

c.) 50 mV into triode $\rightarrow V_{DS} + 0.05 = V_{DS}'$

$$V_{DS} = V_{DS}' - 0.05 = 0.44 - 0.05$$

$$V_{DS} = 0.39 \text{ V}$$

$$I_D = \frac{V_{DD} - V_{DS}}{R_D} = \frac{3 - 0.39}{2000} = 1.31 \text{ mA}$$