EE 43 and EE 100
Pre-Lab: RC Filters and Simulation/Instrumentation Software

Name: _____
GSI: _____
Time/Date: _____

1. In this lab you will explore the two RC filters shown in the Description and Background section of the Experiment Guide. Derive equation (1) for the magnitude of the transfer function for the filter of Fig. 1. (You may find the "Quick Introduction to Phasor Analysis for the RC Filter Lab" on the class web site to be a useful overview of the use of phasors.)

2. If the ordinary frequency, in Hz, for a sinusoidal signal is 100 Hz, what is the corresponding angular frequency, ω, of that signal (both magnitude and units)?

3. What will be the frequency range you choose to plot the transfer function in order to see the filter feature (low-pass filter or high-pass filter)? How do you determine the range?