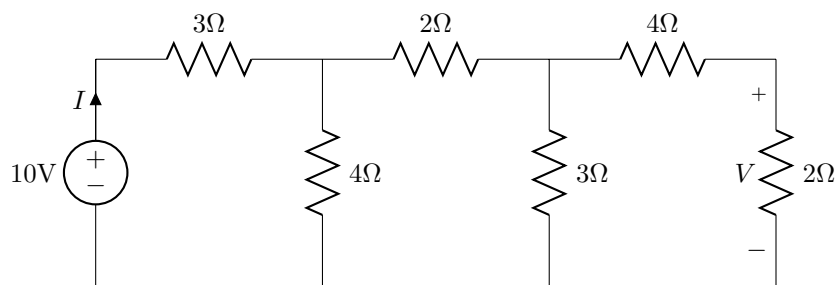


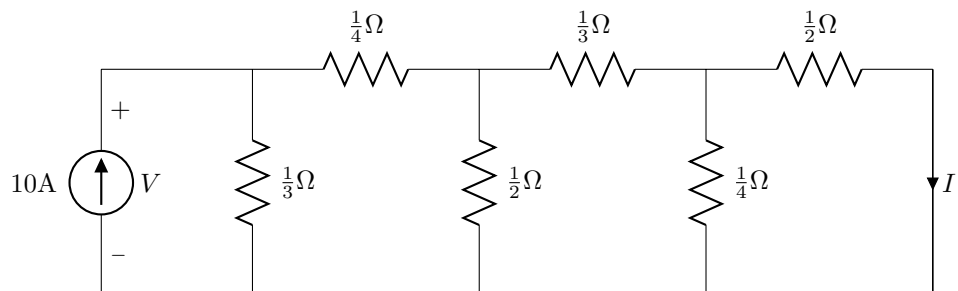
Important Remarks

- Homework is due on Sept. 9th, 2014 at the beginning of class
- **For all problems, keeping your work in fractions will produce easier, more accurate results.**
- Start early and get help if you need it
- Start a new page per problem
- Show all the work
- Specify all the units
- Circle your answers
- Staple pages

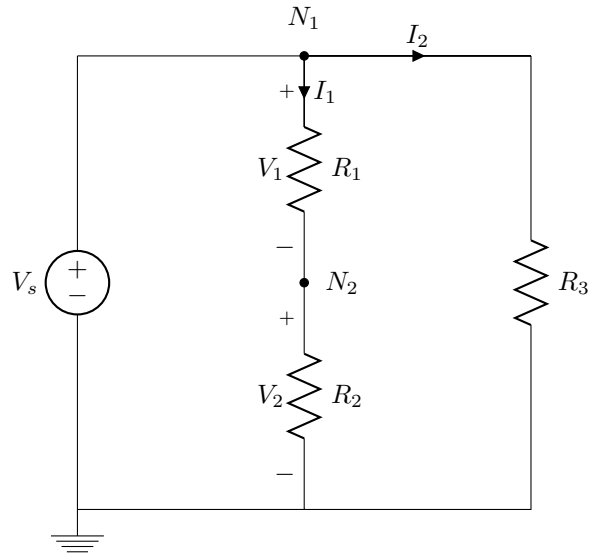
1. Given figure below, find I and V using circuit reduction and other techniques.



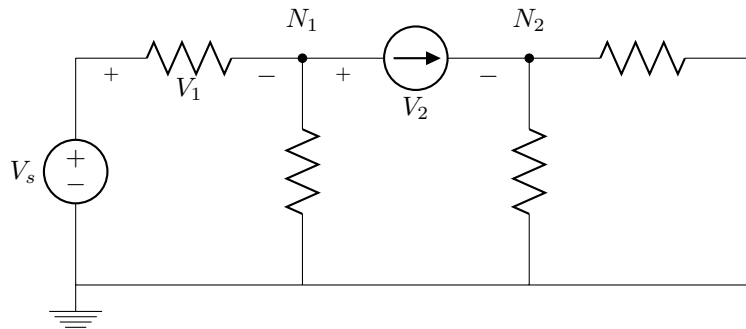
2. Given the figure below, find I and V using circuit reduction and other techniques.



3. Given the figure below, $V_s = 5V$, $R_1 = 375\Omega$, $R_3 = 25\Omega$. With a multimeter we measure 1.25V at N_2 with respect to ground. Find the voltage at N_1 (w.r.t. Gnd), R_2 , V_1 , I_1 , and I_2 using nodal analysis and other techniques.



4. Given the figure below, $V_s = 10V$. With a multimeter we measure (w.r.t. Gnd) 4V at N_1 and 7V at N_2 . Find V_1 and V_2 .



5. In the figure below, $I = 8\text{A}$. With a multimeter we measure (w.r.t. Gnd) 60V at N_2 . Using nodal analysis and other techniques, find V_s , V_1 , V_2 , and the measurement we would expect to get at N_1 (w.r.t. Gnd).

