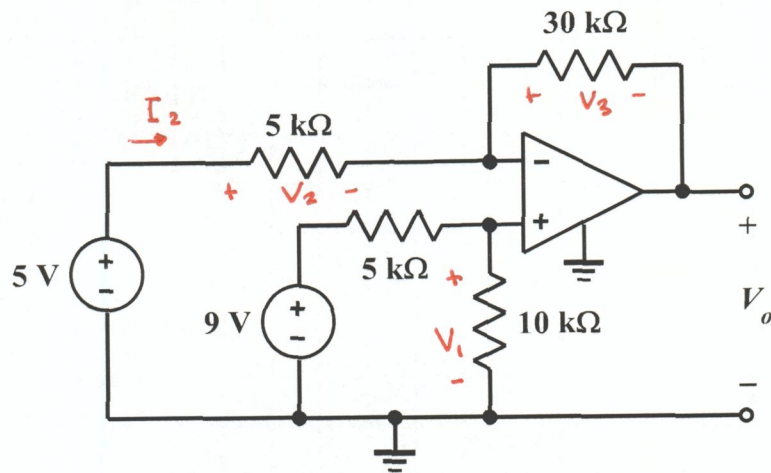


EE 2240
Problem #08

Find V_o .



$$V_1 = \frac{10k\Omega}{5k\Omega + 10k\Omega} \cdot 9V = 6V$$

$$V_2 = 5V - V_1 = 5V - 6V = -1V$$

$$I_2 = \frac{V_2}{5k\Omega} = \frac{-1V}{5k\Omega} = -200\mu A$$

$$V_3 = (30k\Omega)I_2 = -(30k\Omega)(200\mu A) = -6V$$

$$V_o = -V_3 + V_1 = -(-6V) + 6V = 12V$$