



Missing Lines, Missing Views, and Multiview to Isometric

27 September 2017

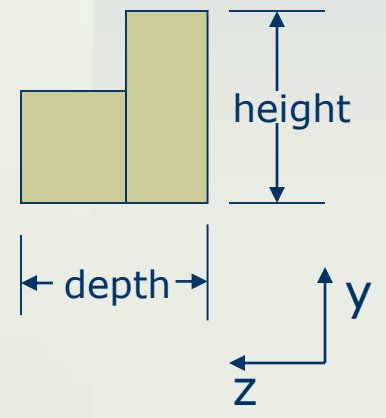
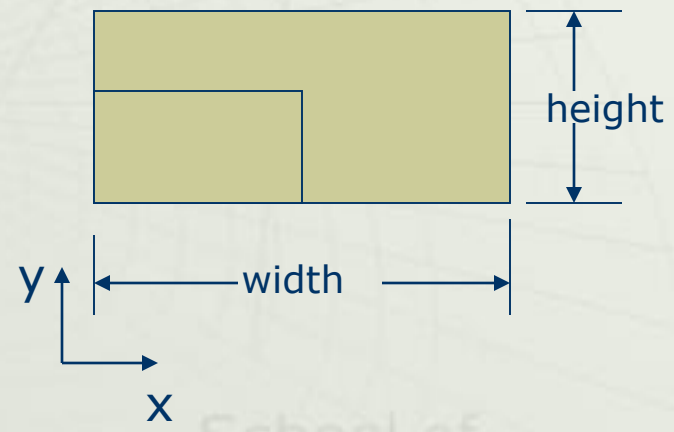
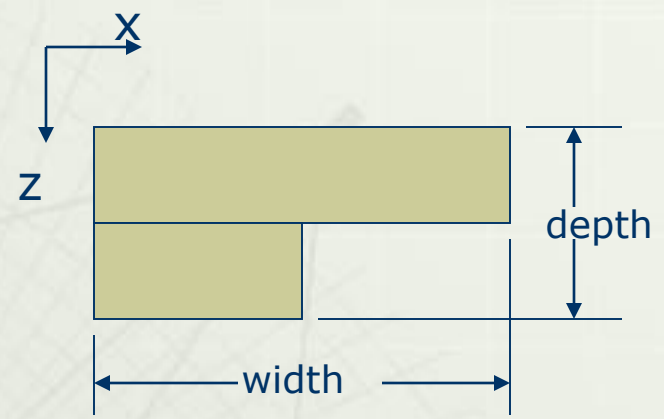
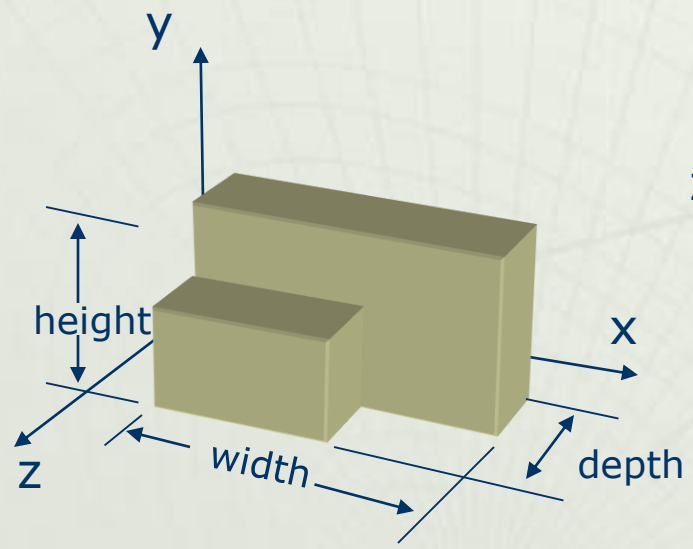


Learning Objectives

- ◆ Identify missing lines in multiview drawings
- ◆ Create an isometric from a multiview
- ◆ Create the missing view given an incomplete multiview

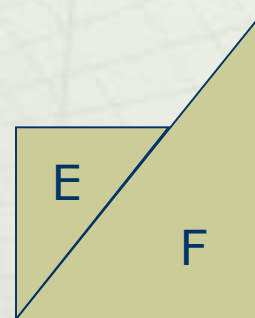
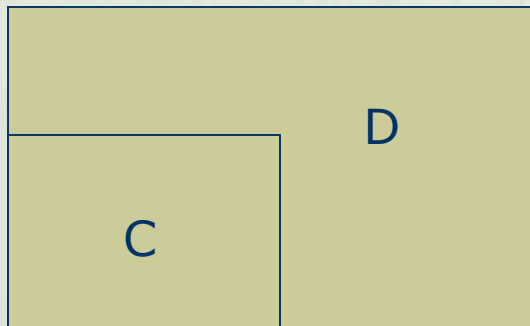
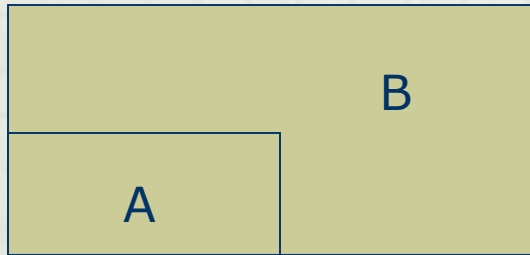


More about Multiviews





Multiview to Isometric



- 1) Label surfaces
- 2) Look at 3 views for curved or inclined surfaces
- 3) Determine how faces relate to each other



Possible Techniques

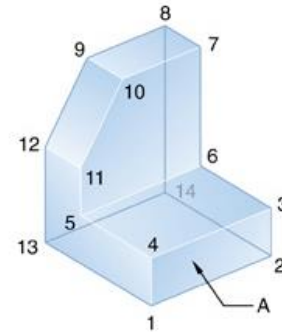
The following examples show possible techniques for creating isometric views from a given multi-view drawing. More than likely, you will use a combination of these techniques while solving one problem.



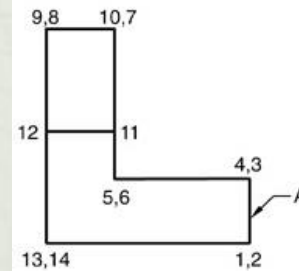
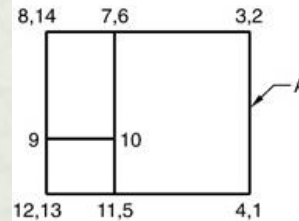
Developing Visualization Skills

Vertex Labeling

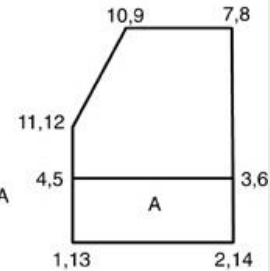
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Top view



Front view



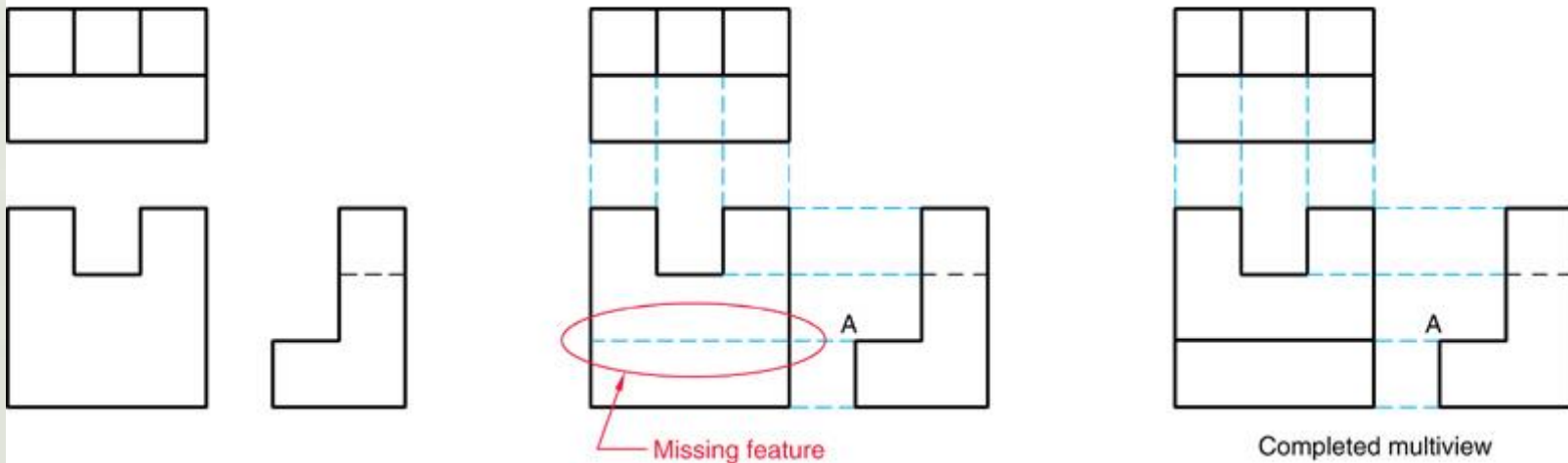
Right side



Developing Visualization Skills

Missing Line exercises

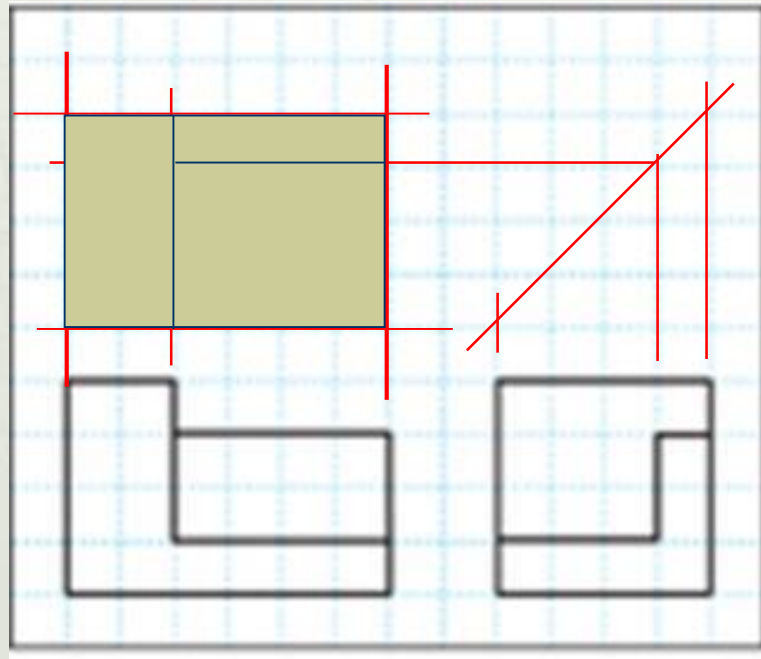
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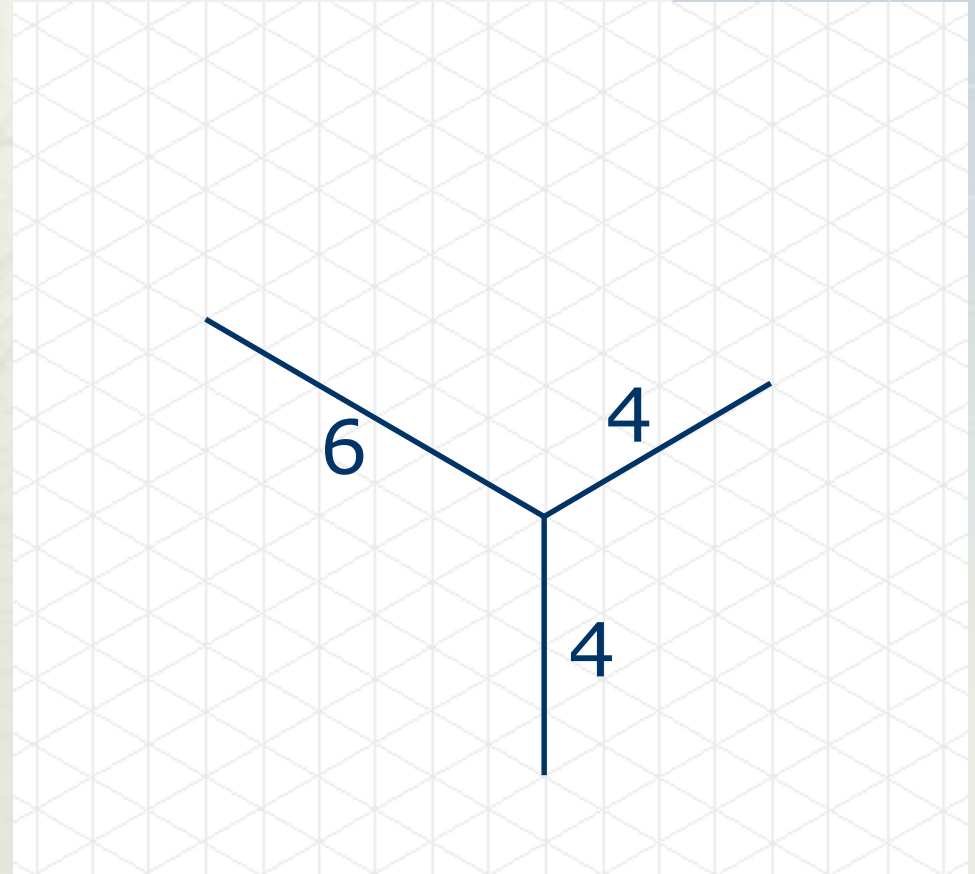
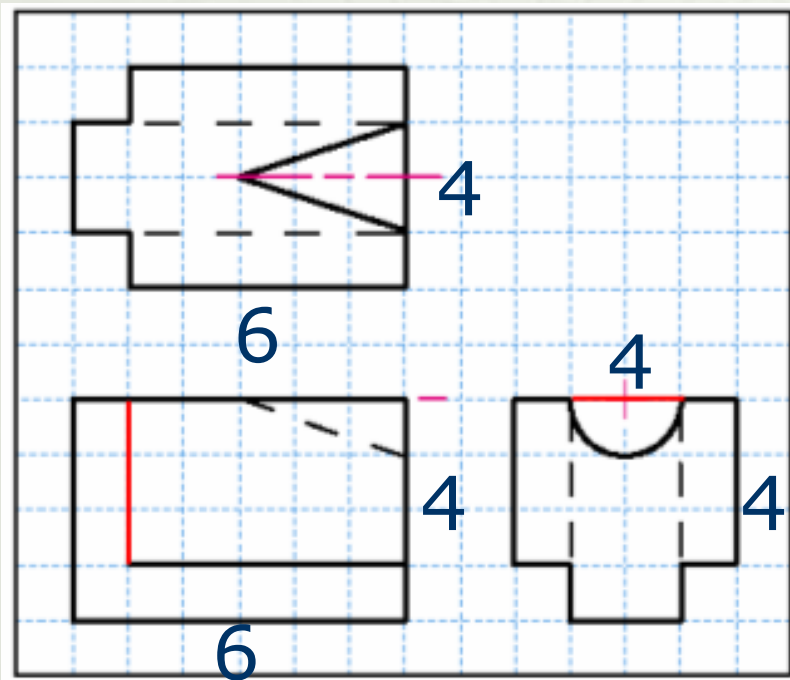
Developing Visualization Skills

Missing View exercises





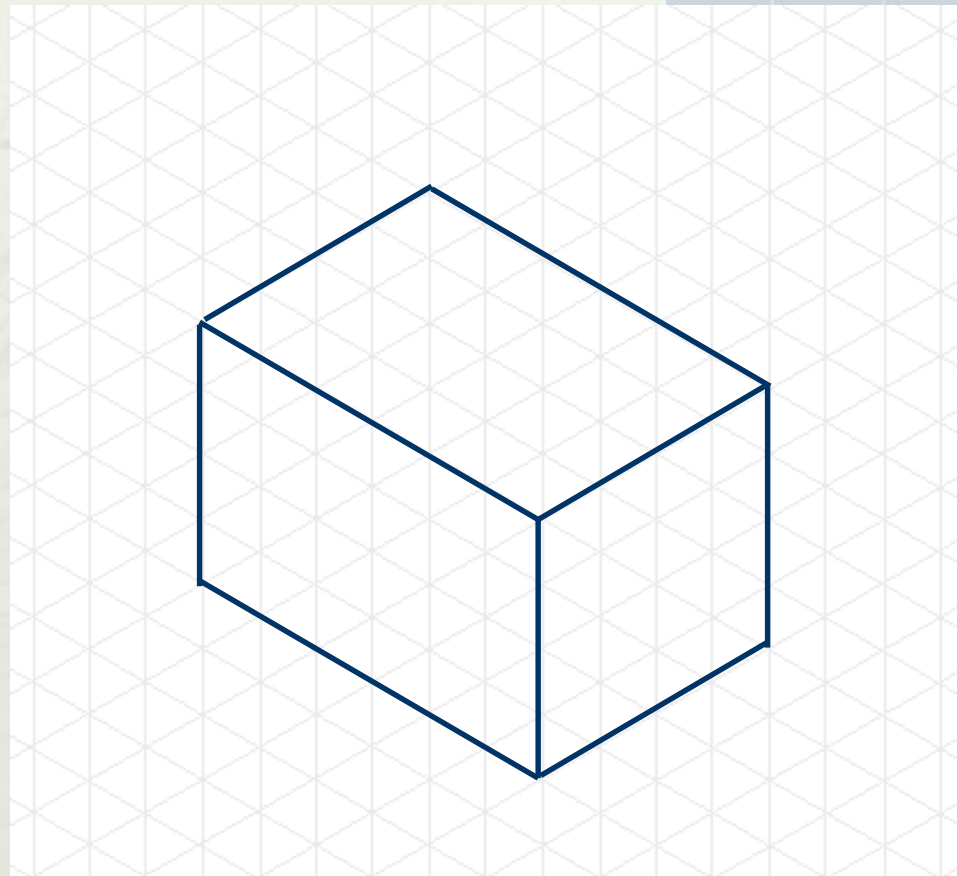
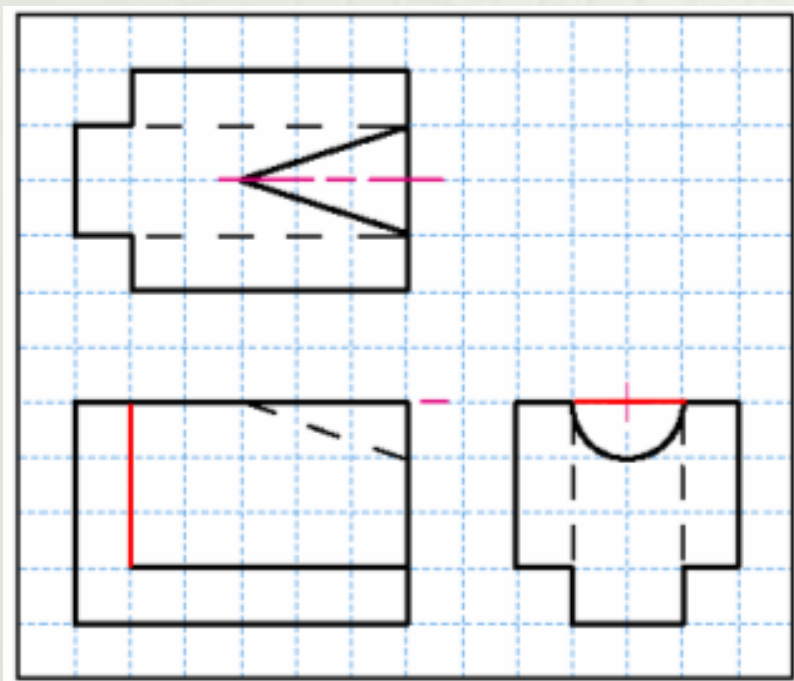
Multi-view to Isometric



This example is more for an exercise in your head.
If you draw this on paper, you may get confused

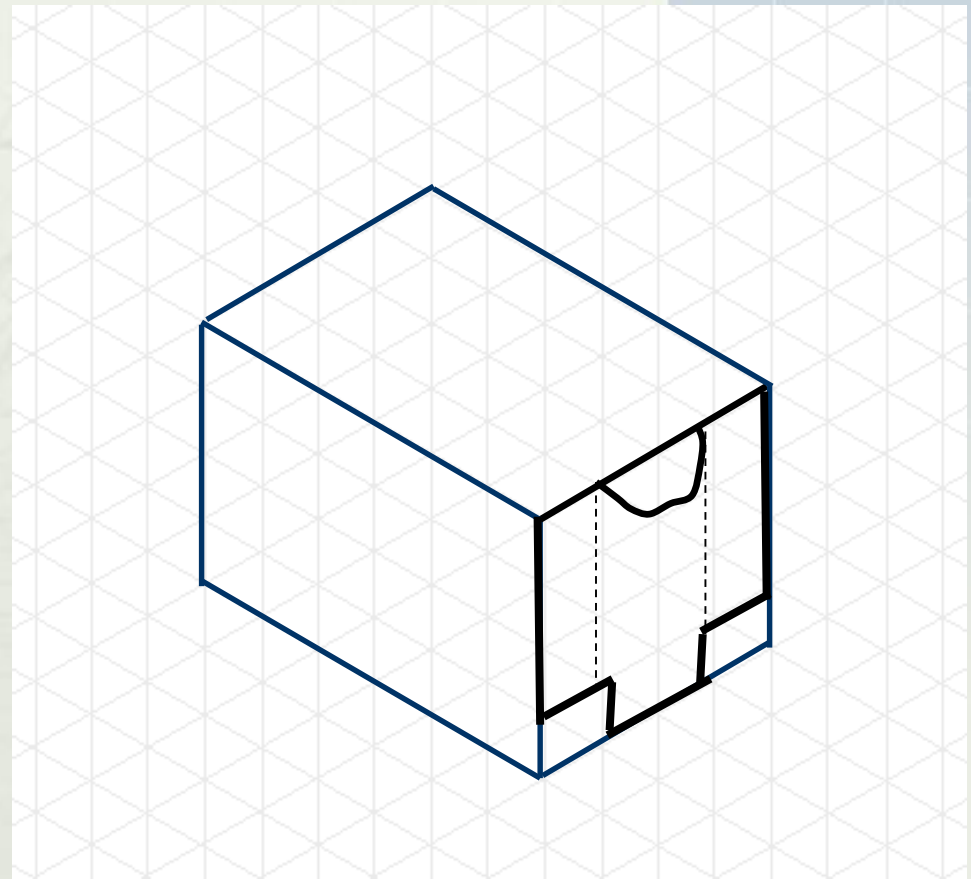
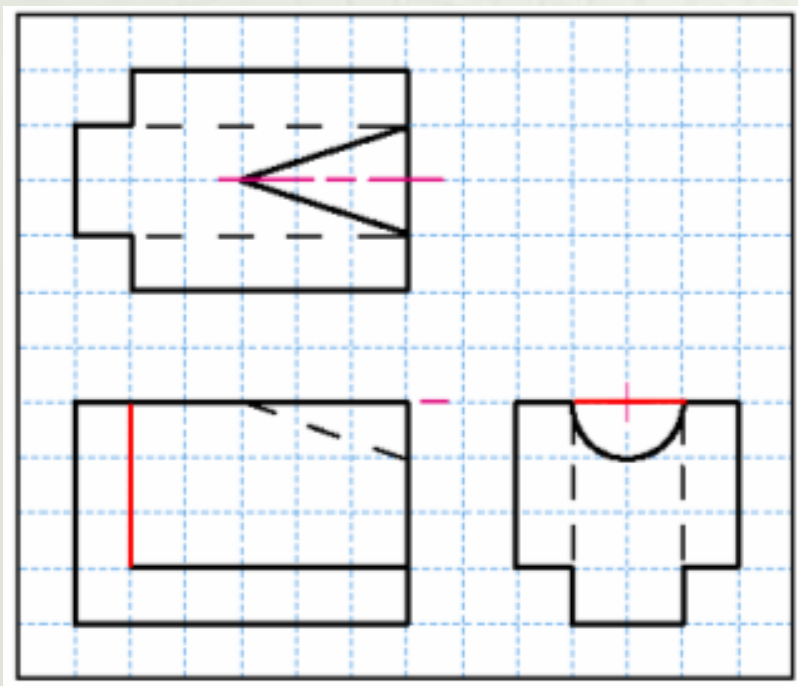


Multi-view to Isometric



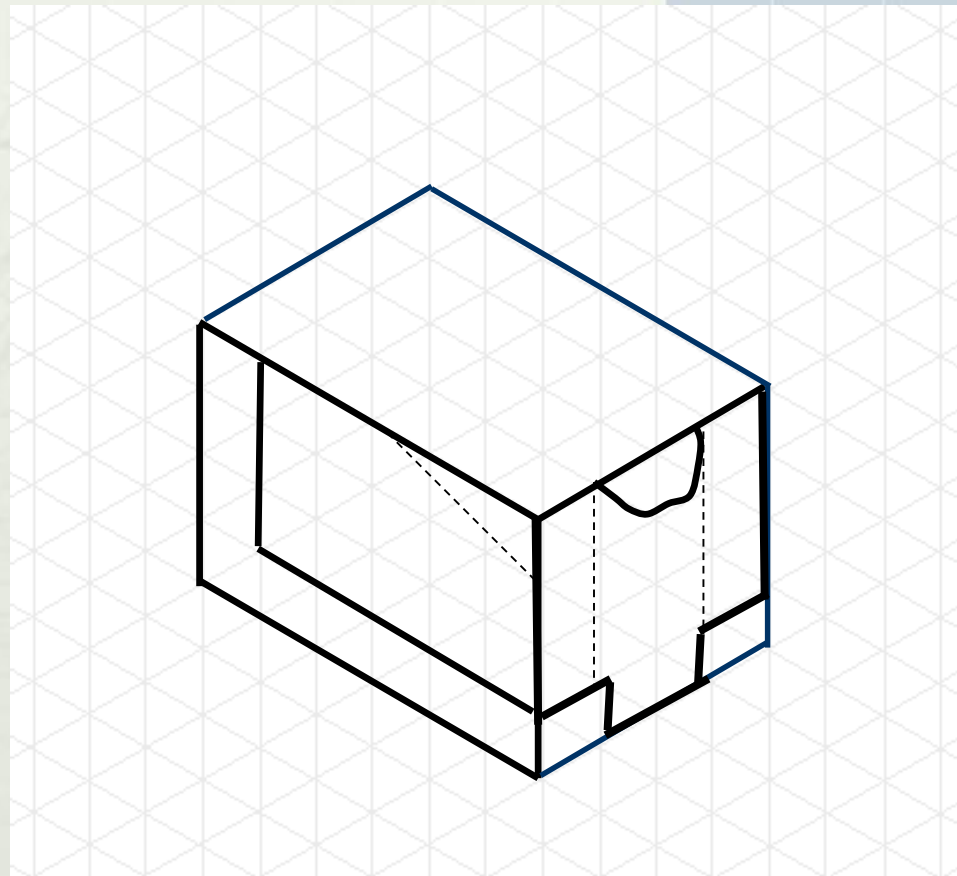
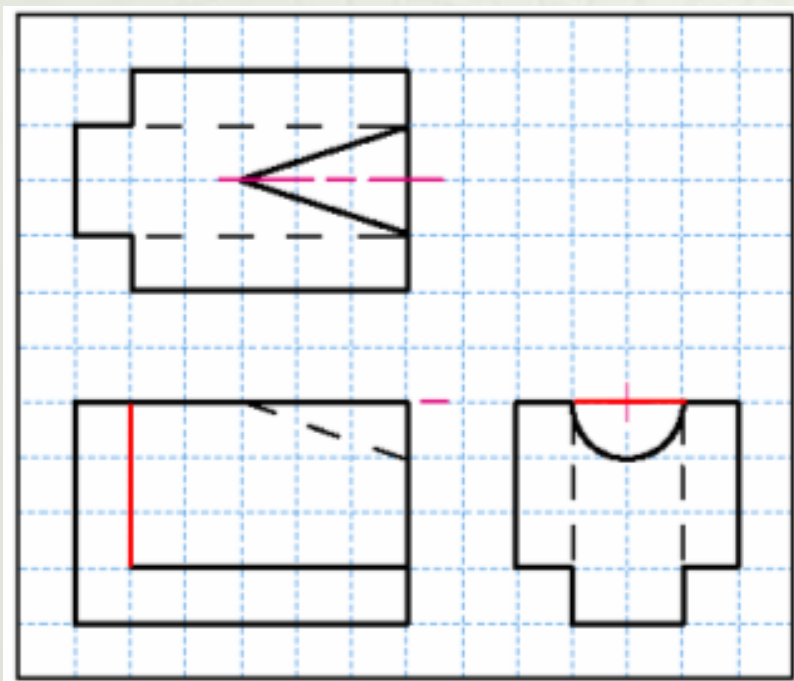


Multi-view to Isometric



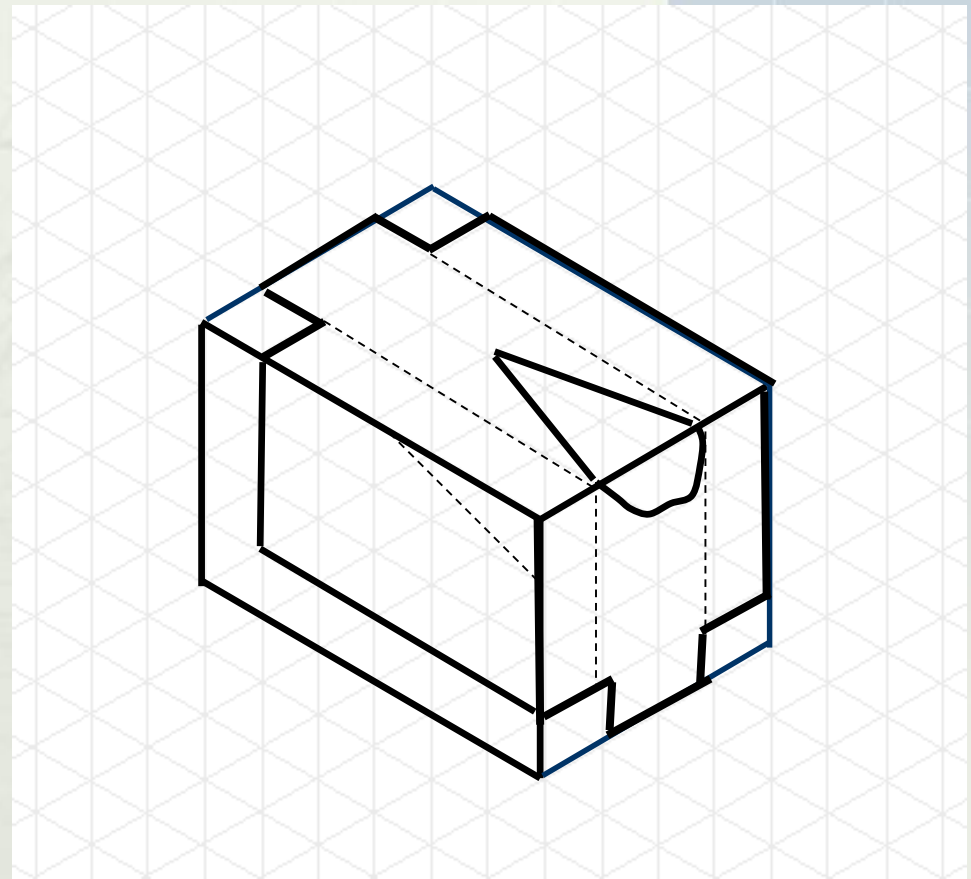
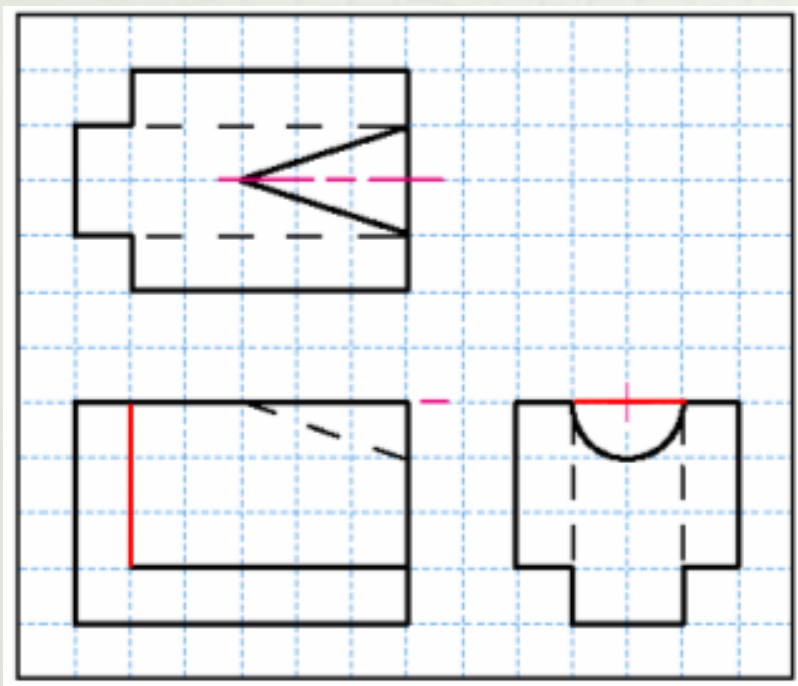


Multi-view to Isometric



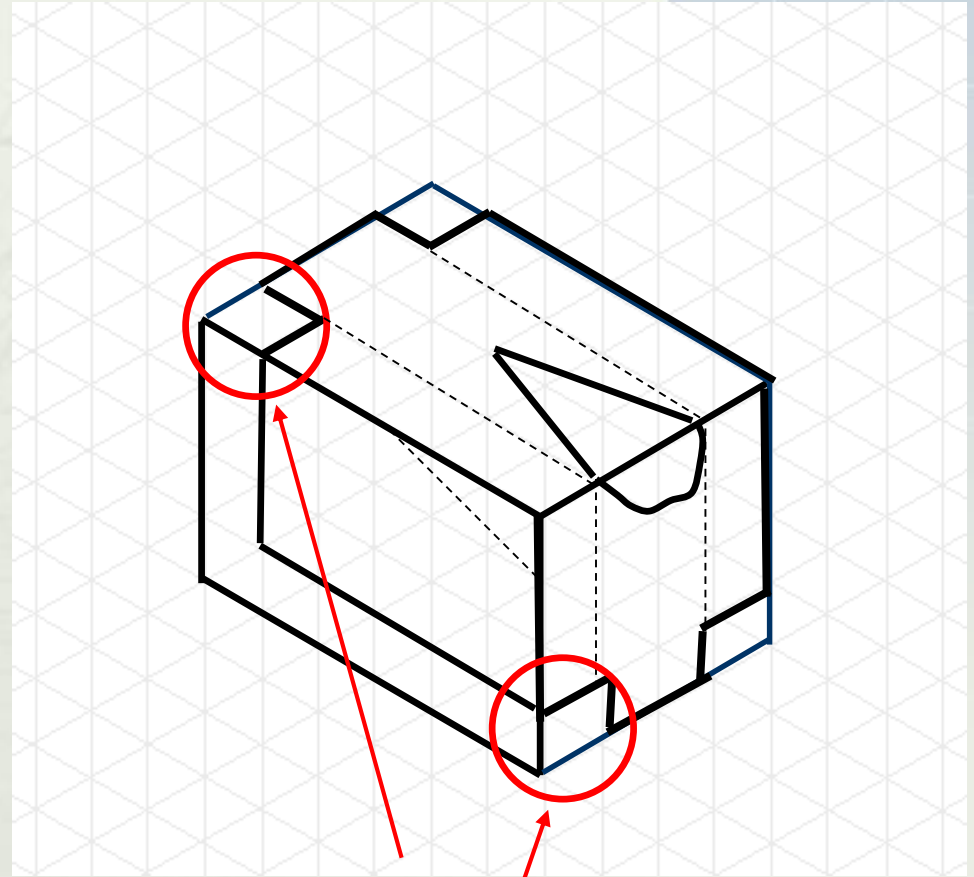
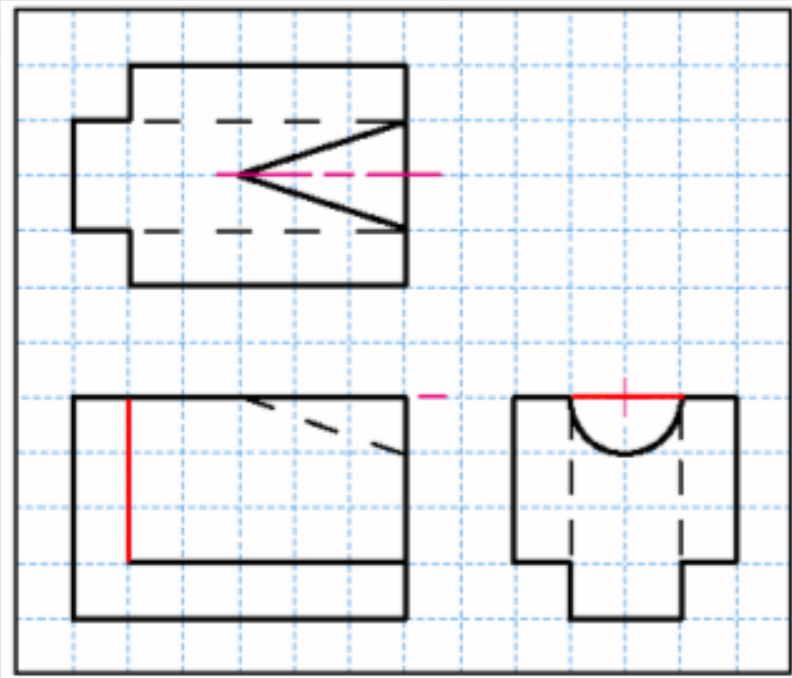


Multi-view to Isometric





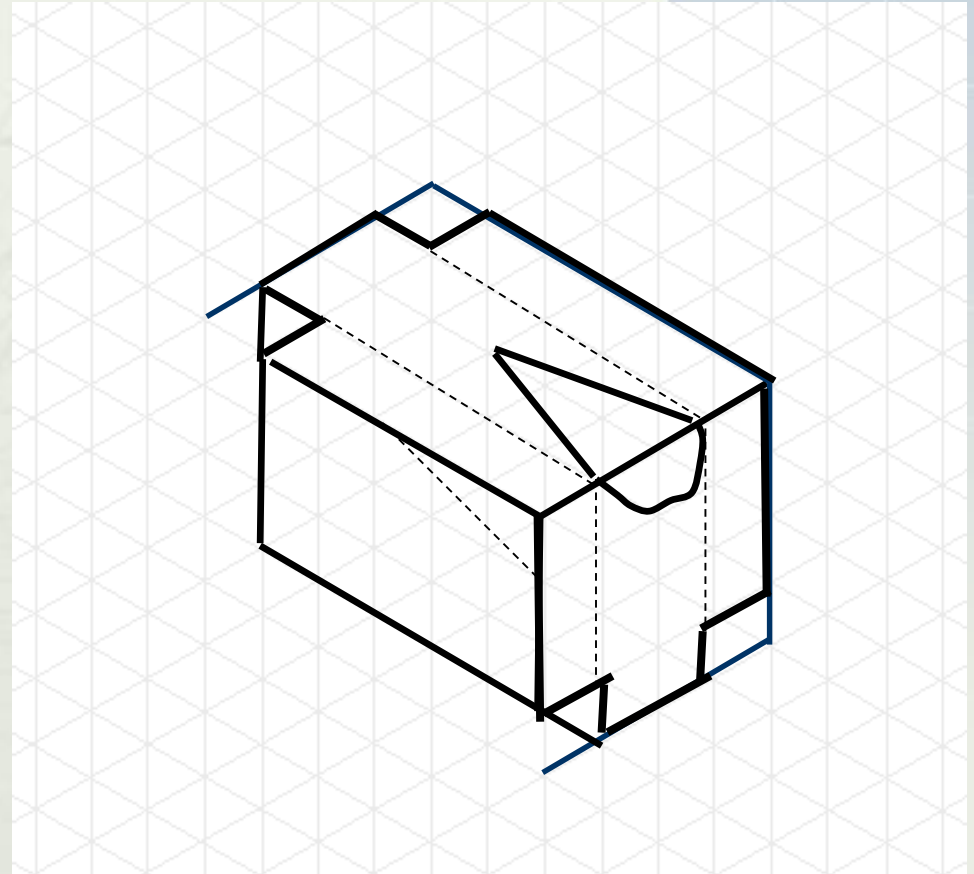
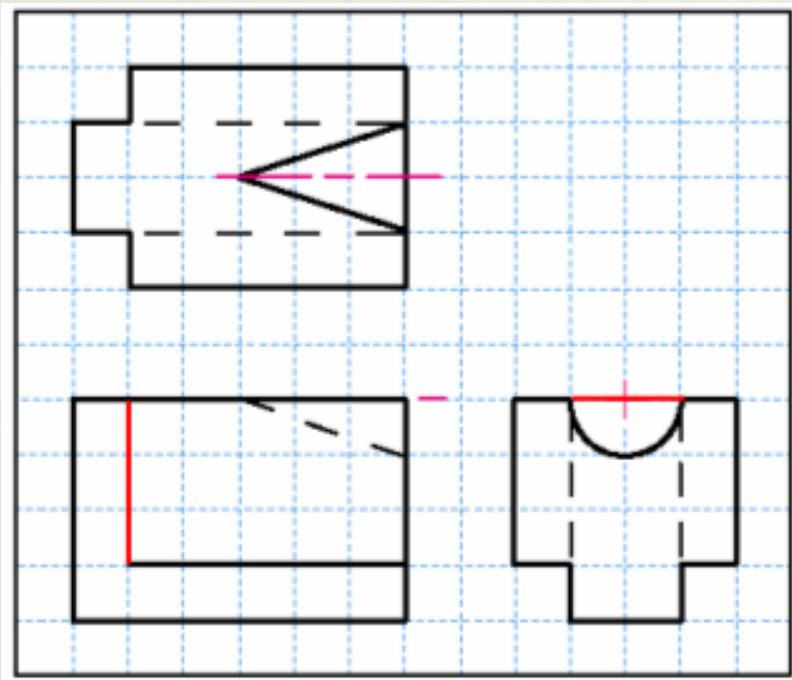
Multi-view to Isometric



Look for contradictions



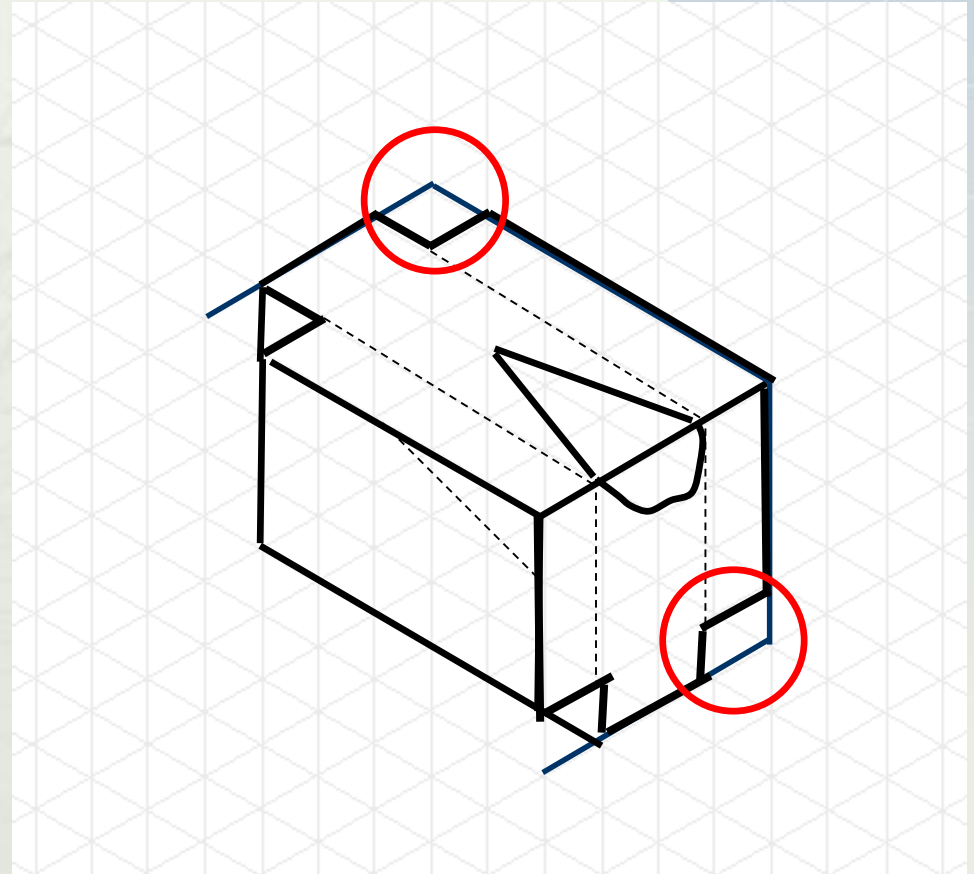
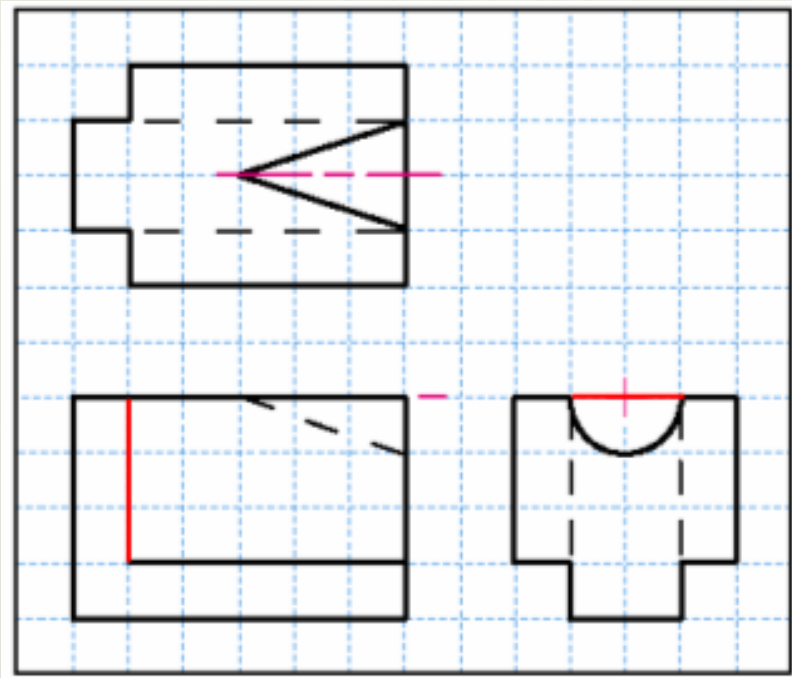
Multi-view to Isometric



Look for contradictions



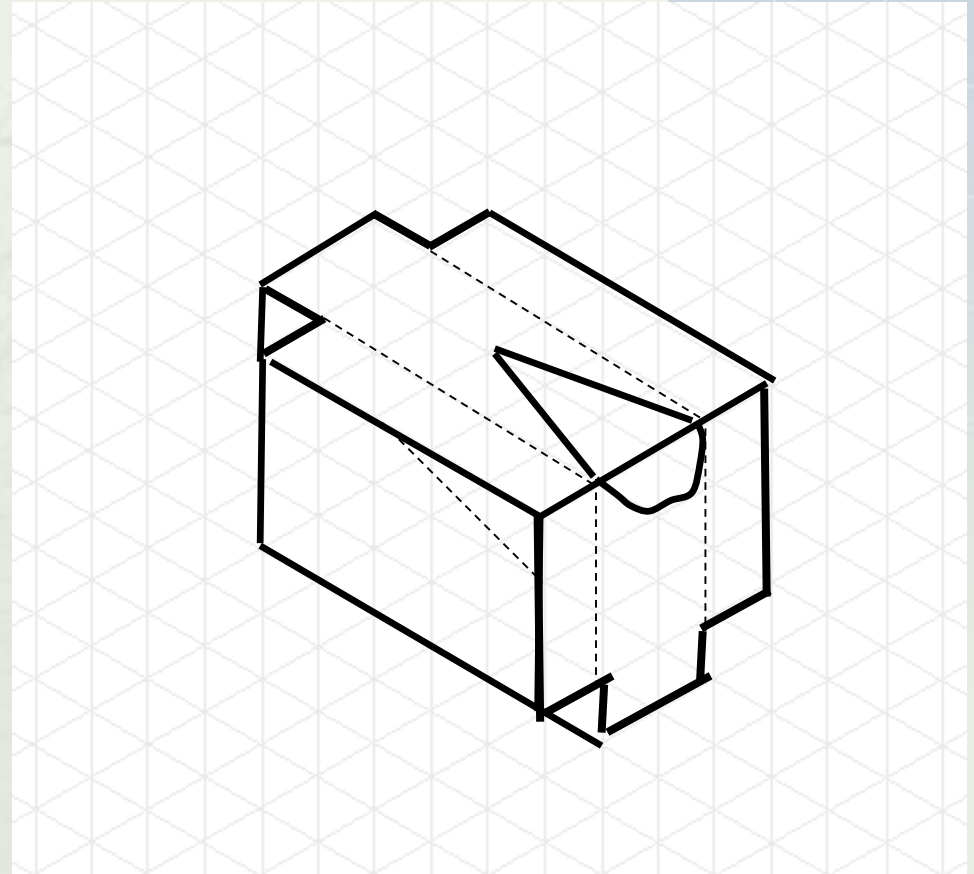
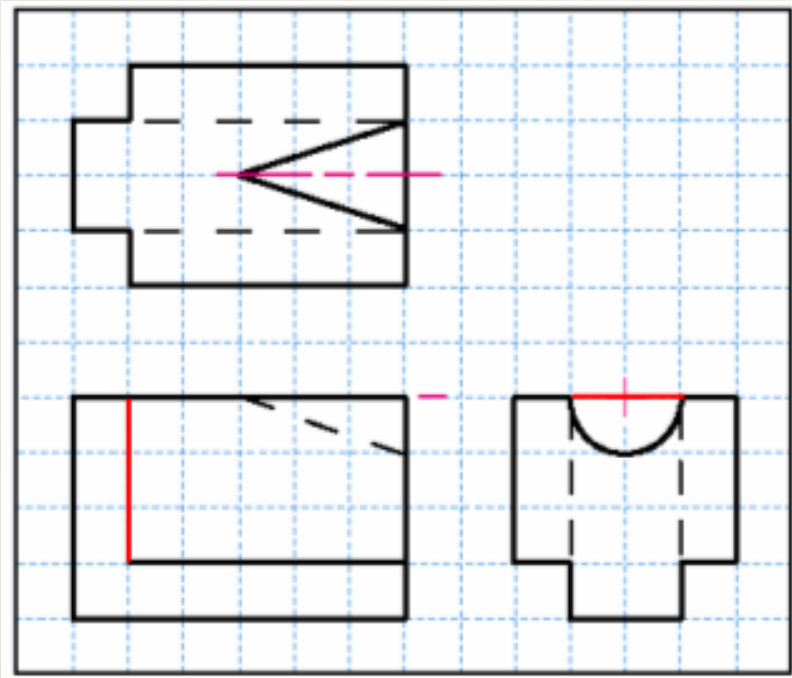
Multi-view to Isometric



Look for things that don't contradict

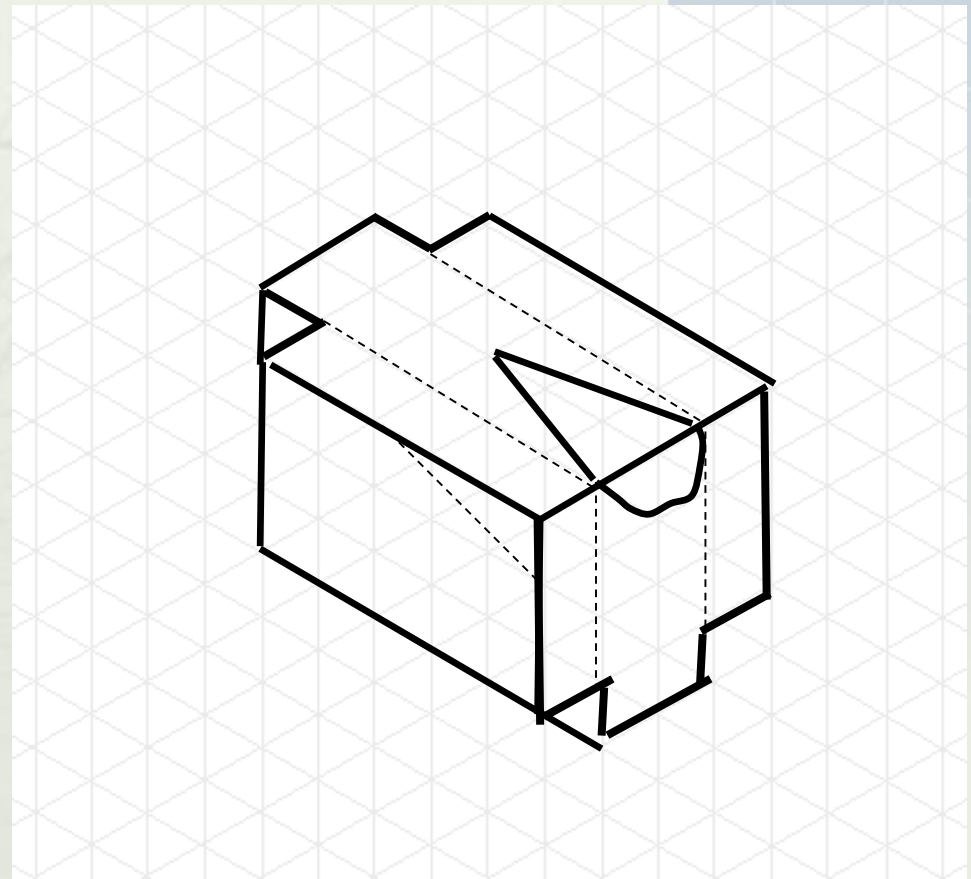
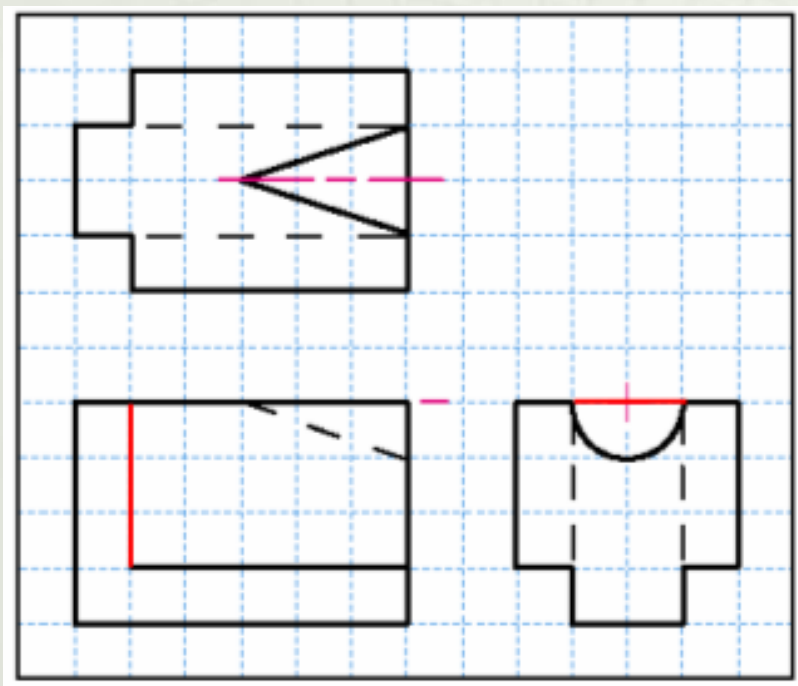


Multi-view to Isometric





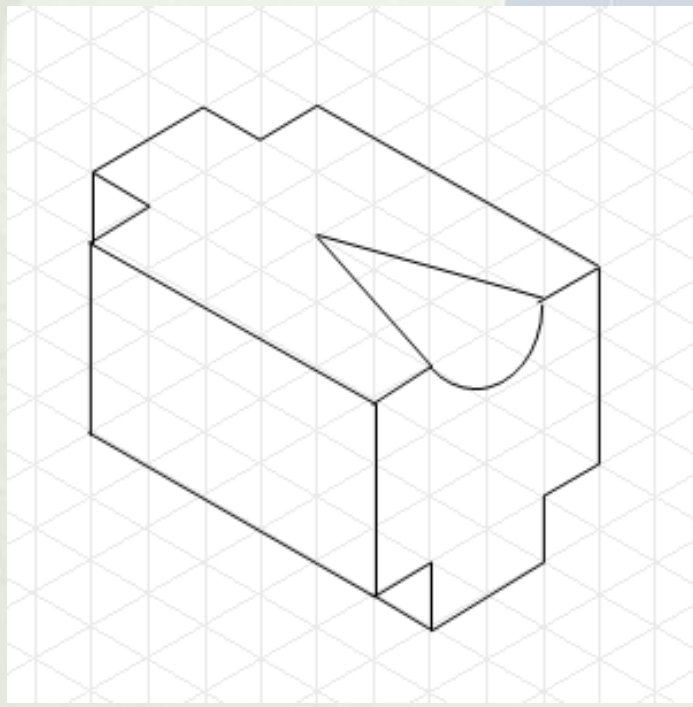
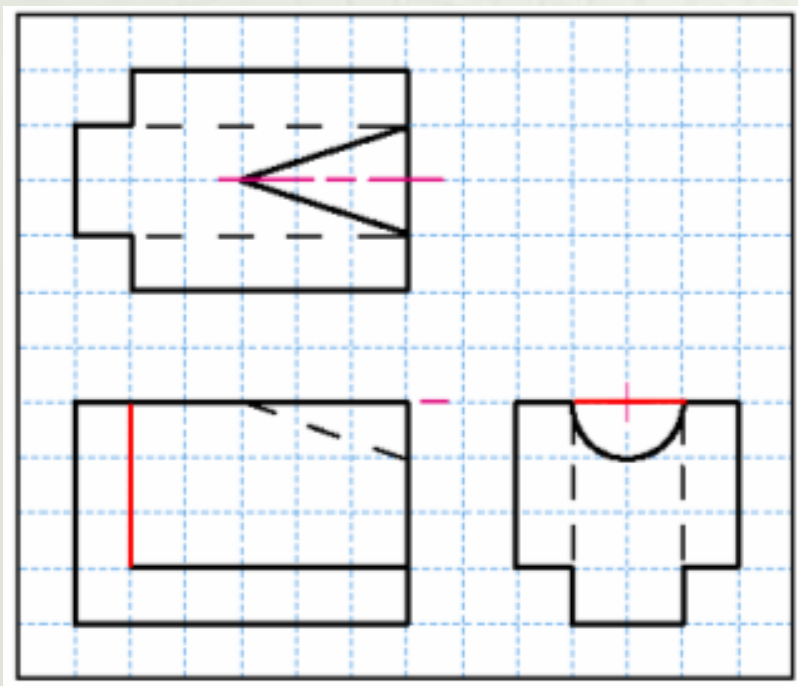
Multi-view to Isometric



Verify any hidden lines, then remove

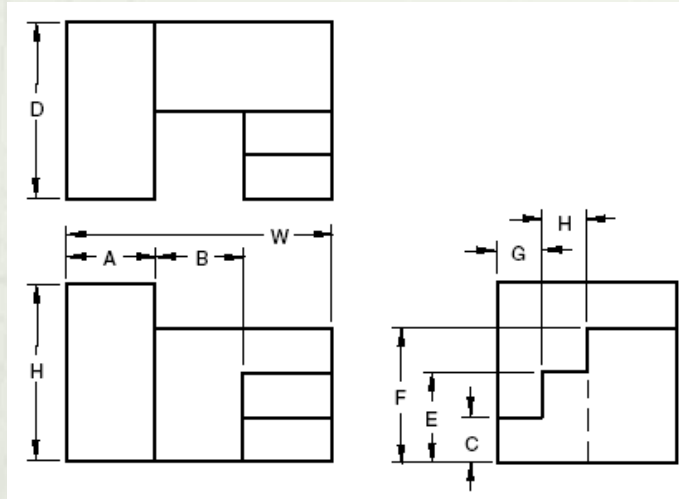


Multi-view to Isometric

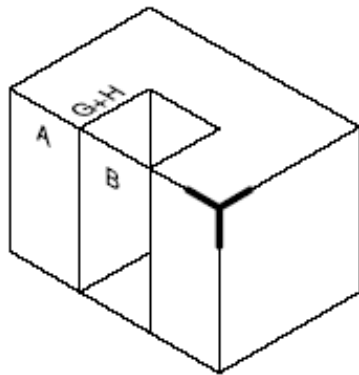




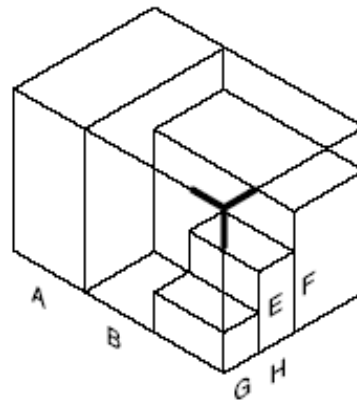
Multi-view to Isometric



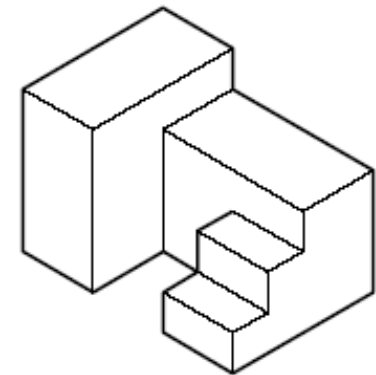
This technique quickly breaks down for objects with a lot of curved and slanted faces.



Step 5



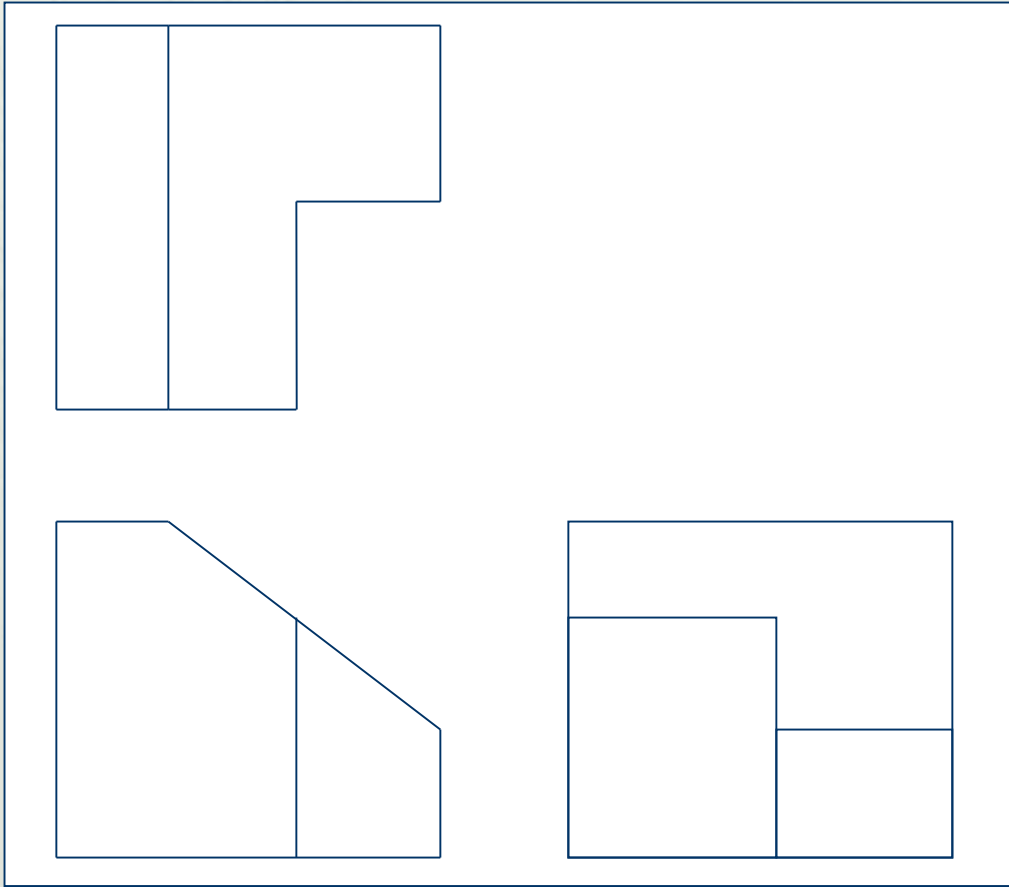
Step 6



Step 7



Multi-view to Isometric





In-class examples

- ◆ Missing Lines
- ◆ Multiview to isometric
- ◆ Incomplete multiview



Next Week

- ◆ Creating Auxiliary Views