Prerequisites: The class will build on concepts from Circuits I and II.

A key skill for success in the course is the ability to analyze electronic schematics (circuits).

Primarily containing these three components:

1. **Voltage Source.**
2. **Current Source.**
3. **Resistor.**
4. **Some Basic Capacitor and Inductor.**

***. We will add others as the semester progresses.**

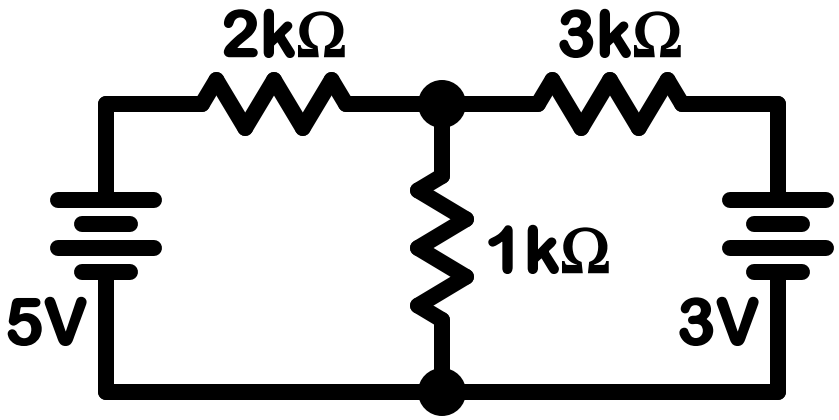
Given a circuit – you should be able to:

1. **Identify voltages and currents.**
2. **Determine component values to obtain voltages and currents.**
3. **Find transfer functions.**

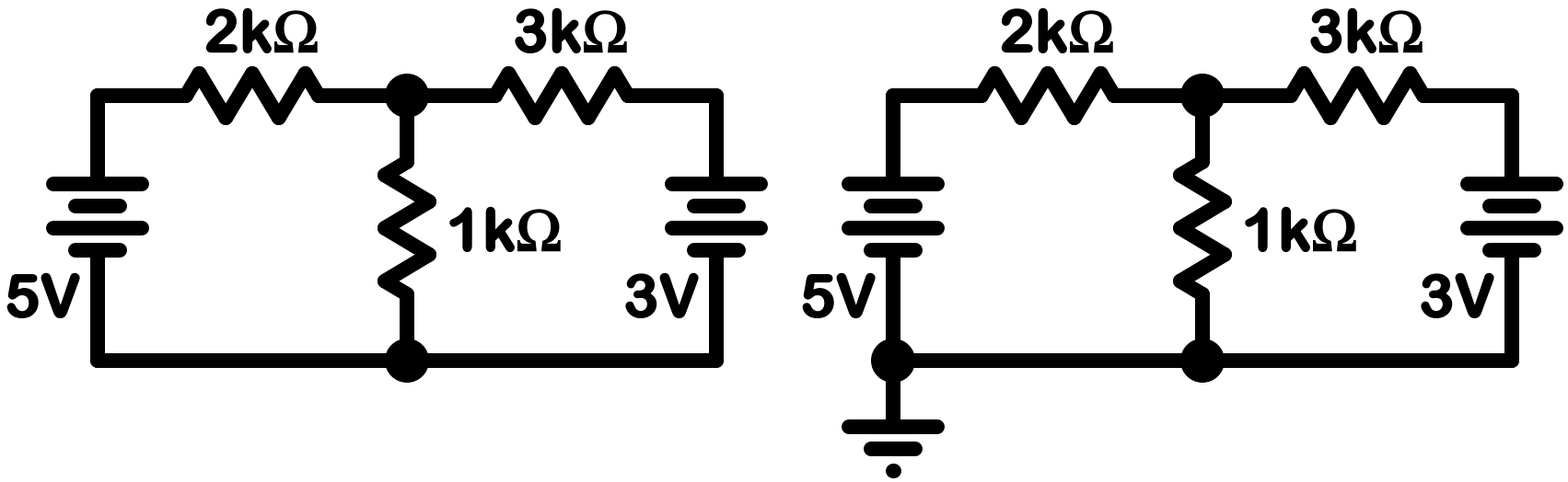
Need to be capable of conducting both Mesh and Nodal Analysis.

Mesh: Currents are unknowns – use KVL to build a set of equations.
Nodal: Voltages are unknowns – use KCL to build a set of equations.

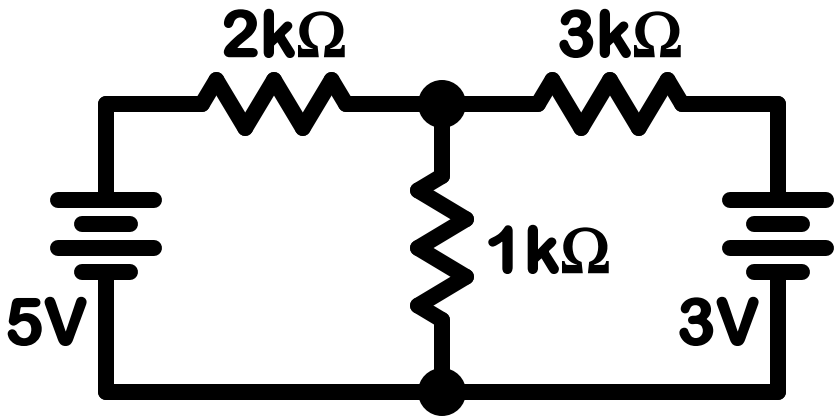
Example Circuit:

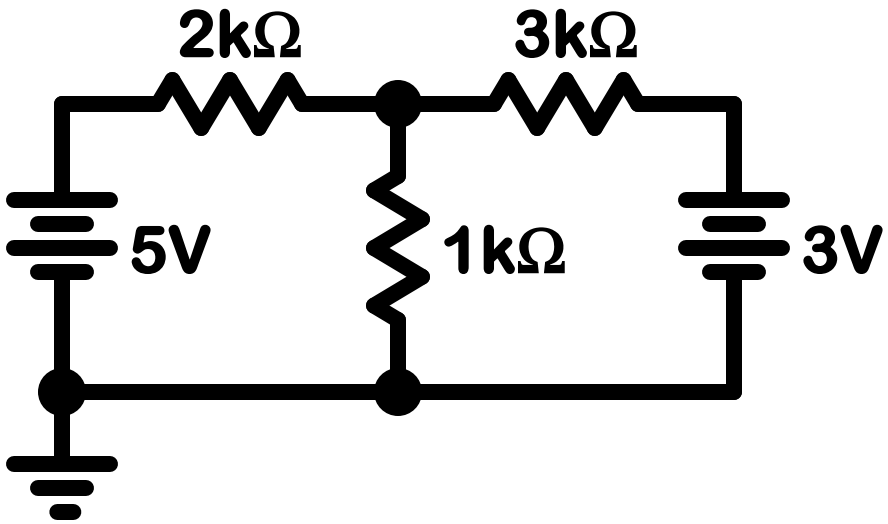


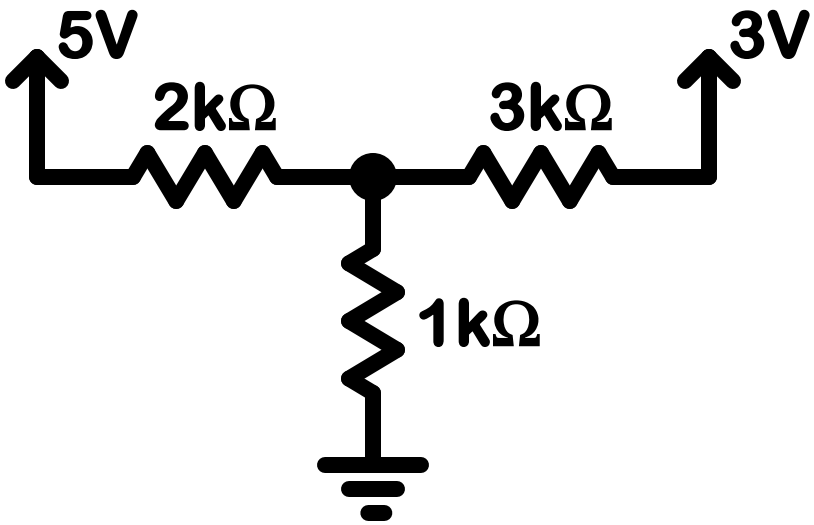
Example Circuit:



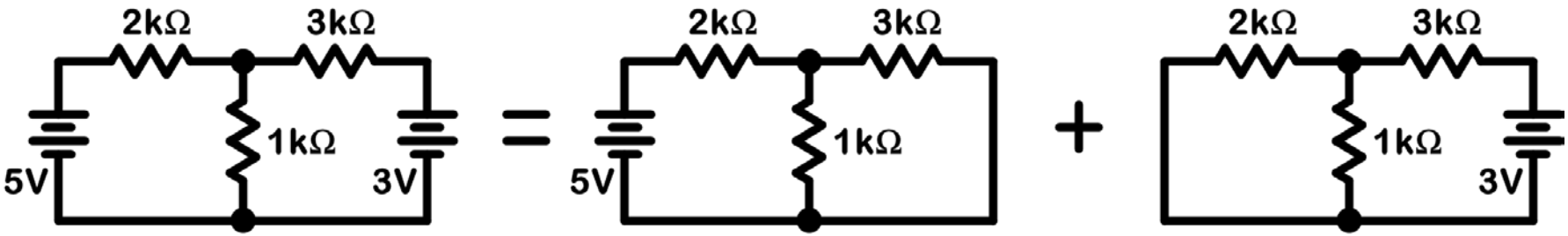
Example Circuit:



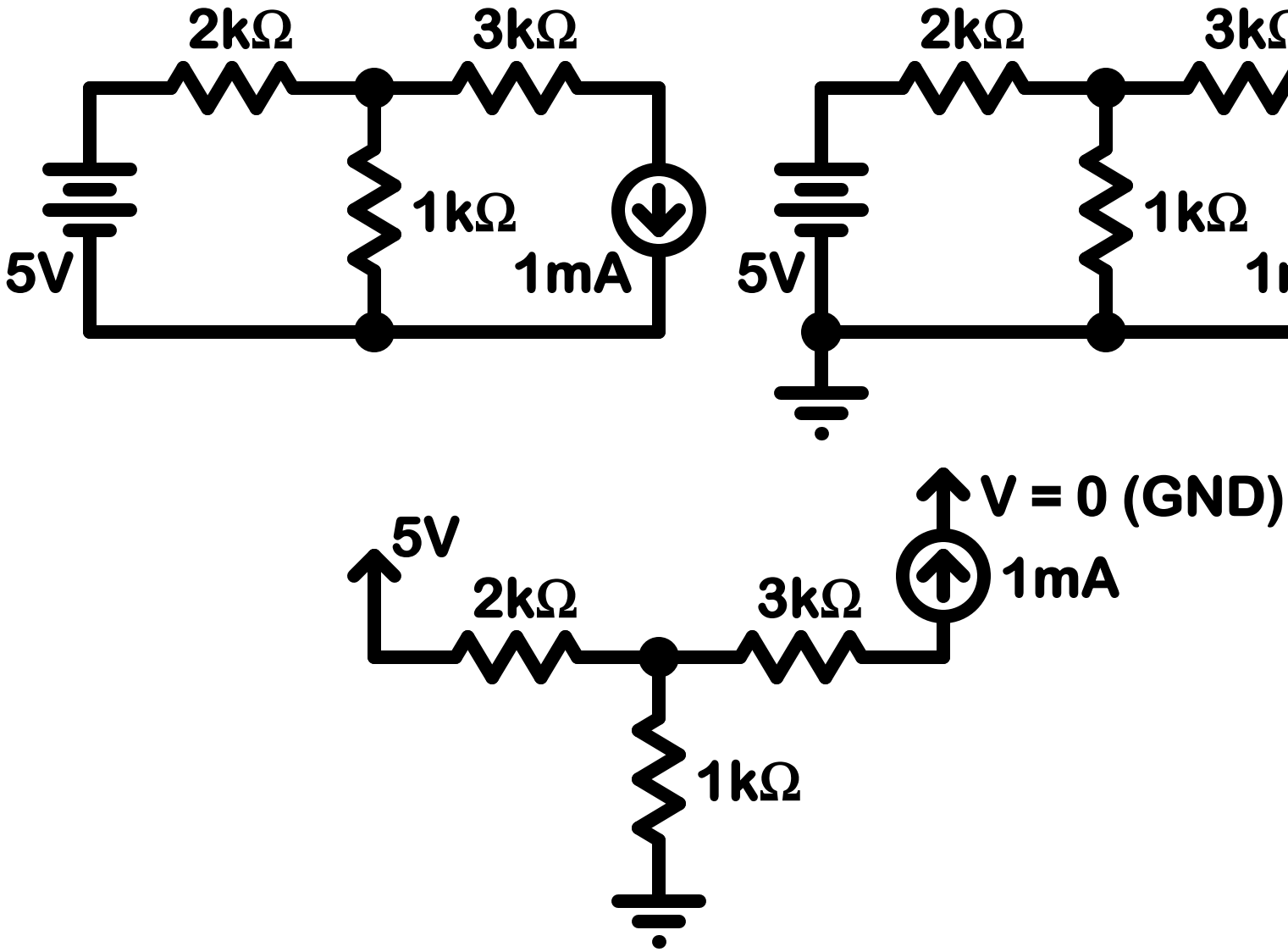




Superposition (Circuit Math):



Example Circuit:



Example Circuit: