ECS 203: Problem Set 9

Semester/Year: **2/2014**
Course Title: Basic Electrical Engineering
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Course Web Site: http://www2.siit.tu.ac.th/prapun/ecs203/

Due date: April 3

Questions

1) [Alexander and Sadiku, 2009, Q6.13] Find the voltage across the capacitors in the circuit of Fig. 6.49 under dc conditions.
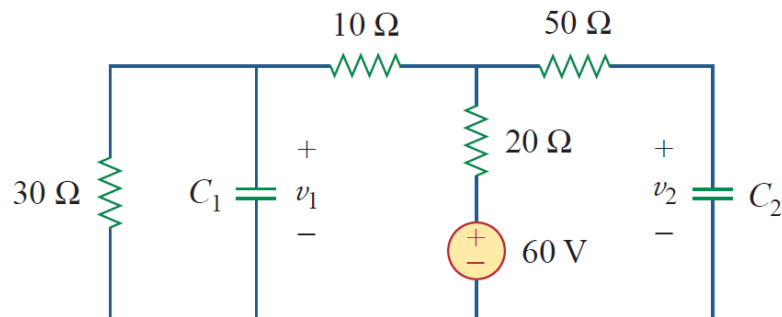

Figure 1

2) [Alexander and Sadiku, 2009, Q6.19] Find the equivalent capacitance between terminals *a* and *b* in the circuit of Figure 2. All capacitances are in μF.
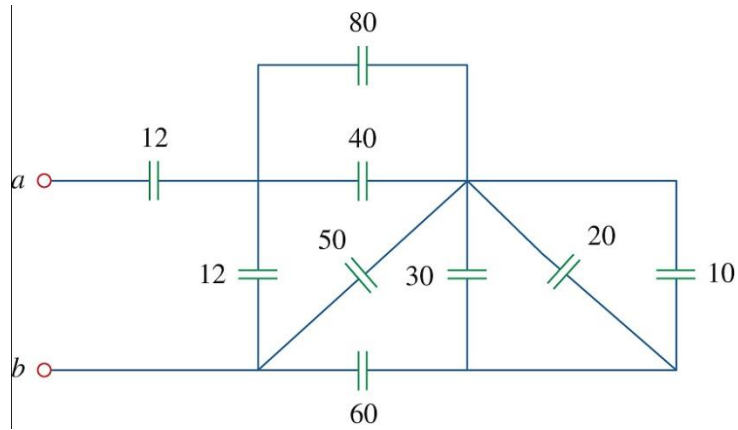

Figure 2

3) [Alexander and Sadiku, 2009, Q6.20] Find the equivalent capacitance at terminals a-b of the circuit in Figure 3.
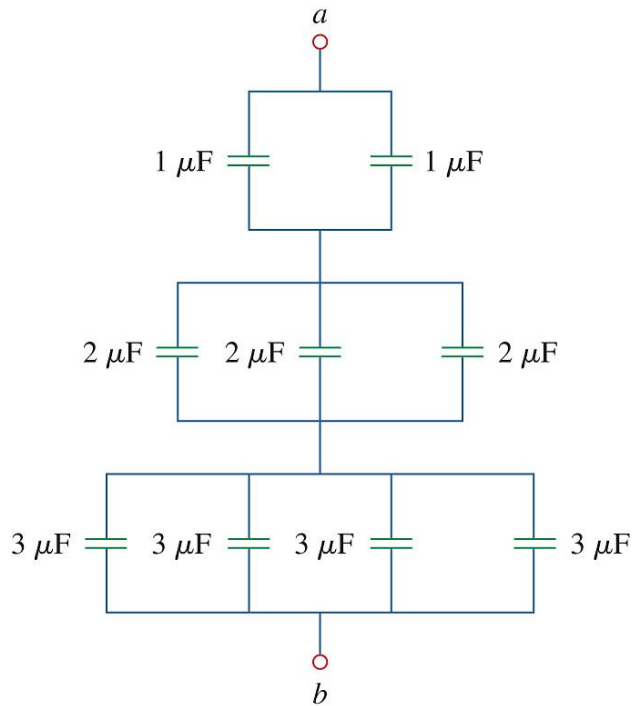

Figure 3

4) [Alexander and Sadiku, 2009, Q6.46] Find v_C, i_L, and the energy stored in the capacitor and inductor in the circuit of Figure 4 under dc, steady-state, conditions.
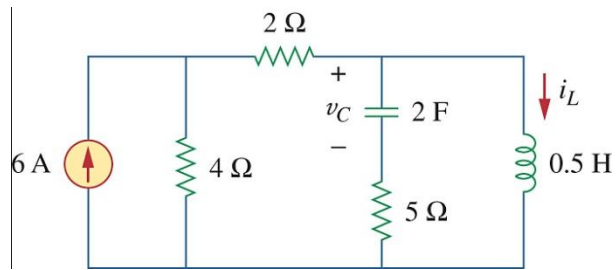

Figure 4

5) [Alexander and Sadiku, 2009, Q6.49] Find the equivalent inductance of the circuit in Figure 5. Assume all inductors are 10 mH.
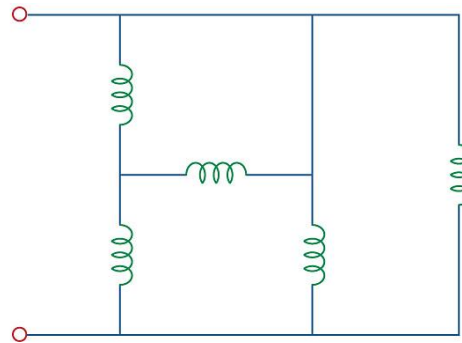

Figure 5