

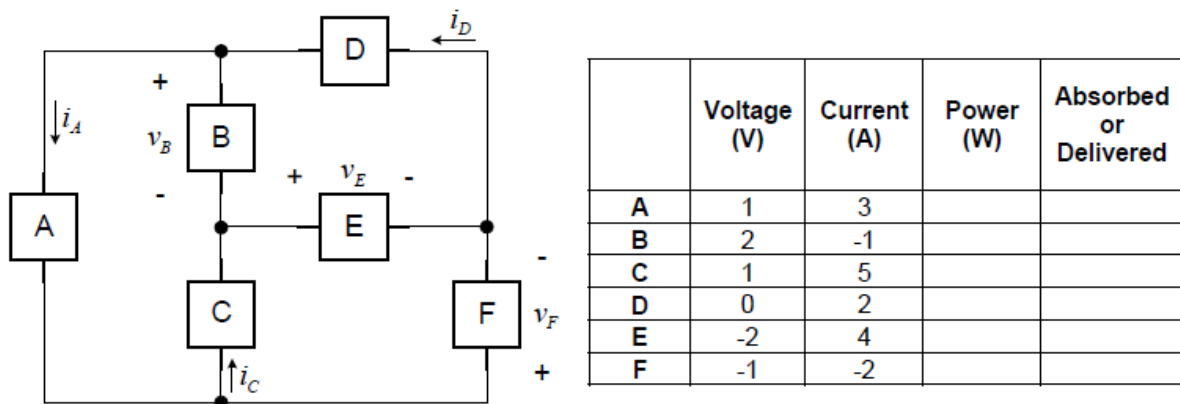
Homework Set #2

Textbook: Chapter 1.4-1.6

Coverage: Voltage, current, power, and energy definitions, Passive sign convention

DUE Thursday, March 11, 2010

1. Problem 1.12, page 17 (*answer in back of book*)
2. Problem 1.15, page 18 (*hint: power flows from Car B to Car A, justify why this is using the passive sign convention*)
3. Label all the missing voltages and currents in the figure below so that each element follows the passive sign convention and then calculate the power absorbed or delivered by each element. Report your results in a table like the one shown below.



4. **Answer T/F.** Given that the power dissipated by element B is 60 mW and the power generated by element C is 85 mW, then element A is a 25 mW load and the current I_A is -5 mA.

