

# 3D Model Analysis

Due: December 5, 2002 AD

- 1 Mesh the given Pro/E model using Algor.  
(<http://www.eng.fsu.edu/~ogarcia/EML4930/ProE/HWPpart.zip>).
- 2 Ground the bottom of the model and apply a uniform surface pressure of 80 lbs to the top. Analyze the resultant stresses and displacement. Use Red Oak as your material.
- 3 Ground the bottom of the model again, this time applying a point load of 80 lbs to the center of the top. Analyze the resultant stresses and displacement. Use Red Oak as your material.
- 4 Print out a report for both Parts A & B and explain the differences in the displacements and stresses between a point load and a distributed load on a surface.