

**10.34. Numerical Methods Applied to Chemical Engineering**  
**Fall 2005. HW # 3. Nonlinear algebraic systems**  
**Due Wednesday 9/28/2005. 9 am**

Again, you are to submit your work electronically to the MIT server. Submit a MS-Word document *username\_HW3.doc* with a description of your work. The names to use individual programs are found in the problem statements below. All problems are from chapter 2 of the text.

1. Solve problem 2.A.1. by hand, and then by MATLAB (problem 2.A.2). Have your program print the solution to the screen, and name it *username\_P2A2.m*.
2. Solve problem 2.B.2 by writing a program *username\_P2B2.m* that makes the necessary plots.
3. Solve problem 2.B.3 by writing a program *username\_P2B3.m*.