

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Course: \_\_\_\_\_ Professor: \_\_\_\_\_

## E4a Prelab: Simple D.C. Circuits

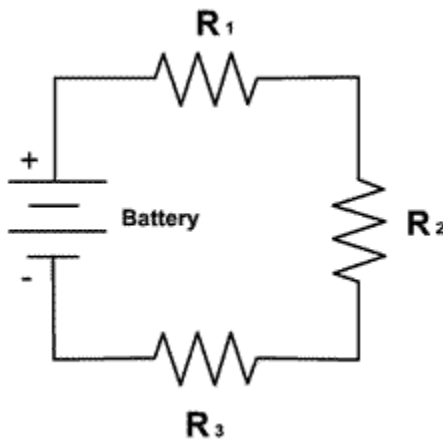


Read the lab instructions and watch the videos before answering questions

1. In the photo below you have a resistor with color bands that are brown, green, red and gold respectively from left to right. Using the key given to you in the instructions, write the color code resistance value and the tolerance range.



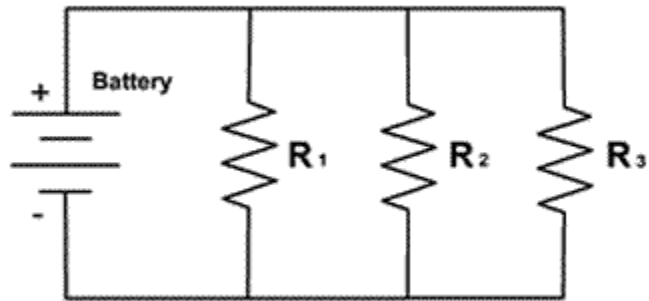
2. In the figure below the resistors have resistances of  $R_1 = 212 \Omega$ ,  $R_2 = 474 \Omega$ , and  $R_3 = 626 \Omega$



- a) Write the equation for the equivalent resistance of the series circuit.

b) Calculate the equivalent resistance of the series circuit.

3. In the figure below the resistors have resistances of  $R_1 = 212 \Omega$ ,  $R_2 = 474 \Omega$ , and  $R_3 = 626 \Omega$



a) Write the equation for the equivalent resistance of the parallel circuit.

b) Calculate the equivalent resistance of the parallel circuit.