

EE 203 Electronics I
Quiz # 3

Name: _____

I.D.# _____

Sec.# 03 _____

The NMOS transistor in the amplifier circuit shown in Fig.3 has $V_t=1V$, $\mu C_{ox}=2mA/V^2$, and

$$\lambda = \frac{1}{V_A} = 0.01V^{-1}, \text{ if } I_Q=1mA$$

Determine the small signal voltage gain v_o / v_i . Include the small signal resistor of the transistor (r_o) in your analysis.

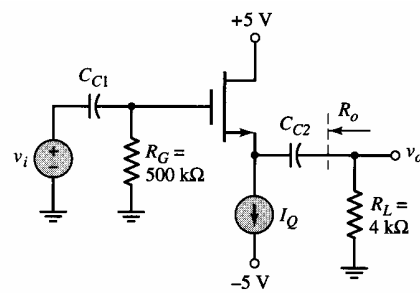


Fig. 3