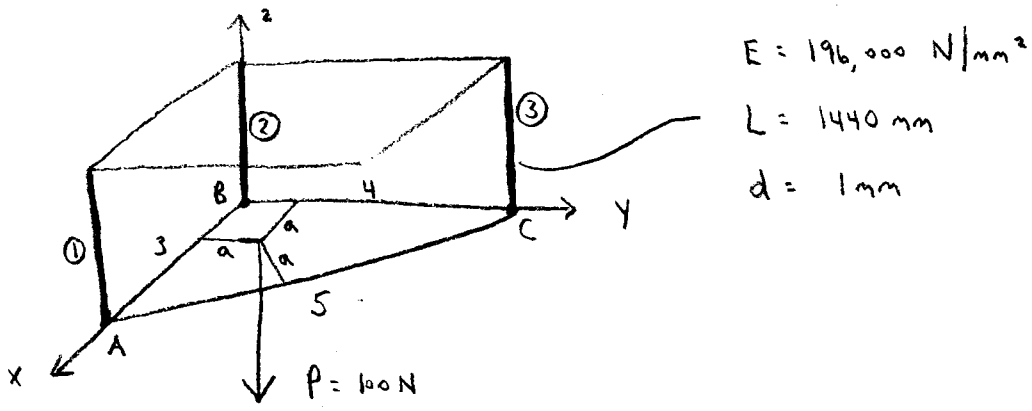
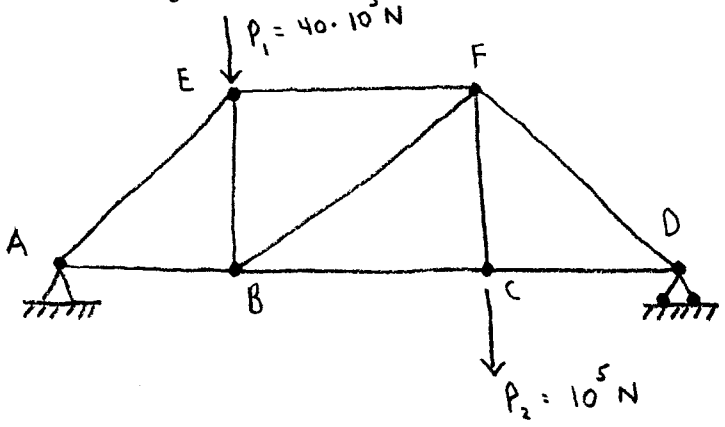
MAE 415 – Analysis of Structures
Instructors: Bloebaum/Hulme
Assignment #8
Due date: 10/27/00, BEFORE class begins
Class web page: http://www.eng.buffalo.edu/~clb/mae415.html

1. Given: A rigid triangular plate (3:4:5) suspended from a horizontal plane by 3 vertical wires. Find: Deflection at point of application of a load P which is equidistant from the 3 sides of the plate.



2. Given: A statically determinate 9-bar truss, supported by a pin joint at the left end, and a horizontal roller at the right end. Find: the vertical deflection at joints B and F, and the horizontal deflection at joint D.



3. Given: A planar pin-jointed truss under a system of loading (for which F14 = 0.7A Newton's). Find: Temperature change in member 14 required to reduce F14 to zero.