

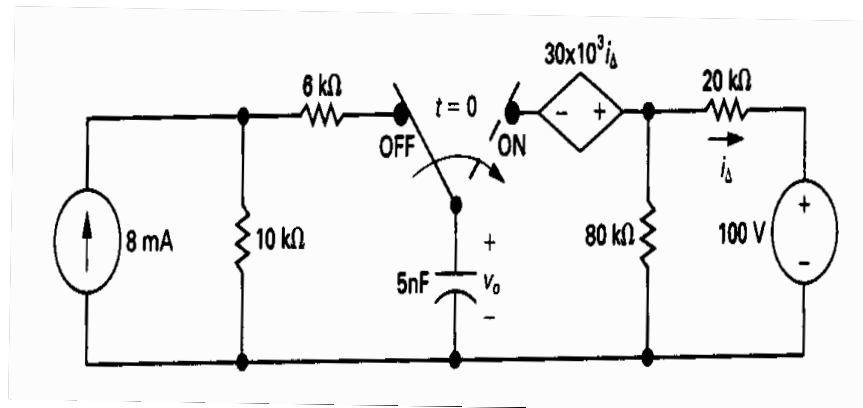
King Fahd University of Petroleum and Minerals
Electrical Engineering Department
EE201 ELECTRIC CIRCUITS

Exam # II

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| Name: | I.D# | Serial # | Sec.# 02 |
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Question No.1

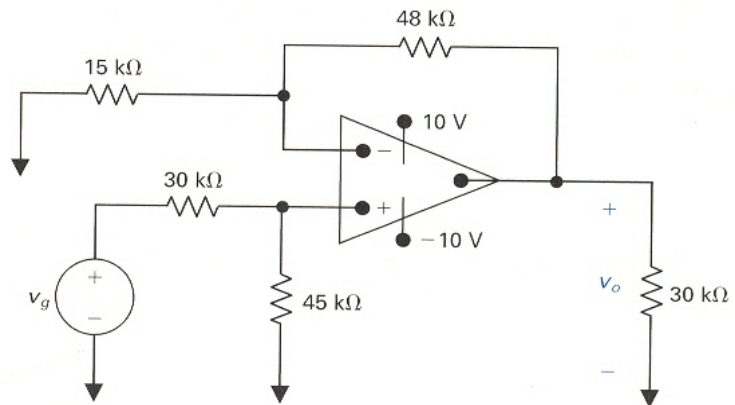
The switch in the circuit shown has been in the OFF position for a long time before switching instantaneously to the ON position at $t=0$. Find $v_o(t)$ for $t \geq 0$



Question No. 2

Assume the op amp in the circuit shown is ideal

- (a) Calculate v_o when v_g equals **3V**.
- (b) What will be v_o when v_g becomes **-5V**.



Question No. 3

The variable resistor in the circuit shown is adjusted for maximum power transfer to R_o :

- Find the value of R_o
- Find the maximum power that can be delivered to R_o .

