

Inventor Assignment #3

Reading Assignment:

Read Chapter 8 in Parametric Modeling with Autodesk Inventor 2013, by Randy Shih

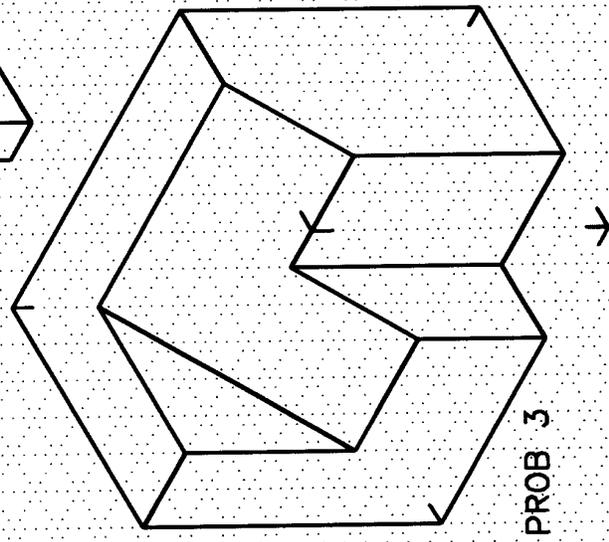
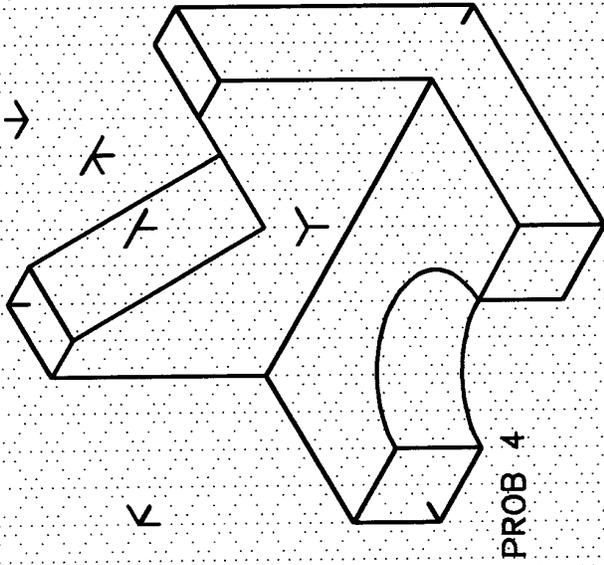
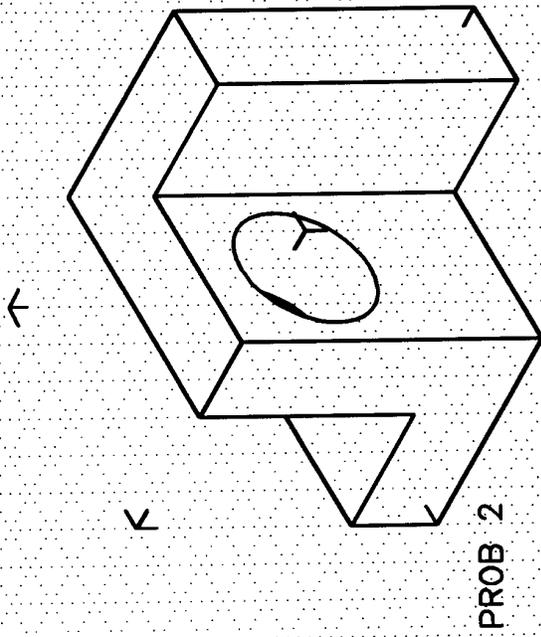
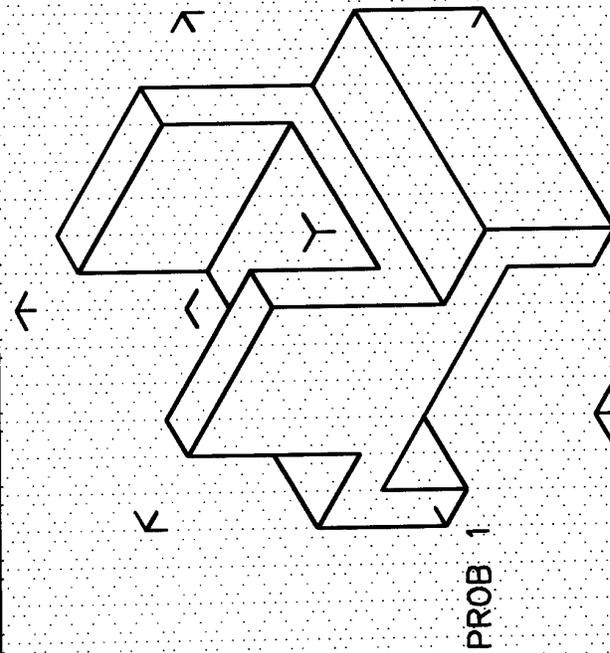
Computer Assignment:

- 1) Create a solid model (a part) of the object shown in Problem 2, Sheet A-2, page D-23, in Engineering Graphics Text and Workbook, Series 1.2, by Craig & Craig (attached).
 - Use the scale 1 square = $\frac{1}{4}$ ".
 - Add sufficient dimensions to clearly define the part.
- 2) Create a 4-view layout (top, front, right, and isometric) drawing file according to the following specifications:
 - Use an A-size (portrait) sheet.
 - Retrieve dimensions from the part into the drawing file. Adjust the dimensions as necessary for a neat appearance.
 - In general, use good dimensioning style (see below)
 - Add centerlines.
 - Add labels for each view (Top, Front, Right Side, and Isometric).
 - Arrange the views such that they are approximately centered within the drawing area.
 - Add text to the title page boxes (use whatever boxes you wish) with the following information:
Your name
EGR 110 – Engineering Graphics
Date
Full scale
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Problem 2, Sheet A-2, page D-23, in Engineering Graphics Text and Workbook, Series 1.2, by Craig & Craig.
 - Print the drawing.

Dimensioning style

Good style in dimensioning will be covered in detail a little later in the course, but for now a few useful rules are presented below:

- Keep dimensions aligned as much as possible
- Neatly space the dimensions
- Avoid inside dimensions
- Avoid driven (redundant) dimensions
- Center the dimension text within the extension lines
- Specify diameter (using ϕ) for holes and radius (using R) for arcs
- Label views (neatly centered under each view)
- Always include the scale for the drawing
- Use centerlines where appropriate



A-2 1. SKETCH PICTORIAL AS GIVEN 2. SKETCH FRONT, TOP, SIDE ORTHOGRAPHIC VIEWS.