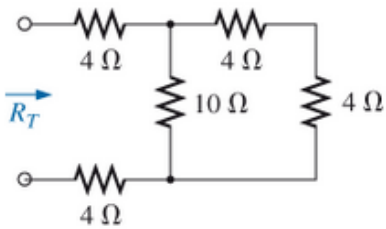


ET 110/C13 – Electric Circuit Analysis
Homework # 7 – Series-Parallel dc circuit
Due date: 10/26/16 Wednesday

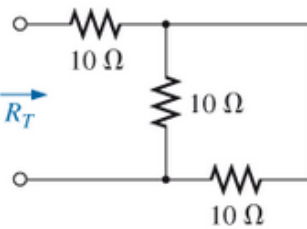
YOU HAVE TO SHOW ALL WORK IN ORDER TO RECEIVE FULL CREDIT

Note: All answer must be in engineering notation rounded off to the tenth

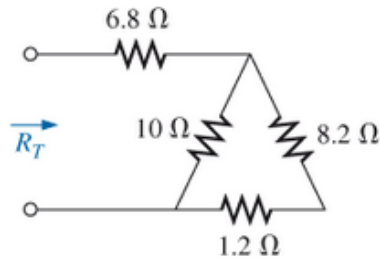
1) Determine R_T for the networks



a) (6 pts)

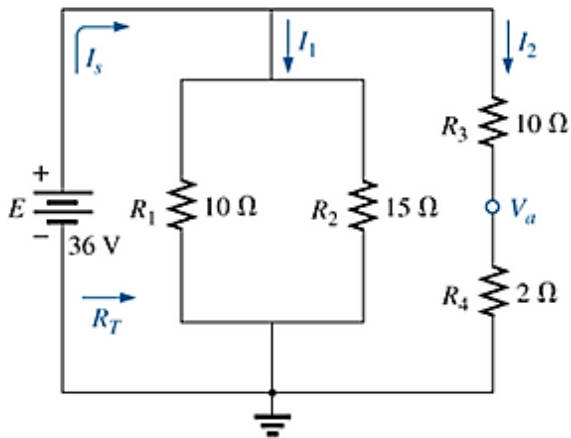


b) (4 pts)



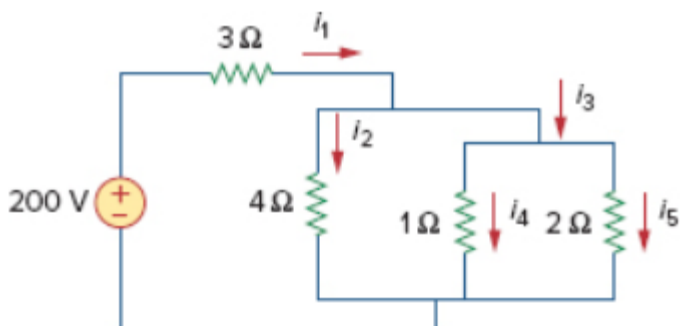
c) (6 pts)

2) For the network



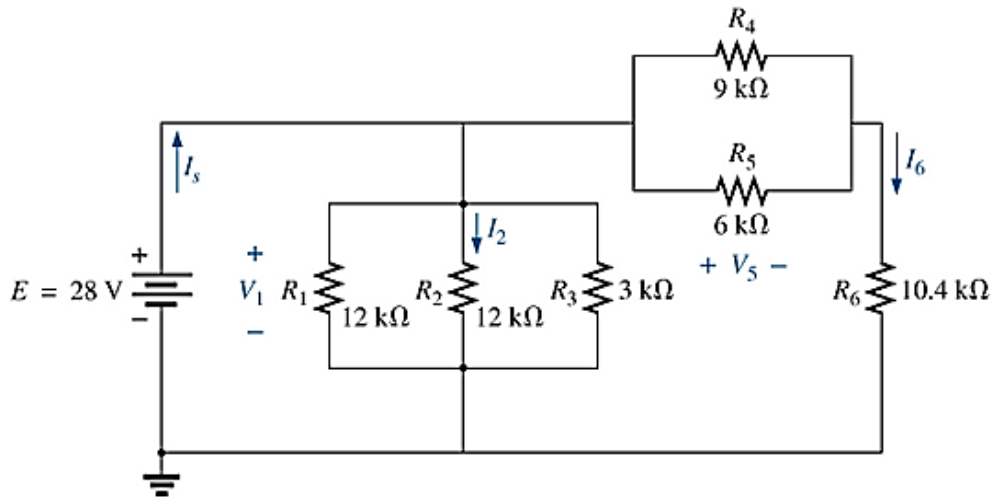
- a. Determine R_T (6 pts)
- b. Find I_s , I_1 , and I_2 (6 pts)
- c. Find voltage V_a (6 pts)

3) Determine i_1 to i_5 for the following circuit (8 points, 10 points)



4) For the following circuit

- Find currents I_s , I_2 , and I_6 (6pts, 5 pts, 5 pts)
- Find voltages V_1 and V_5 (3pts, 5 pts)
- Find the power delivered to the $3\text{ k}\Omega$ (4 pts)



5) For the ladder network

- Determine R_T (6 pts)
- Calculate I (4 pts)
- Find the power delivered to R_7 (10 pts)

