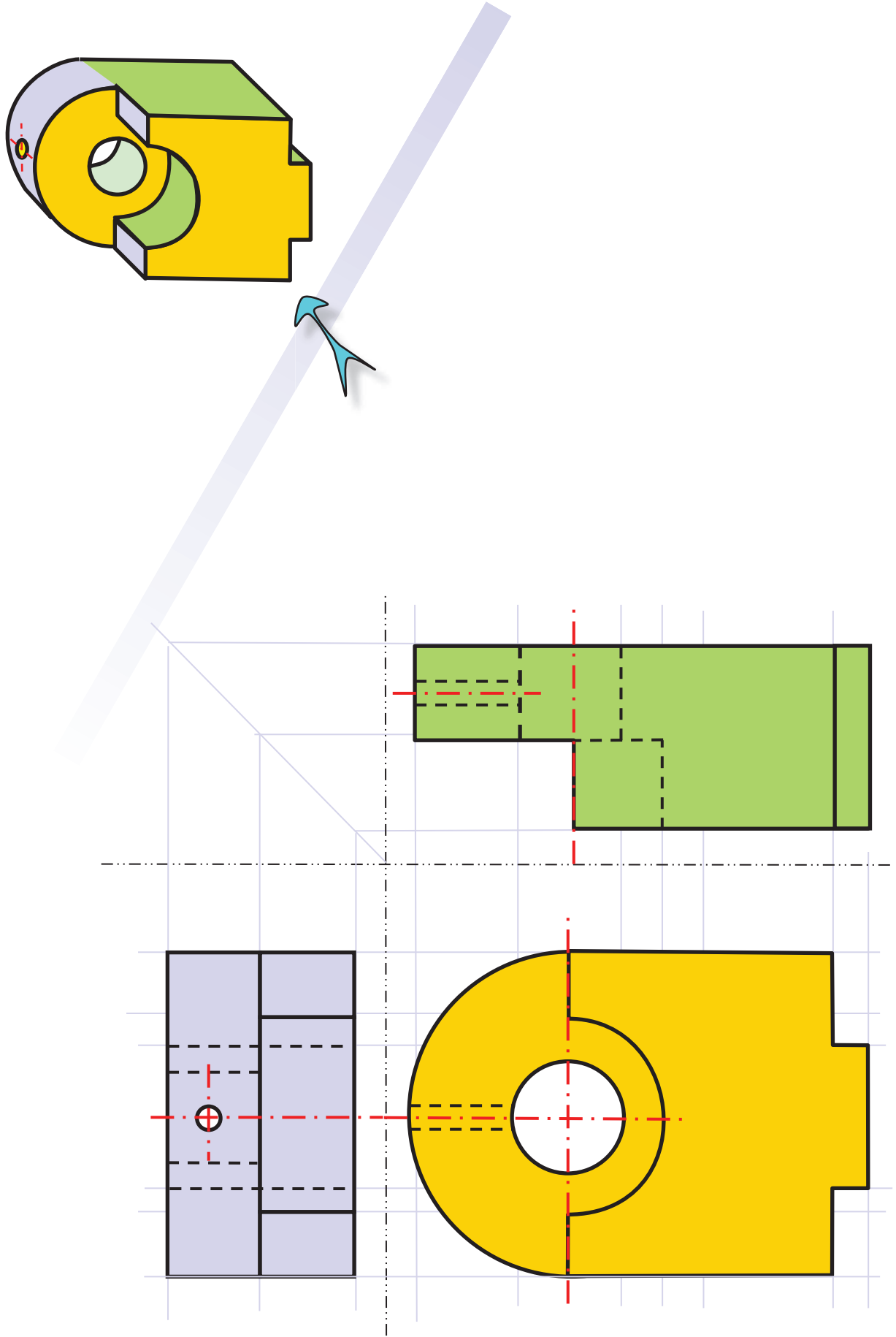
Example 3



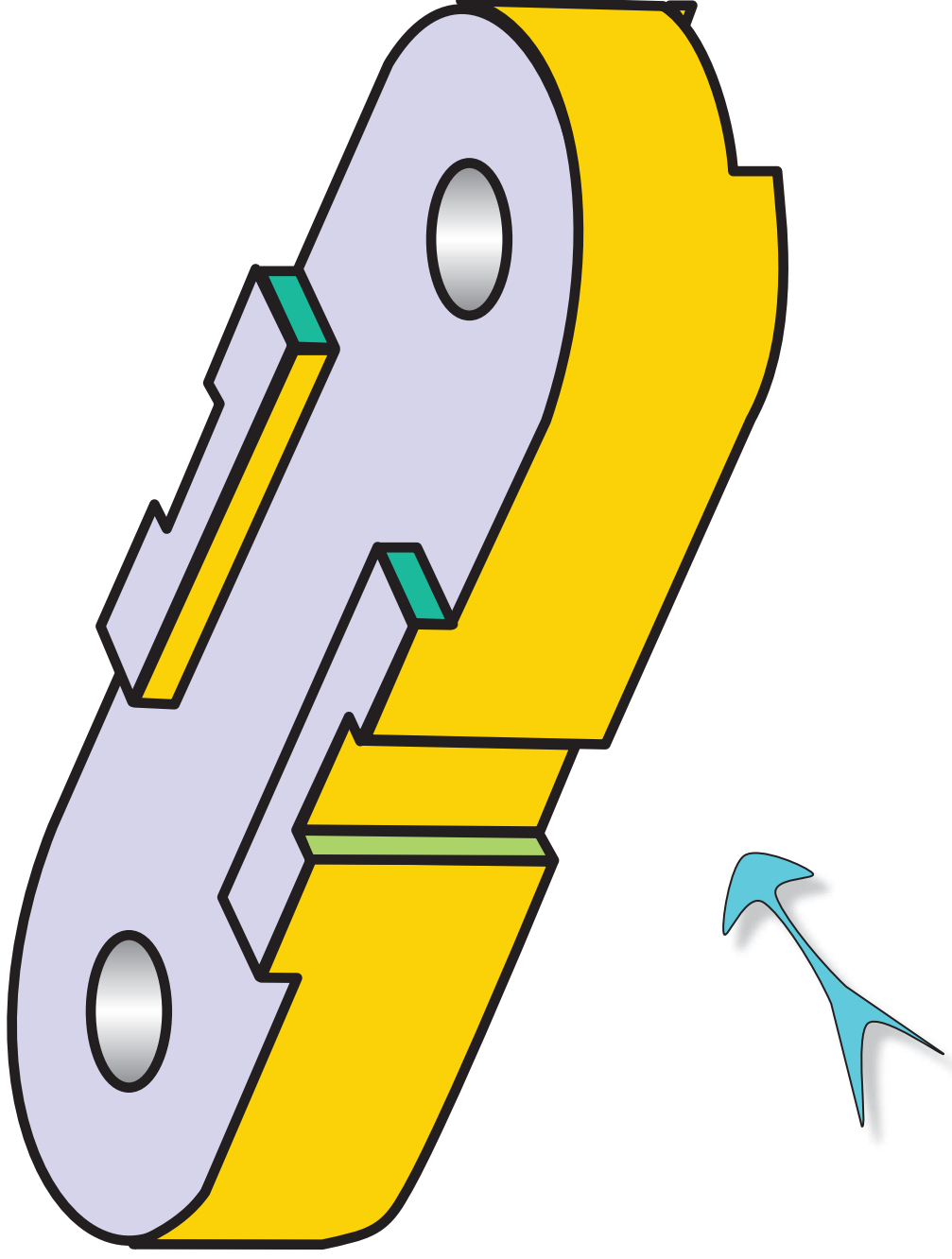
Example 4



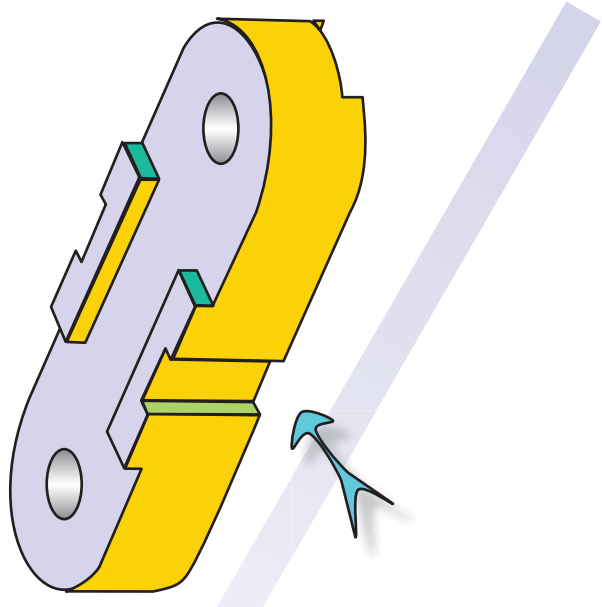
Example 4



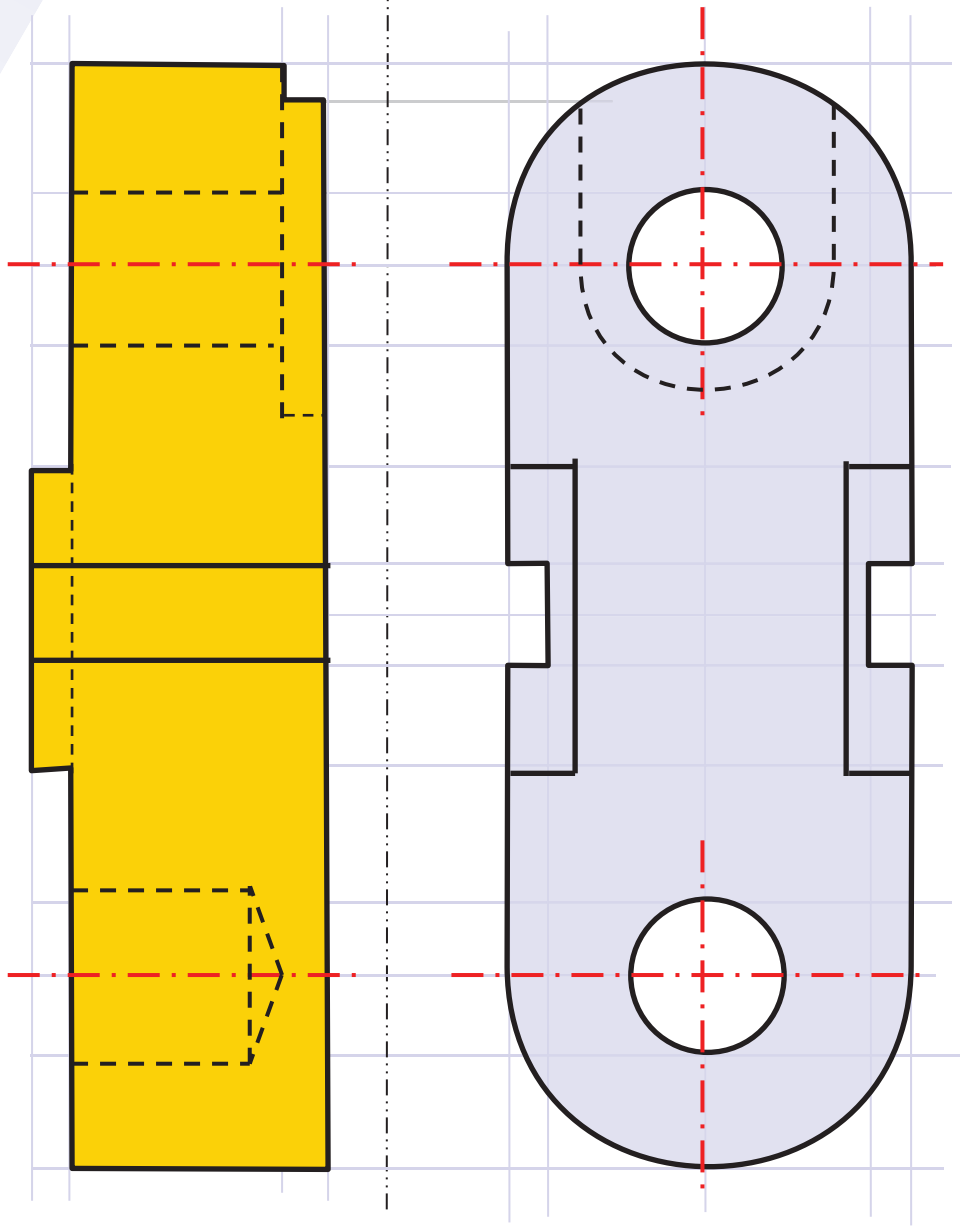
Example 5



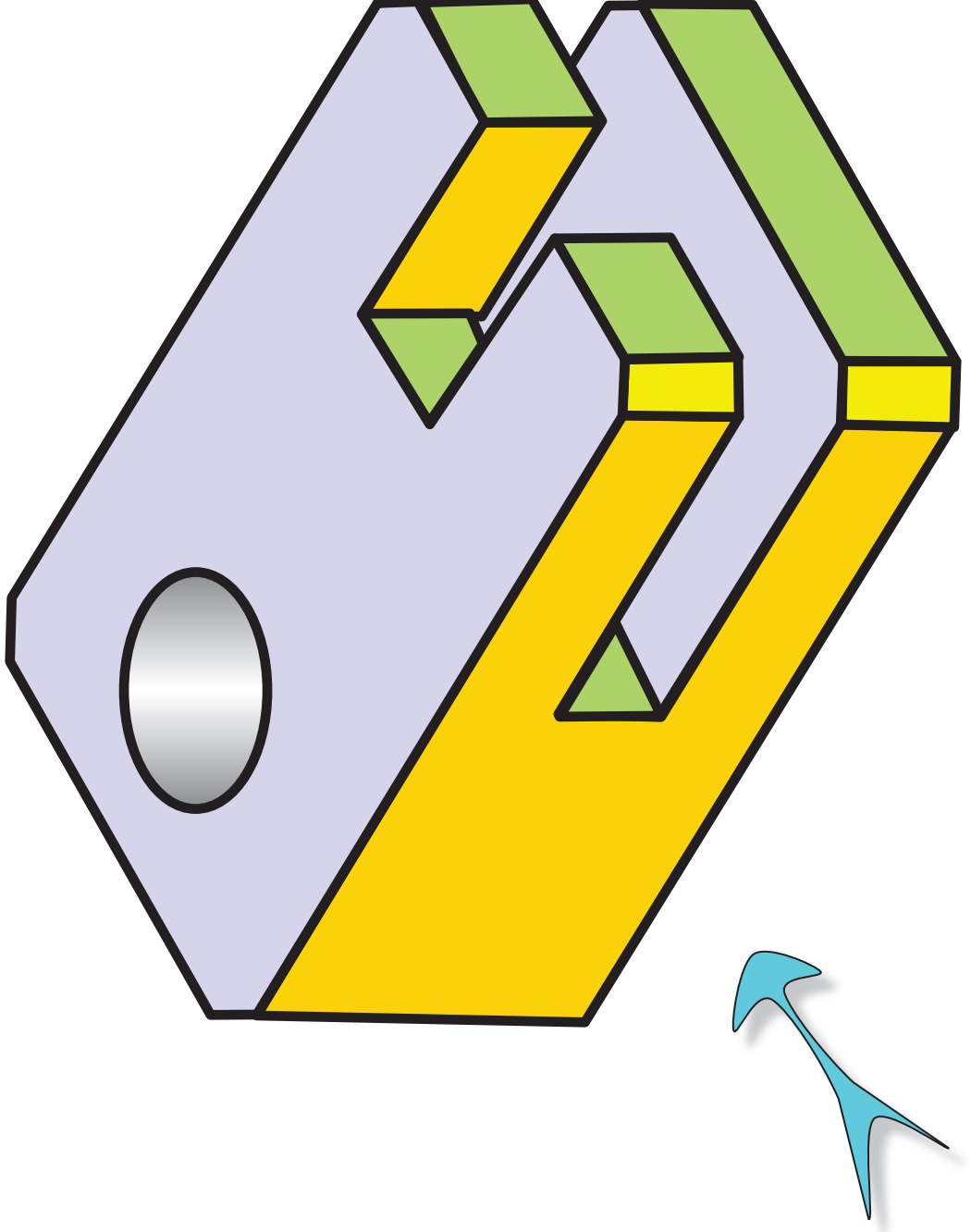
Example 5



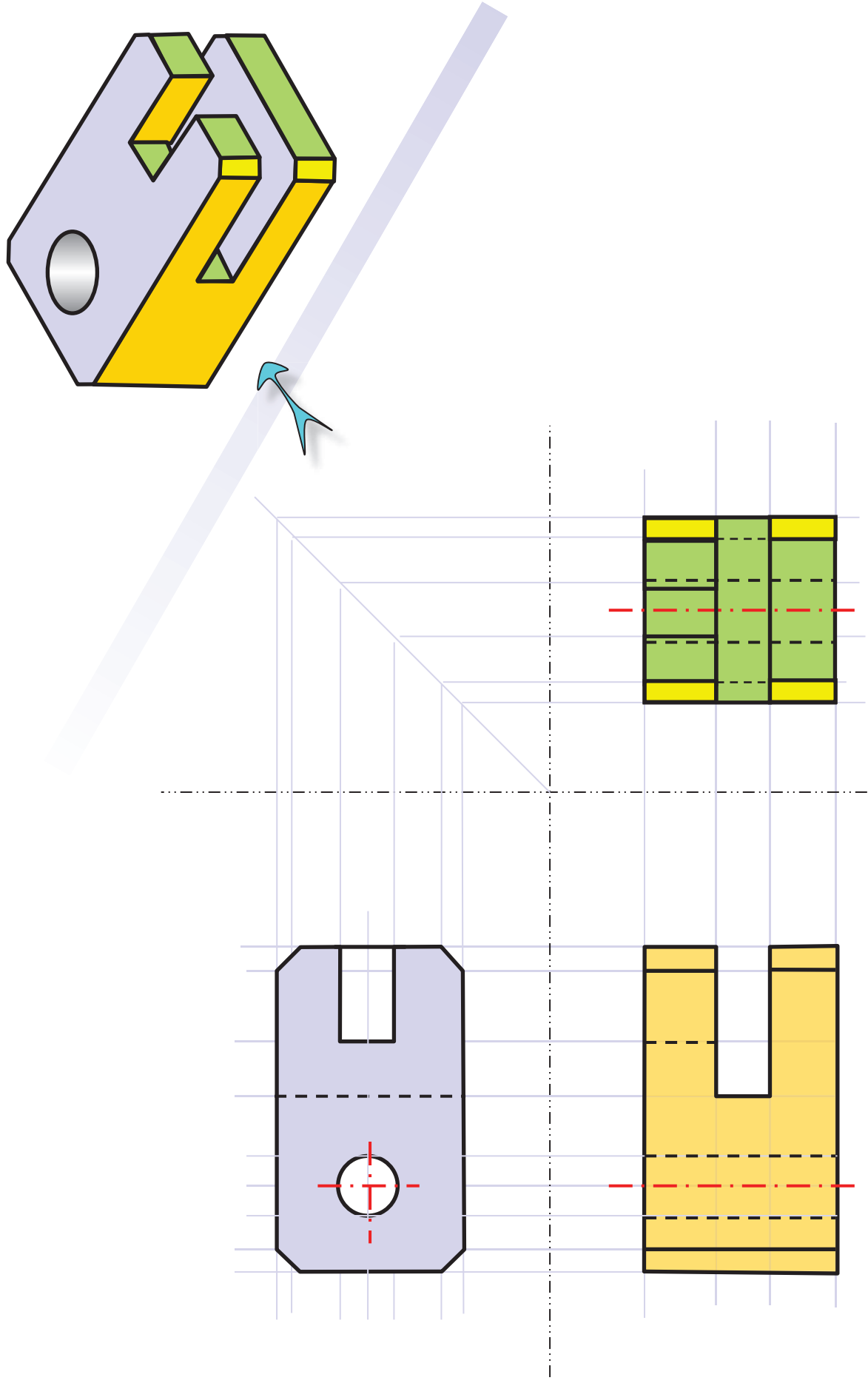
FIRST
Angle
Projection



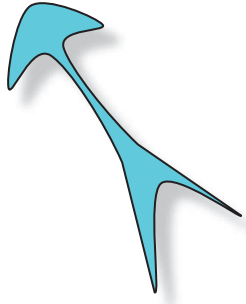
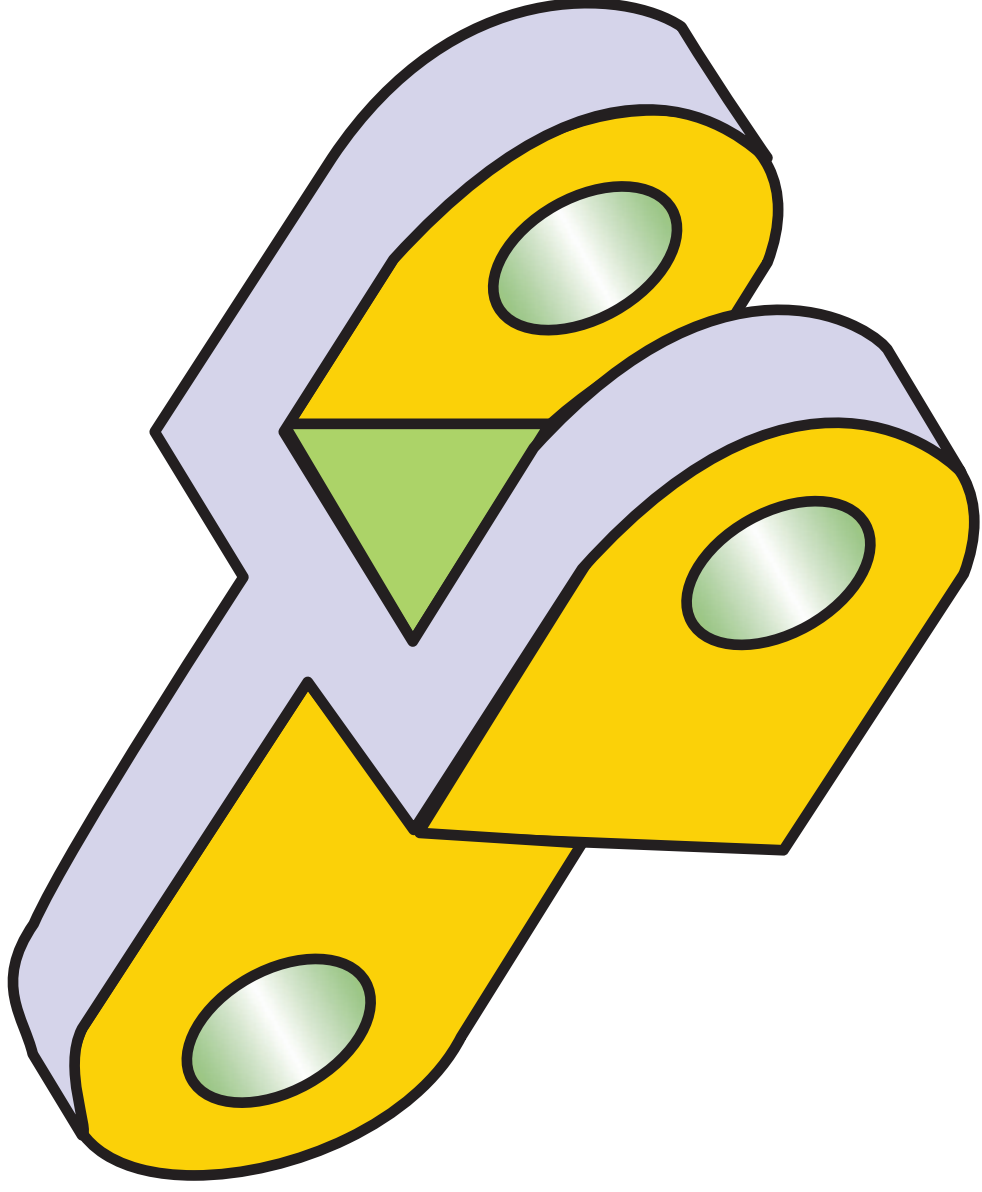
Example 6



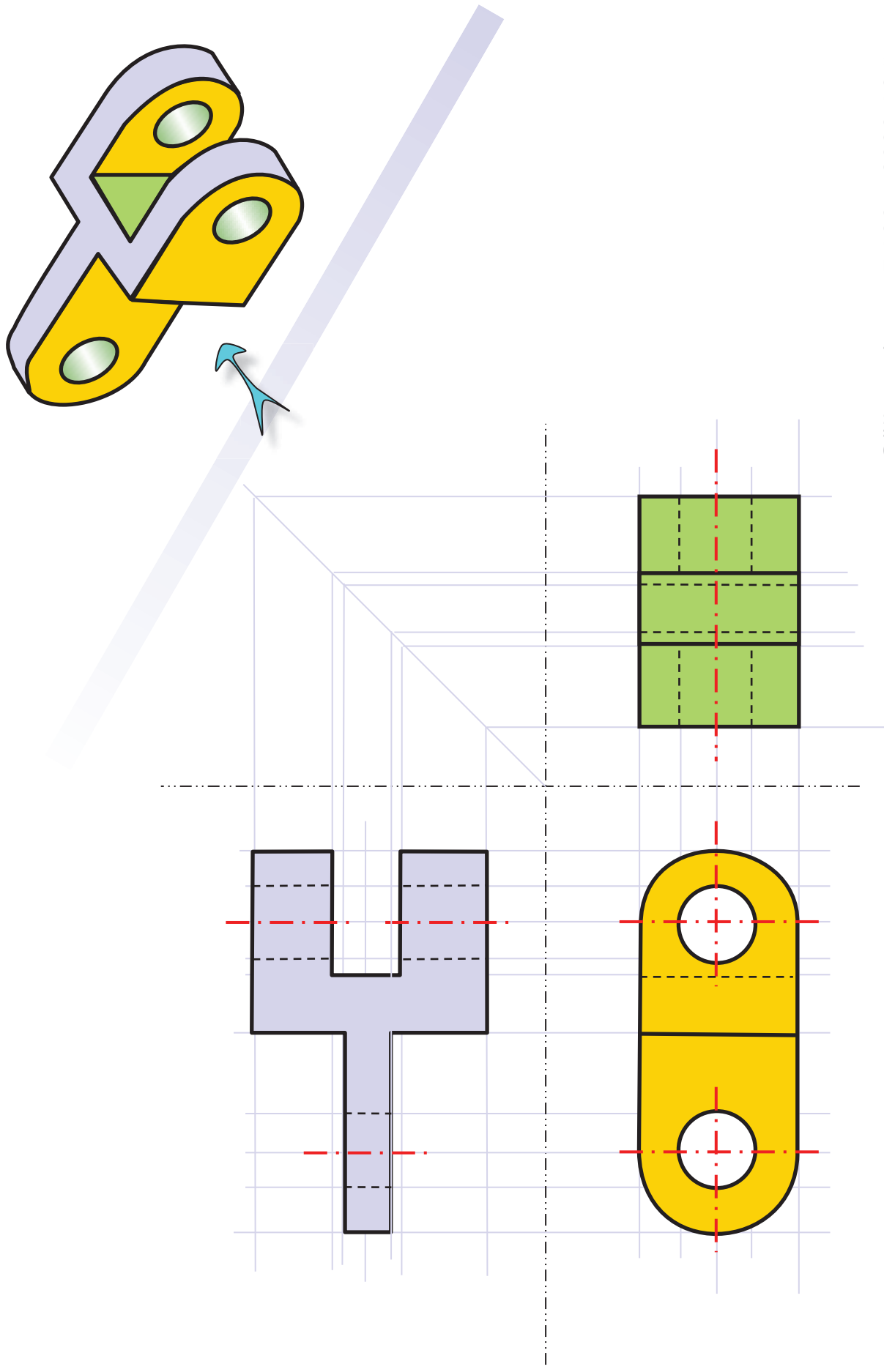
Example 6



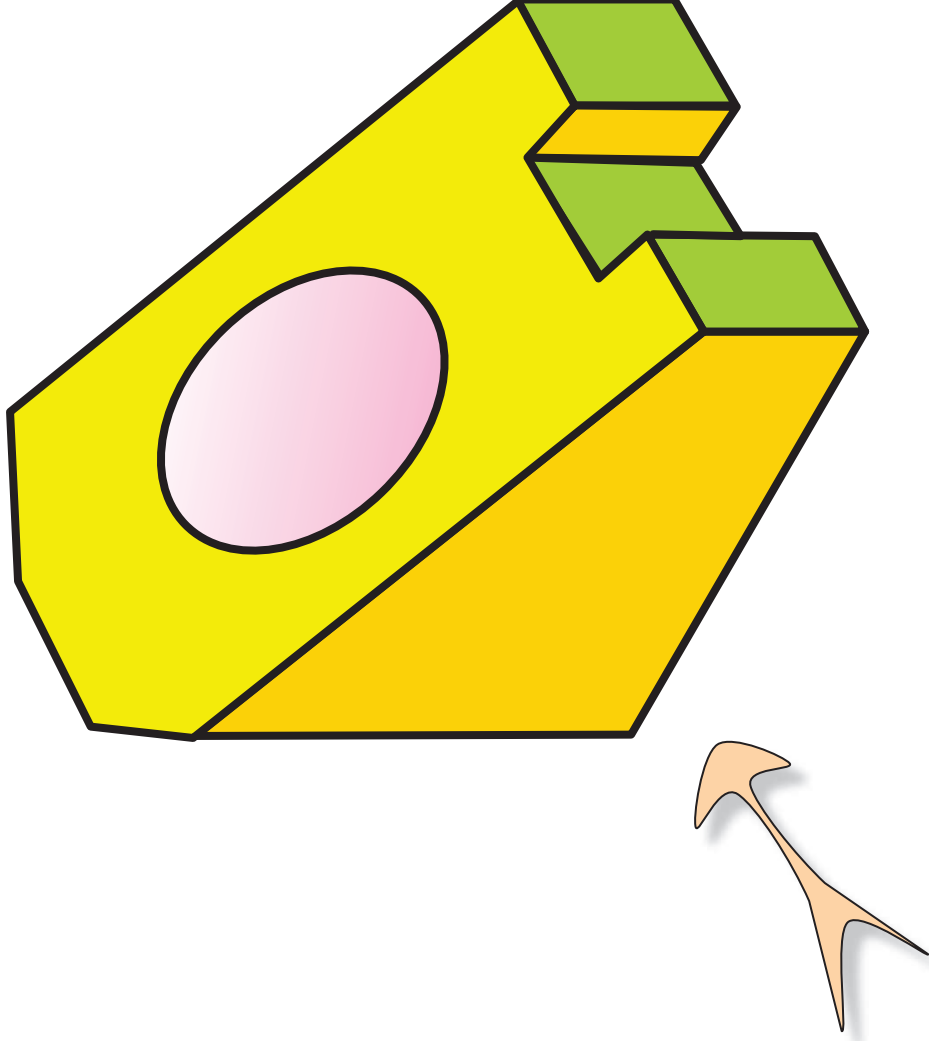
Example 7



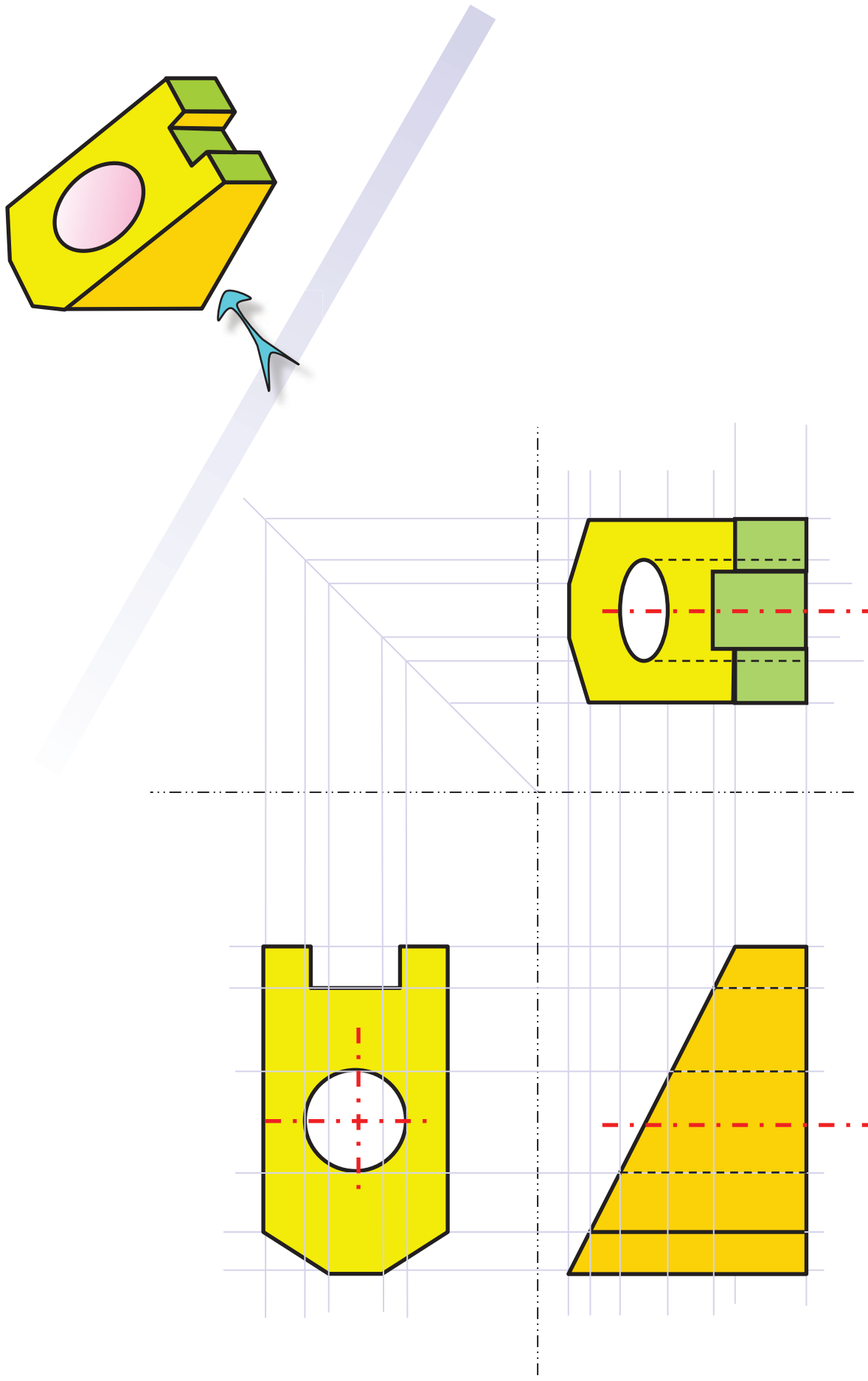
Example 7



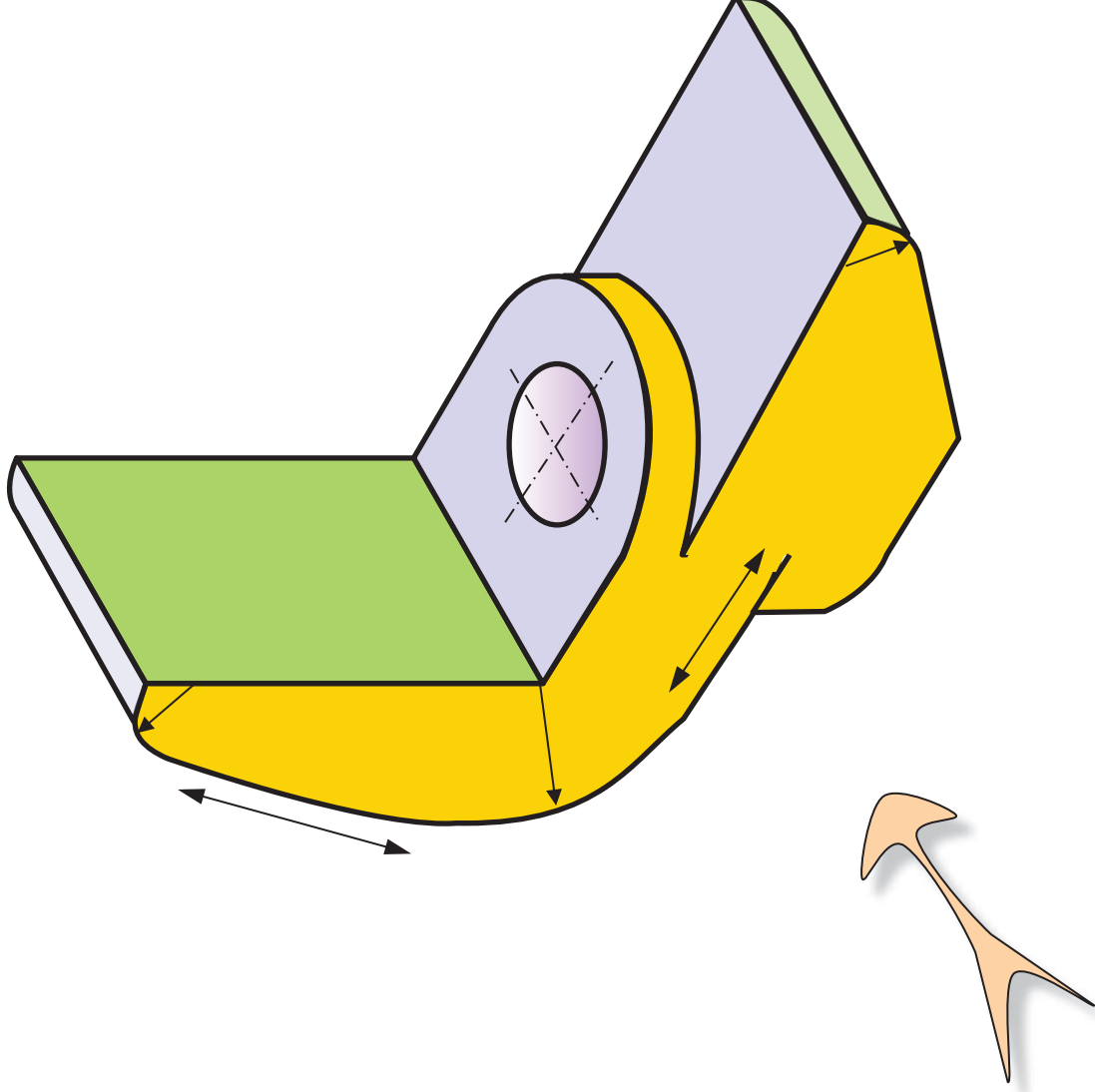
Example 8



Example 8



Example 9



Example 9

