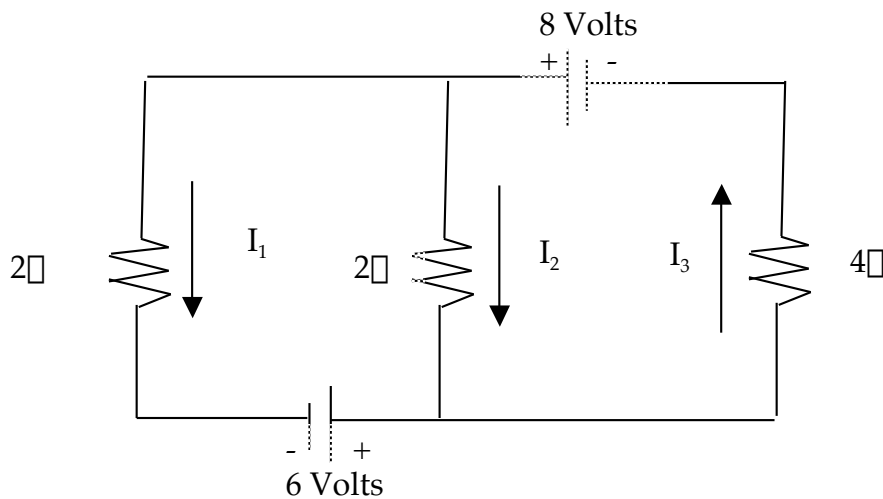


Electrical Networks

For this project you are going to need to understand Ohm's and Kirchoff's laws, and to be able to explain why using them in the analysis of an electrical network yields a system of linear equations. Your goal is to be able to solve the following problem and explain the mathematics and the physics in a form that would justify your solution to a classmate. Your final write up should be no more than 5 pages.

Find the currents in the diagram below.



Show that if the current I_5 in the circuit below is zero, then $R_4 = R_3 R_2 / R_1$.

