EE 230 — HW 2.23 Name_____

a) Design a passive first-order high-pass filter using resistors and a capacitor. The filter should have a corner frequency at f_c = 2.9 kHz a high-frequency gain G_o = 0.6. Use component values that are available in your lab kits. Sketch a clean and legible circuit diagram with component values labeled. Below that, show your design calculations.

b) Confirm your design with a SPICE (PSPICE or LTSPICE) frequency response simulation. In the simulation, use a frequency range of 10 Hz to 1 MHz. Plot the magnitude and phase of the output over this range.

Write your answers — and whatever work will fit — on this sheet. Staple any sheets with additional work behind.