

Sirindhorn International Institute of Technology Thammasat University at Rangsit

School of Information, Computer and Communication Technology

ECS 203: Problem Set 7

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: Not Due

Questions

1) [Alexander and Sadiku, 2009, Q4.66] Find the maximum power that can be delivered to the resistor R in the circuit of Figure 1.

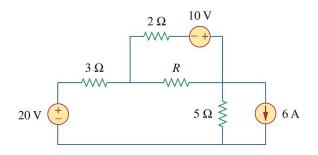
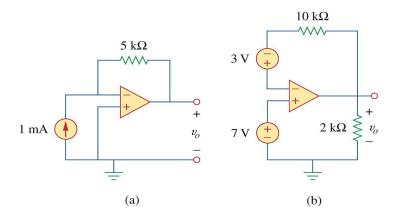


Figure 1

2) [Alexander and Sadiku, 2009, Q5.8] Obtain v_0 for each of the op amp circuits in Figure 2.



3) [Alexander and Sadiku, 2009, Q5.10] Find the gain $v_{\text{o}}/v_{\text{s}}$ of the circuit in Figure 3.

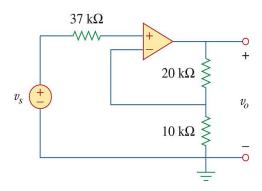


Figure 3

4) [Alexander and Sadiku, 2009, Q5.20] In the circuit in Figure 4, calculate v_{o} if v_{s} = 0.

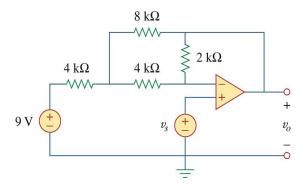


Figure 4

5) [Alexander and Sadiku, 2009, Q5.37] Determine the output of the summing amplifier in Figure 5.

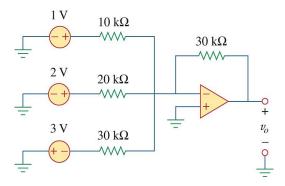


Figure 5