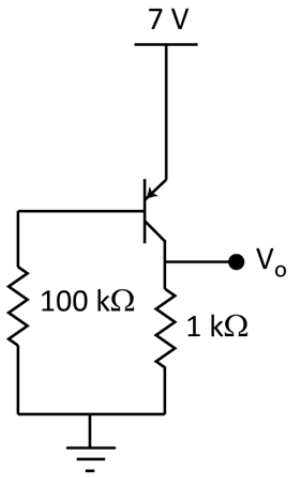


Question 1 (10 points)For this silicon transistor, $\beta=200$

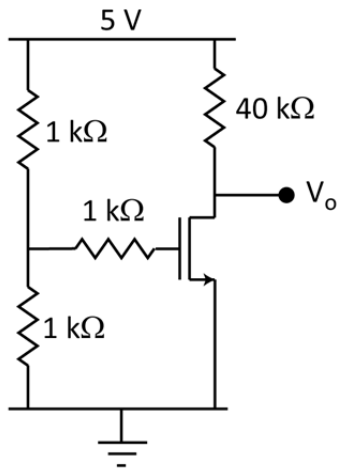
- (a) Determine which mode the transistor is in
- (b) Find V_o



Question 2 (10 points)

For this transistor, $V_T = 2\text{ V}$, $k_n'(W/L) = 0.5\text{ mA/V}^2$

- (a) Determine which mode the transistor is in
- (b) Find V_o



Question 3 (10 points)

For these silicon transistors, $\beta=50$

(a) Determine which mode each transistor is in

(b) Find V_o

