EGR 260 Homework #4 due date: _____
Circuit Analysis Test #2 (Ch. 4.1-4.8, Ch. 5): _____
File: N260H4 (See Due Dates Table)

Homework Assignment #4

Reading Assignment:

Chapter 5 in **Electric Circuits, 8th Edition** by Nilsson (omit section 5.6)

Problem Assignment:

Note: *Be sure to follow the required PROBLEM FORMAT for every assignment in this course.*

1) Chapter 5 problems: 2, 5, 6, 8, 12, 15, 18, 22, 36, 41
2) Problems 2 and 3 shown on the next page

Selected Answers:

(Note: Answers have also been provided for many problems that were not assigned. A good way to study for a test is to work extra problems.)

5.5) a) $v_a = -400$ mV b) $v_o = -6.8$ V c) $i_a = 20$ µA d) $i_o = 111.67$ µA

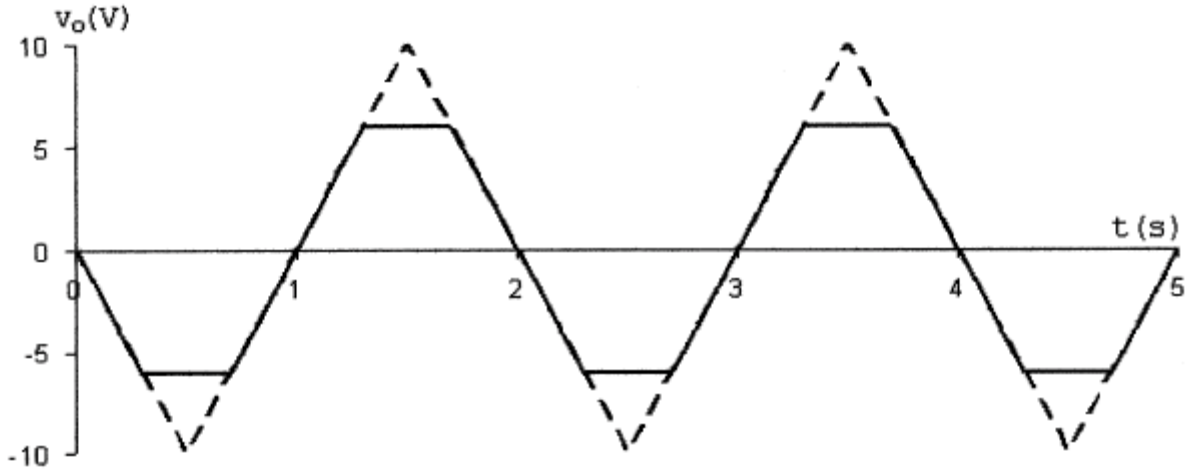
5.6) $i_L = -250$ µA

5.12) c) $-7.5\text{V} < V_c < -1.5\text{V}$ (answer in text is incorrect)

5.22) a) $R_b = 4$ kΩ, $R_c = 2$ kΩ, $R_f = 120$ kΩ b) $i_a = -250$ µA, $i_b = 0$, $i_c = 250$ µA

5.36) a) $i_a = -4.6$ mA b) $v_{right} = -750$ mVA

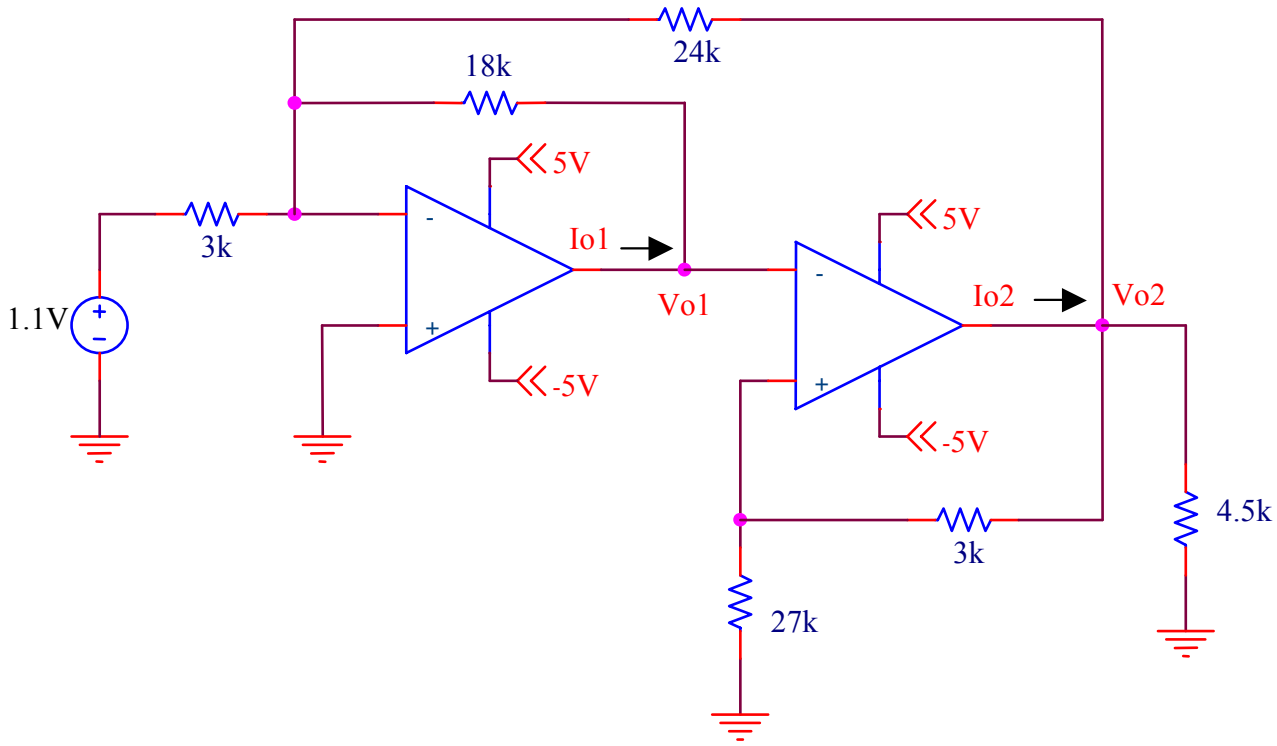
5.41) v_o versus t is shown below:



2) $I_{o1} = -0.2$ mA, $V_{o1} = -3.6$ V $I_{o2} = -1.189$ mA, $V_{o2} = -4$ V

3) $I_o = -0.788$ mA, $V_o = -2.065$ V

2) Find V_{o1}, V_{o2}, I_{o1}, and I_{o2} in the circuit shown below.



3) Find I_o and V_o in the circuit shown below.