Orthographic Projection

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Part 1

by
Dr. Ahmed Khattab

Department of Industrial Technology
College of Engineering
University of Louisiana-Lafayette
Orthographic Projection

Look from front to see Front View

How can you sketch an object to convey its shape effectively?
Six Principal Views of Orthographic Projection

Standard Orthographic Arrangement for 3 views of an object

- You can adequately describe most objects with three orthographic views.
  - Front
  - Top
  - Right
How can you sketch this angle bracket to convey its shape?

Glass Box concept

- Envision the object surrounded in a glass box
- Project the views out onto the pieces of glass
- Each pane shows a 2D projection of the object
Converting to Orthographic
Orthographic Views

- If the object has an obvious top, then it must be the top view
- Minimize the number of hidden lines
- Use the most descriptive view as the front view
- Conserve space by choosing the depth to be the smallest dimension

View Selection

- If the object has an obvious top, then it must be the top view
- Minimize the number of hidden lines
- Use the most descriptive view as the front view
- Conserve space by choosing the depth to be the smallest dimension
Construction of Views

Object for exercise
Solution

Solution