**ENEL471 – Lab 1 - Prelab**

**Exercise 1)**

Q1) The total number of cycles is 1024/50 = 20.48 cycles

Q2) The sampling interval is 0.05/50 = 1.0e-03 seconds/sample

Q3) The sampling rate is 50/0.05 = 1000 samples/second

Q4) The sampling rate is the inverse of the sampling interval.

**Exercise 2)**

Q5) The Mean Sim is -0.35916. The STD Sim is -1.3663

Q6) The percent error of STD Sim is -3.3875%

Q7) The percent error can be decreased by increasing the number of samples

Q8) Max = 8.3805, Min = -7.4485

**Exercise 3)**

