Why:

Engineers must be able to visualize an object 3 dimensionally from a 2-dimension drawing. Some people are blessed with this talent, but majority of us must learn tips and tricks. With practice, visualization skills can be improved.

Learning Objectives:

- To know the difference between multiview drawings and isometric drawings.
- Sketch the missing multiview.
- Create an isometric sketch from a multiview projection.
- Be able to correctly sketch inclined planes, circles, arcs and cylinders in isometric form.
- Work on improving visualization skills.

Performance Criteria:

- Missing multiview is sketched correct size and shape.
- Sketched isometric is correct size and shape.
- Circles, arcs, cylinders, inclined planes, and oblique planes are correctly sketched.
- Proper use of line types (Object, hidden, construction, etc.)
- Sketches are done in a neat and professional manner with the correct border and lettering.

Resources in addition to Previous Reading Assignments, Hands-On Web Sites, Other Students, Class Notes, and Instructor:

- SI
- Tutor

Plan:

1. Sketch the isometric on the handout, for each of the problems on handout Activity 2A and 2B. Show ALL construction lines lightly. (1 orthographic grid = 1 isometric grid)
2. Sketch the missing orthographic view.
3. This will be a graded assignment.