EE318 Fall 2005  
MATLAB Assignment

Due at the start of the final exam, on Wed 14 November, 2005.

Analyze and compute the response of the circuit of problem 2.8 in the text, using MATLAB.

Each of you has unique values for the components in the circuit:

- Marcus,  \( R = 3 \, \Omega \), \( L = 3 \, \text{H} \)
- Josh, \( R = 4 \, \Omega \), \( L = 3 \, \text{H} \)
- Sushila, \( R = 6 \, \Omega \), \( L = 2 \, \text{H} \)
- Daniel, \( R = 4 \, \Omega \), \( L = 2 \, \text{H} \)

(Yes, those are very big inductors, and very small resistors. This is a theoretical exercise. Go with it.)

Turn in a written solution, including at least the following items:
- a plot of the output, \( y(t) \), and \( Y(\omega) \) when the input is given by \( x(t) = u(t) \)
- a plot of the output, \( y(t) \), and \( Y(\omega) \) when the input is given by \( x(t) = u(t) - 2u(t-1) + u(t-2) \)
- The scales on these plots should clearly show how big the signals are, and the plots should run from a time of 0 until the output “stabilizes.”
- all ".m" source files, and/or the text commands that you entered to generate these results.