AME 538
Homework 32
Due: Wednesday, 11 December 2002, in class

1. Solve the Blasius boundary layer problem as set up in the course notes by some means (fortran, matlab, maple, mathematica,...) and plot $f'(\eta)$. Give full analyis for reducing the partial differential equations to ordinary differential equations.

2. Solve the flat plate thermal boundary layer problem as set up in the course notes and plot $T(\eta)$. Only focus on the numerical solution and not equation derivation.

3. Solve the same flat plate thermal boundary layer problem with a new boundary condition, $T(\infty, t) = \frac{1}{2}T(0, t)$.