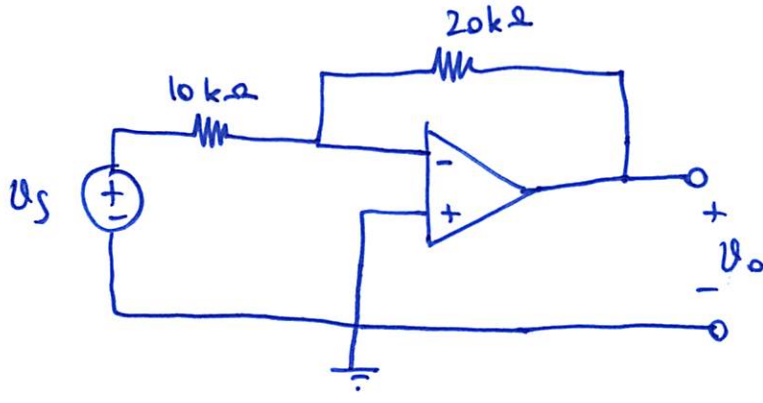
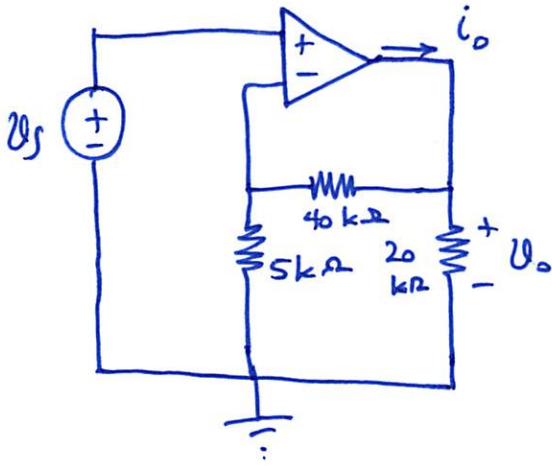


1) The op-Amp has an open loop gain of 2×10^5 , $R_{in} = 2\text{M}\Omega$ $R_{out} = 50\Omega$.
Find $\frac{V_o}{V_s}$ and Find i for $V_s = 2\text{V}$.

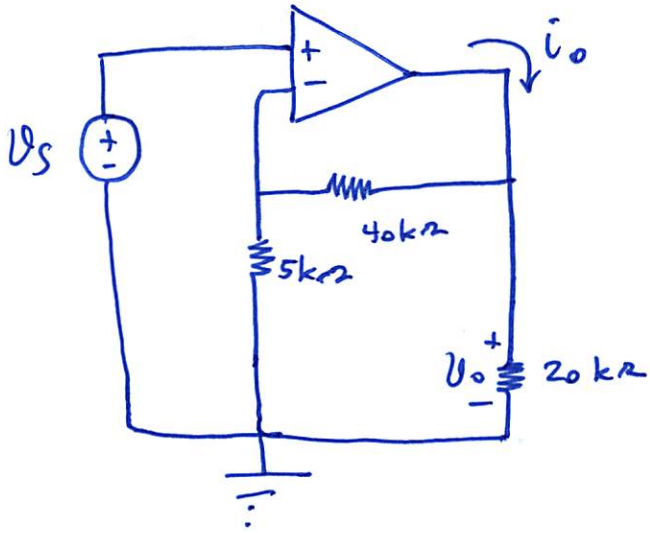


2) The op-Amp is the same as last problem.

Find $\frac{V_o}{V_s}$. Find i_o when $V_s = 1V$.

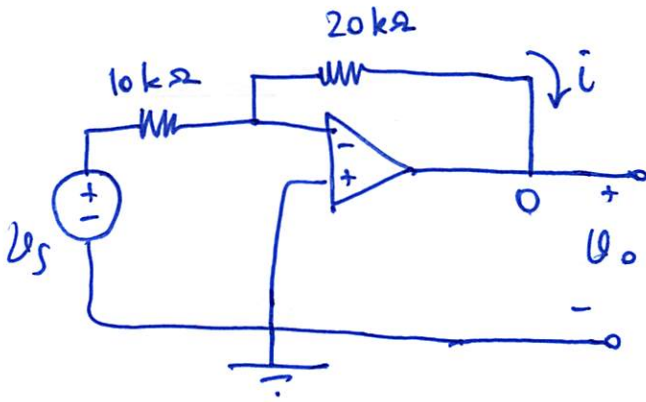


3) Amplifier is ideal. Find $\frac{U_o}{U_s}$. Find i_o when $U_s = 1V$.



4)

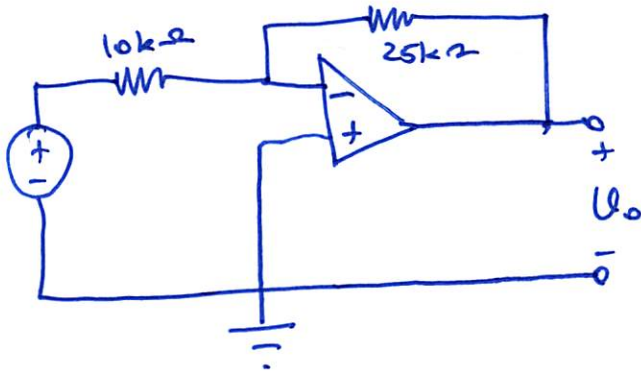
ideal op-Amp. Find $\frac{U_o}{U_s}$. Find i for $U_s = 2V$



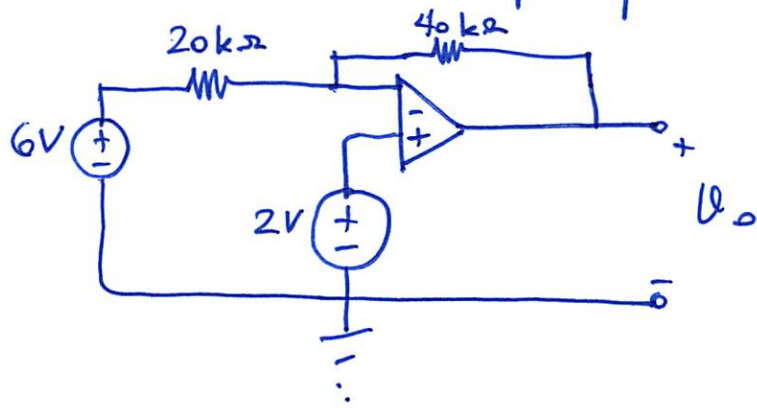
5) If $U_i = 0.5V$ Calculate

a) The output voltage U_o &

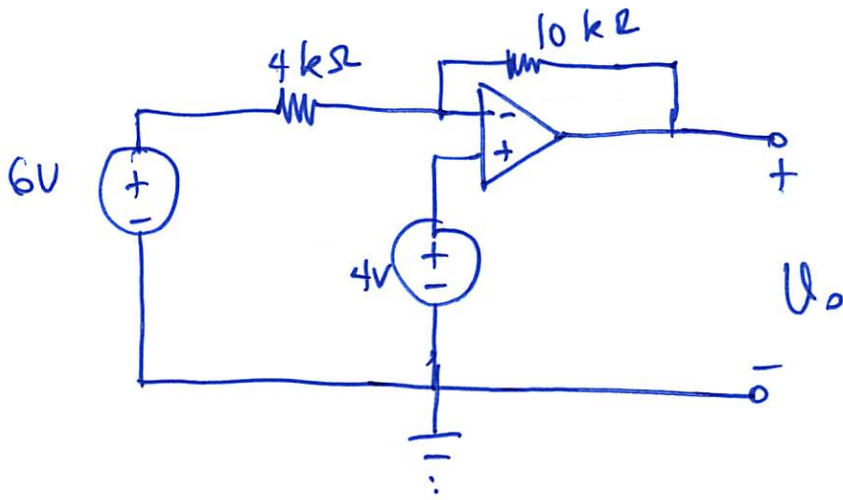
b) the current in the $10k\Omega$ resistor



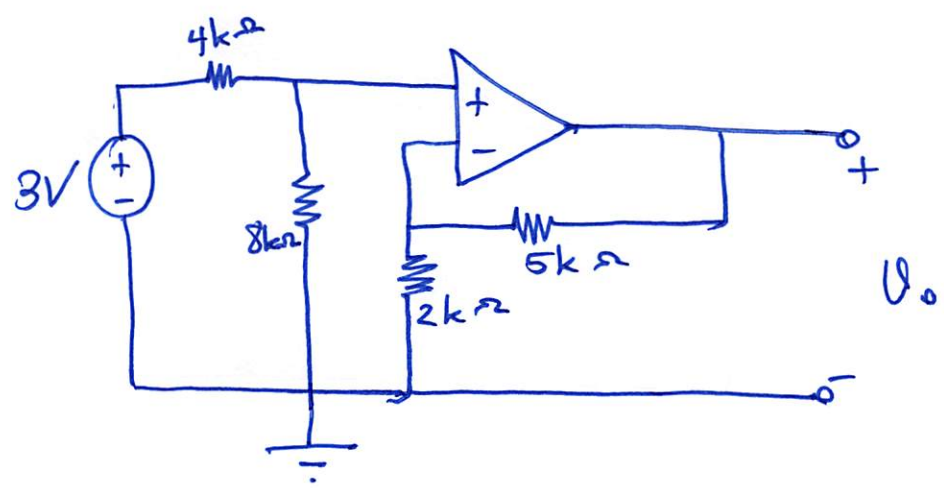
6) Det. V_o in the op-amp circuit:



7) Calculate U_o

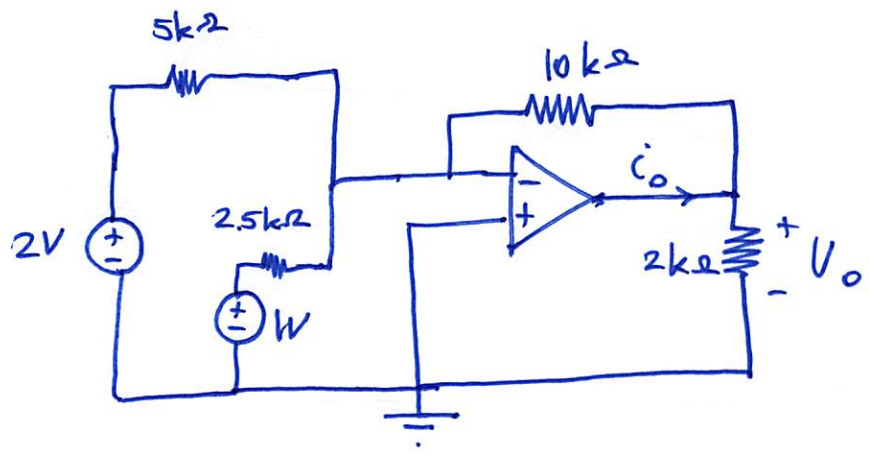


8) Calculate U_o



Problem 9.

Calculate V_o & i_o in the op-Amp:



10) Design an op-amp circuit with inputs V_1 & V_2
Such that $V_o = -5V_1 + 3V_2$.