

EECS/CSE 70A Network Analysis I

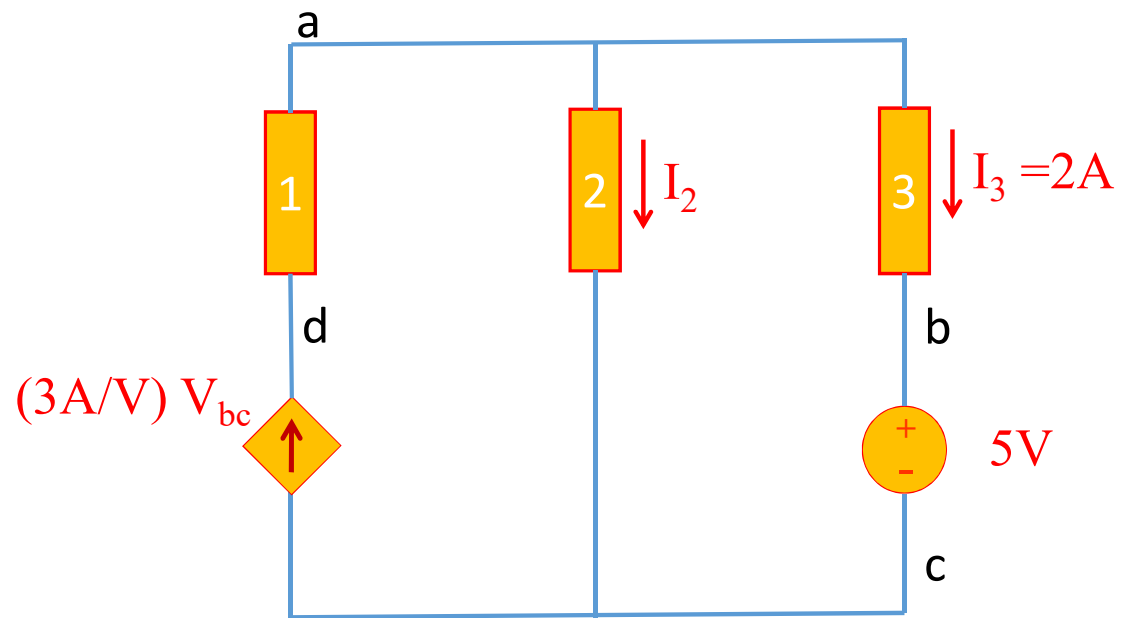
Homework #2

Due on or before

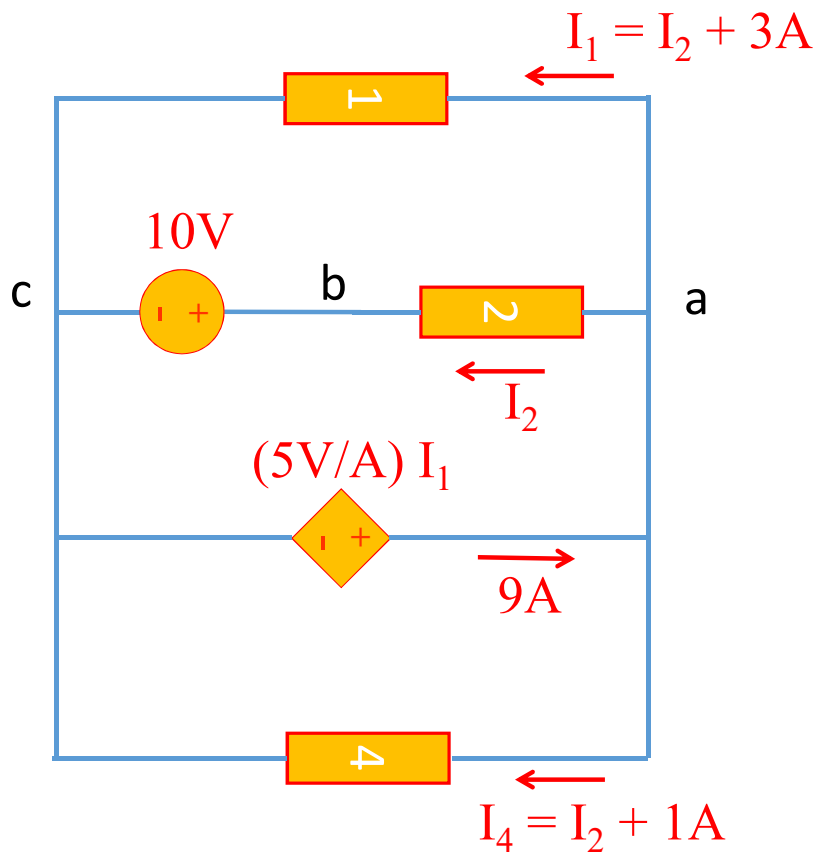
4/19/2018, Thursday 10 am

(You can submit your homework in any of the Tuesday or Thursday discussions before or on 4/19/2018)

Problem 1: (VCCS) Find I_2 . 1.5 points

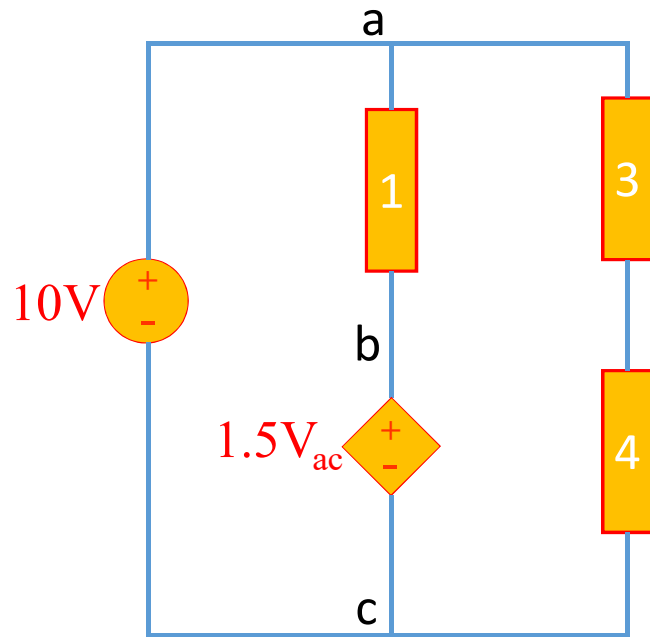


Problem 2: (CCVS) Find I_2 , I_4 and V_{ac} 3.5 points



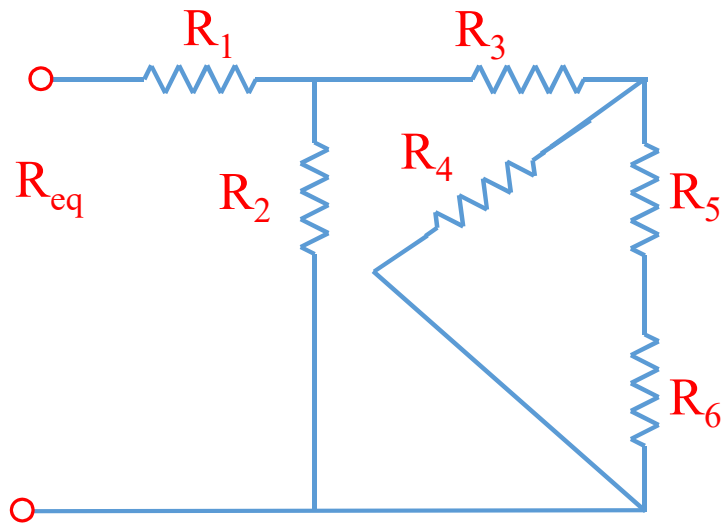
Problem 3: (VCVS) Find V_{bc} and V_{ab} .

1 points



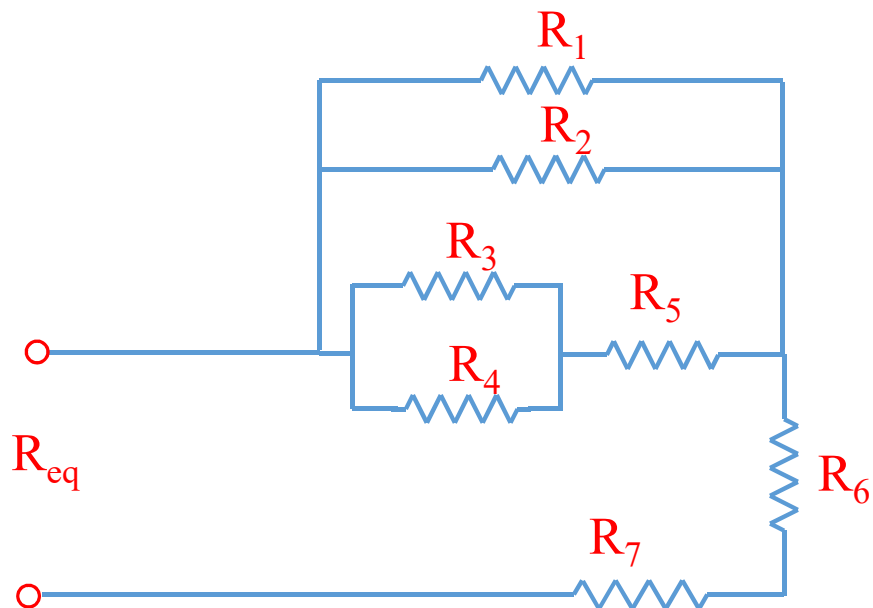
Problem 4: Find R_{eq} . Please use the parallel sign “//” as discussed in class.

2 points



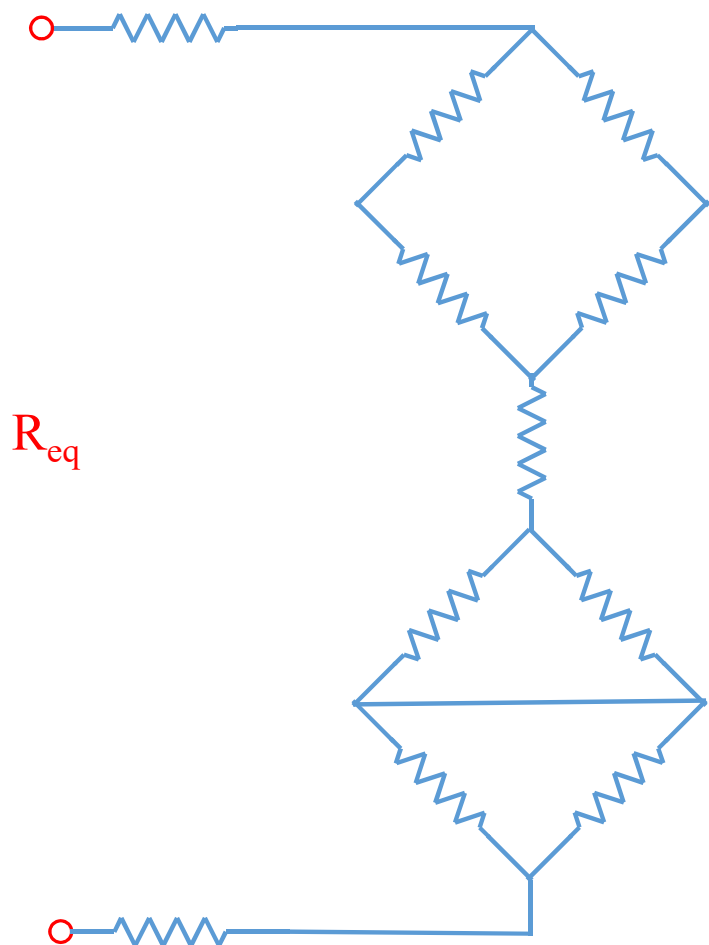
Problem 5: Find R_{eq} . Please use the parallel sign “//” as discussed in class.

2 points



Problem 6: All of the resistors below are $R_0 \, \Omega$. Find R_{eq} .

2.5 points



Problem 7: (Potentiometer) In the circuit below, the wiper divides the potentiometer resistance R between two resistances $R(1-\alpha)$ and $R\alpha$ where $0 < \alpha < 1$. α is a parameter modeling the wiper's position. Find the value of voltage V_{out} in terms of V_s if the value of α is $\frac{1}{2}$. **3 points**

