## 11.4.1: Passive Low Pass Filter (45 points)

1. Attach to this worksheet a sketch of the straight-line approximation to the Bode plot for the circuit of Figure 1 if R = 2.2kΩ and C = 100nF. (5 pts)
2. In the space below, sketch the circuit of Figure 1 with measured values for the resistances and capacitance (if available). (3 pts)
3. In the space below, tabulate the input frequencies and the magnitude response of your circuit (in decibels) at each of these frequencies. (Note: feel free to include additional data in your table. It may result in partial credit.) (10 pts)
4. **DEMO**: Have a teaching assistant initial this sheet, indicating that they have observed your circuit’s operation. (4 pts total)

**TA Initials: \_\_\_\_\_\_\_**

1. Attach to this worksheet an image showing the output of the Network Analyzer window. (8 pts)
2. Attach to this worksheet a plot showing the Network Analyzer data overlaid with the tabulated data from part 3 above. (10 pts)
3. In the space below, comment on the agreement between the agreement between the data acquired in part 3 and the data acquired with the Network Analyzer in part 6. Also comment on the agreement between your expectations based on your pre-lab analysis and both sets of data. (5 pts)