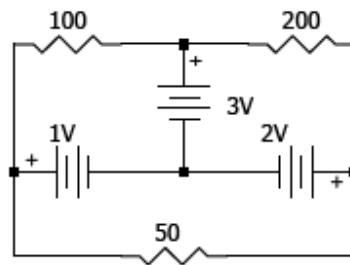


## Physics 517/617 Homework 1 (Due Nov. 3<sup>rd</sup>)

“Basic Electronics”, Curtis Meyer *It is suggested that you use Mathematica or Maple to solve the linear equations*

Chapter 1 problems: 1-7,1-16,1-17 (parts c Thevenin only),1-20

- 1) Calculate the currents in the 1V, 2V, and 3V batteries. Indicate whether the power supply is charging or discharging (Assume the internal resistance of the batteries is 0).



- 2) Six  $100\Omega$  resistors are soldered to form the edges of a tetrahedron. Calculate the resistance between any two points of the tetrahedron.