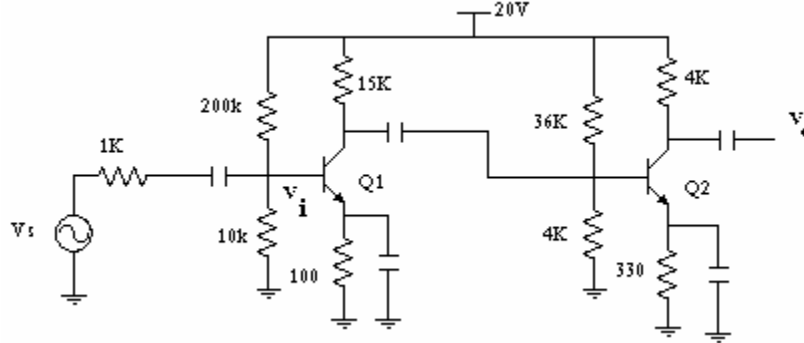
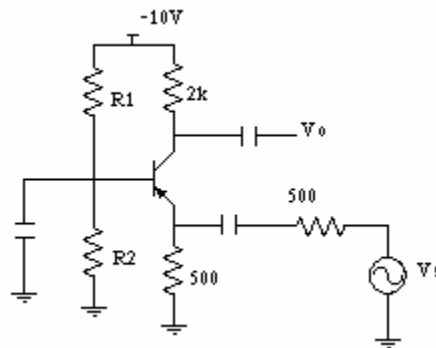


- 1) In the two stage amplifier shown in the following figure. Transistors are same and have $\beta = 50, h_{oe}^{-1} = 40k\Omega$. Determine $A_v, A_i, A_{v_s}, R_i, R_o$, for the amplifier.



- 2) For the circuit shown in fig. assume $50 \leq \beta \leq 100$.
 a) Determine R1 and R2 for maximum output swing.
 b) Calculate $A_v, A_i, A_{v_s}, R_i, R_o$.



- 3) For each of the following circuits; Determine A_v, R_i, R_o . For JFETs $I_{DSS} = 10mA, V_p = -2V, r_d = 200k\Omega$.

