ELG4139 Lab 1: Operational Amplifier Characteristics

Objectives: To study the characteristics of a voltage follower.

Case 1: Voltage Follower (Multisim and Hands-on)

1. Calculate v_{out} with the switch open (no load) and with the switch closed (500 Ω) for the following circuit.
2. Repeat the calculation using a voltage follower as a buffer between the voltage divider and the 500 Ω.
3. Build the circuit and repeat 1 and 2.
4. What effect does the simulation predict if you lower the load to 4 Ω?
5. What happens with a 500 Ω load at 1 MHz? Explain