Math 444/544 **Fall 2008**
Homework 1, due Friday 12 September.

1. (20 points) Do this problem as a Good Problem, paying attention to the *Layout* handout. You are encouraged but not required to LaTeX your good problems. See the back of this sheet for a description of the Good Problems. (444 students must, of course, do this problem individually.)

   Write your mathematical autobiography. Include your background, current interests, future goals, why you are taking this class, and whatever else is relevant or interesting. Target length is 2 pages.

2. (15 points) Explore Wikipedia, starting at
   `http://en.wikipedia.org/wiki/Numerical_analysis` .
   Read the editing instrctions at
   `http://en.wikipedia.org/wiki/Wikipedia:How_to_edit_a_page` .
   Practice editing something at
   `http://en.wikipedia.org/wiki/Wikipedia:Sandbox` .
   Write down five things you learned.

3. (10 points) Find a place to use MATLAB. Write a function program to do something trival, and run it. Print the program and the result of running it. (If you need help, see
   `http://www.math.ohiou.edu/courses/math344/lecture2.pdf` .)

4. (15 points) Section 1.1 problem 6.

5. (15 points) Section 1.1 problem 12 parts a and b.

6. (15 points) Section 1.2 problem 4.

7. (10 points) Explain what happens if you run the following MATLAB commands, and why.

```
format long
for i=1:30
   x=10^i+pi
   mypi=x-10^i
   error=(pi-mypi)/pi
end
```