Sirindhorn International Institute of Technology

Thammasat University at Rangsit

School of Information, Computer and Communication Technology

ECS 203: Problem Set 1

Semester/Year: **2/2014**
Course Title: Basic Electrical Engineering
Instructor: Asst. Prof. Dr. Prapun Suksompong (prapun@siit.tu.ac.th)
Course Web Site: http://www2.siit.tu.ac.th/prapun/ecs203/

Due date: Jan 23, 5 PM

Instructions

1. Solve all problems. (5 pt)
2. ONE sub-question will be graded (5 pt). Of course, you do not know which part will be selected; so you should work carefully on all of them.
3. Late submission will be heavily penalized.
4. ***Write down all the steps*** that you have done to obtain your answers. You may not get full credit even when your answer is correct without showing how you get your answer.

Questions

1) [Alexander and Sadiku, 2009, Q1.16] Find the power absorbed by each element in Figure 1. (Note that if the power is actually supplied by the element, then your corresponding answer will be negative.)

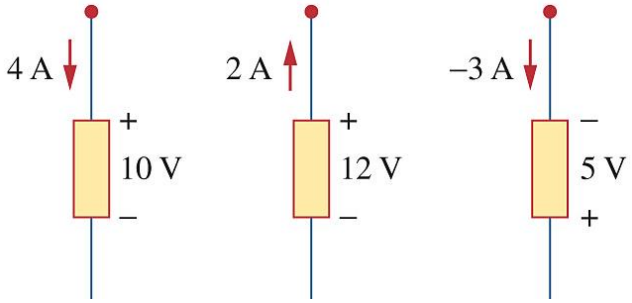

Figure 1

2) [Alexander and Sadiku, 2009, Q1.18] Calculate the power absorbed by each element in Figure 2. (Note that if the power is actually supplied by the element, then your corresponding answer will be negative.)

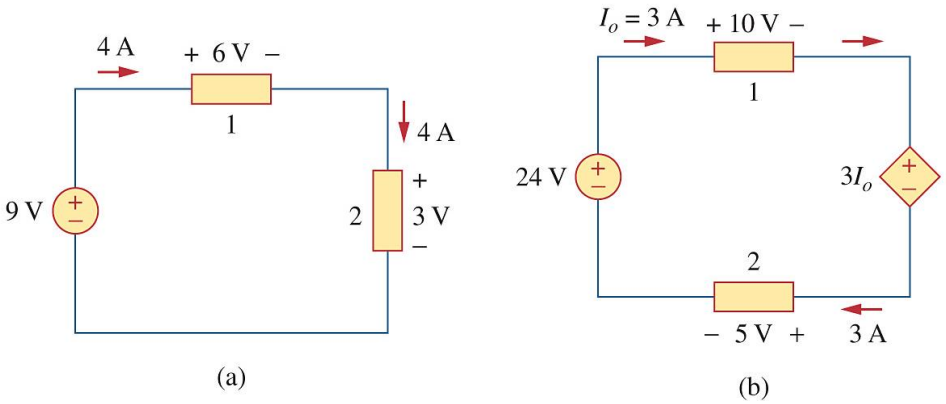

Figure 2

3) [Optional. However, see remark below] Play the "Free Energy Game!" on Facebook.

The game is available at https://apps.facebook.com/freeenergygame/.
You may play multiple times but record and submit (along with your solutions for the first two questions above) your best End Game Stats. (Screen-capture this as well in case you are asked to show a proof.)
Top five players of our class will get 1 extra credit for this HW.