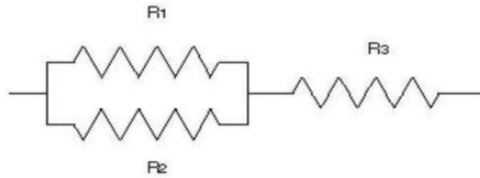


P2.W1 – DC Circuits

1. Using the figure below, determine the equivalent resistance R_{eq} and its uncertainty ΔR_{eq} .



2. What is the equation for a weighted average? What is the uncertainty of a weighted average? When should a weighted average be used instead of an unweighted one?
3. You will use a multimeter as an voltmeter, ohmmeter, and ammeter. What will each of these measure? Is a voltmeter connected in series or in parallel with your circuit? Is an ammeter connected in series or in parallel with your circuit?
4. What is the value of uncertainty for a measurement taken with the multimeter?
5. What is the purpose of connecting a charged object to ground?
6. A resistor is labelled with the code $1000F$. Determine its resistance making sure to convert the tolerance from a percentage to a value in Ω .