

Sample calculations for lab 03

[a] You have a $10\ \Omega$ resistor in series with a $100\ \Omega$ resistor. Sketch the circuit element. Calculate the equivalent resistance showing clearly the units at each step.

[b] You have a $10\ \Omega$ resistor in parallel with a $100\ \Omega$ resistor. Sketch the circuit element. Calculate the equivalent resistance showing clearly the units at each step.

[c] A $50\ \Omega$ resistor is connected across a DC power supply that provides 10 V to the resistor. Thus, the potential drop across the resistor is 10V . Calculate the current through the resistor showing clearly the units at each step.