

# Homework #1

## 1 Problem 1

Use Matlab/Simulink to simulate the following system

$$\ddot{x} + 0.1\dot{x} + x^5 = 6\sin(t)$$

for two set of initial conditions

$$x_0 = 2, \dot{x}_0 = 3$$

and

$$x_0 = 2.01, \dot{x}_0 = 3.01$$

## 2 Due Date

March 1, 2004