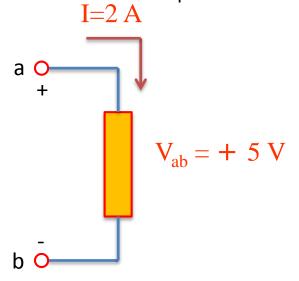
## **EECS 70A: Network Analysis**

Homework #1

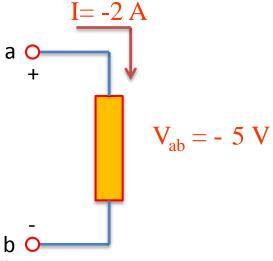
Due on 4/10/2014, Thursday 17:30

at EH 3404

Problem 1: Find the power absorbed or supplied by the element.

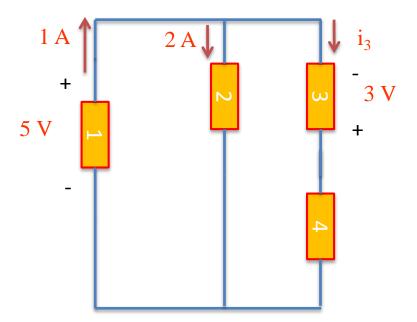


Problem 2: Find the power absorbed or supplied by the element.



## Problem 3:

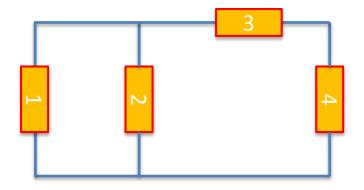
- a) Find  $i_3$ .
- b) Find the power absorbed or supplied by element 3.
- c) Is element 3 a source or a sink?



Problem 4: (Power balance)

Assume  $P_1 = 10 \text{ W}$ ,  $P_2 = 30 \text{ W}$ ,  $P_3 = -5 \text{ W}$ .

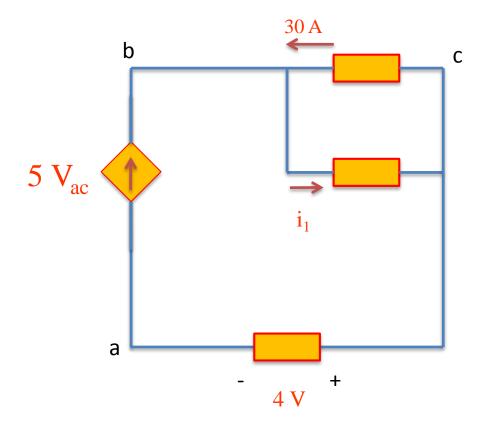
Find the power absorbed or supplied by element 4. Is it a source or a sink?



Problem 5: (VCCS)

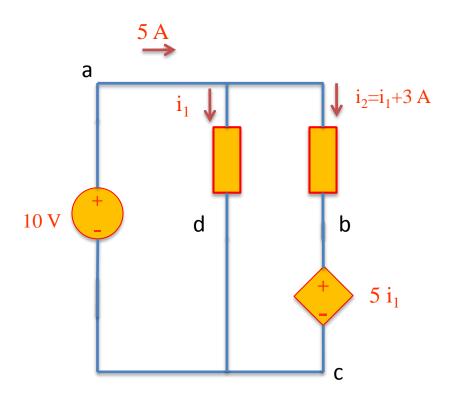
Find i<sub>1</sub>.

Is current flowing from b to c or from c to b?



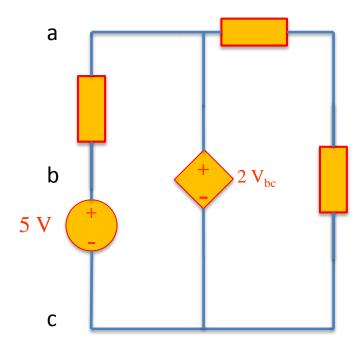
Problem 6: (CCVS)

Find i<sub>1</sub>, i<sub>2</sub>. Find V<sub>bc</sub>.



Problem 7: (VCVS)

Find  $V_{ac}$ .



Problem 8: (CCCS) Find i<sub>1</sub>.

