Math 100 — Assignment 5 (MATLAB), due Sept. 18, 2012

You may again submit a diary file of your work session. However, if you write or use any M-files, please submit them as well so that I can reproduce your work.

All problems are taken from our textbook *Experiments in* MATLAB.

1. Do Exercise 2.4 (Backslash). Note that you need to use the value `phi = (1+sqrt(5))/2` for ϕ. In addition to the system mentioned in the book, also solve the system

$$c_1 \phi + c_2(1 - \phi) = 1$$
$$c_1 \phi^2 + c_2(1 - \phi)^2 = 1$$

which corresponds to the discussion in the slides.

What is the formula for f_n in each of the two cases? How do you explain the difference?

2. Do Exercise 2.6 (Execution time).

3. Do Exercise 2.8 (Slower maturity).

4. Do Exercise 3.9 (Your birthday). Refer to the "Friday the 13th" section and `http://www.mathworks.com/moler/exm/exm/friday13.m` for guidance.