CS514 Fall '00
Numerical Analysis
Homework 3
Due date: Oct 24, 2000 (before class)

1. Answer the following questions from your text in Chapter 3:
   Problems: 1, 6, 7, 8, 10, 35.

2. Machine Assignments: 1.

3. Compute integral of $f(x) = e^{-x}$ over the interval [0,1] using trapeziod rule as well as gaussian quadrature. Divide the interval into 10 parts ($h = 0.1$). For the gaussian quadrature, use 3 point quadrature. In each case, compute the error with respect to the analytically computed result.

4. Answer the following questions from your text in Chapter 4:
   Problems: 7, 21, 22, 35.

5. Machine Assignments: 1.