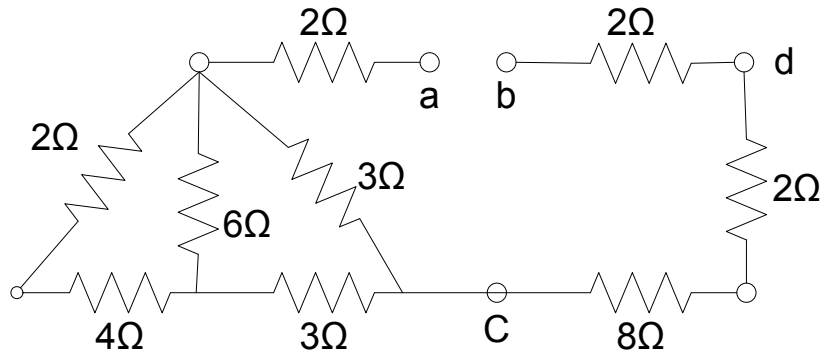


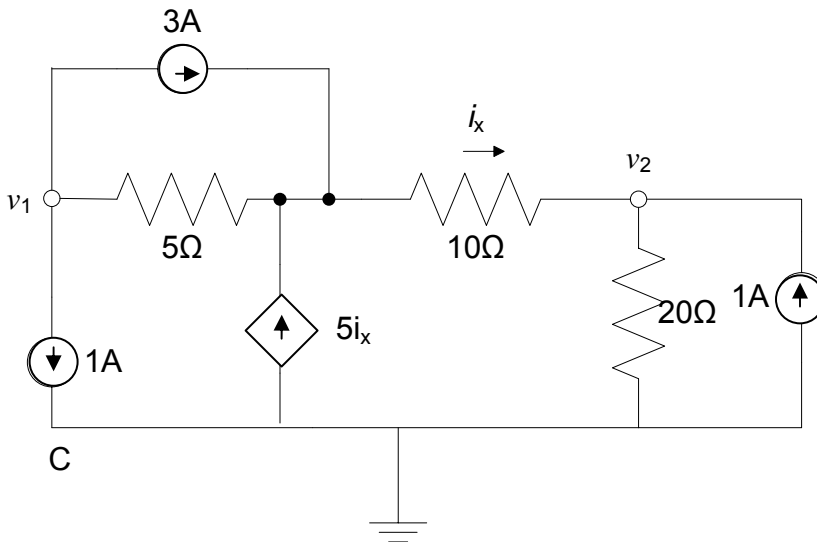
EE40 Spring 2008 Homework 2

Due Friday 2/8 5 p.m. sharp. No extensions!

- 1) Find the equivalent resistance between the terminals a and b for the following networks:
- a)



- b) Same network as above, except that there is also a short circuit between nodes c and d.
- 2) Hambley P 2.17
- 3) Hambley P 2.24
- 4) Hambley P 2.32
- 5) Hambley P 2.49
- 6) Hambley P 2.52, except that you should choose as the reference the node where the 2 Ω and 10 Ω resistors and the current sources meet. Find the graph of the circuit, choose a tree that contains the voltage source, and use a supernode.
- 7) Solve for the node voltages



- 8) Hambley 2.64
- 9) Hambley 2.72. First find the graph of the circuit, and then choose a tree that does not contain the current source, before starting mesh analysis.
- 10) Hambley 2.90