

Pre-Lab Experiment 2
ECE203 Spring 2025

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1. (2 points) To determine source impedance, why shouldn't we hook up the circuit in Figure 2.2?

Because it will be Striked an arc and damage the terminal.
It will also damage the battery in the process

2. (2 points) Why do we use a switch in this lab?

This can make us quickly connect and disconnect equipment without having to turn on/off or re-wire part of circuit

3. (2 points) Why don't we use a 10Ω resistor from your regular parts kit?

It will overheat quickly

4. (2 points) In Section 2.6, we build a circuit designed to measure 240V. What voltage do we actually use in the lab, and why?

Instead of using 240V, we will apply $2.4 V_{rms}$

from our function generator, therefore we can safely to test our circuit

5. (2 points) In Section 2.6, why do we use such large resistances for our voltage divider?

Prevent excessive current draw

Also reduce power dissipation.