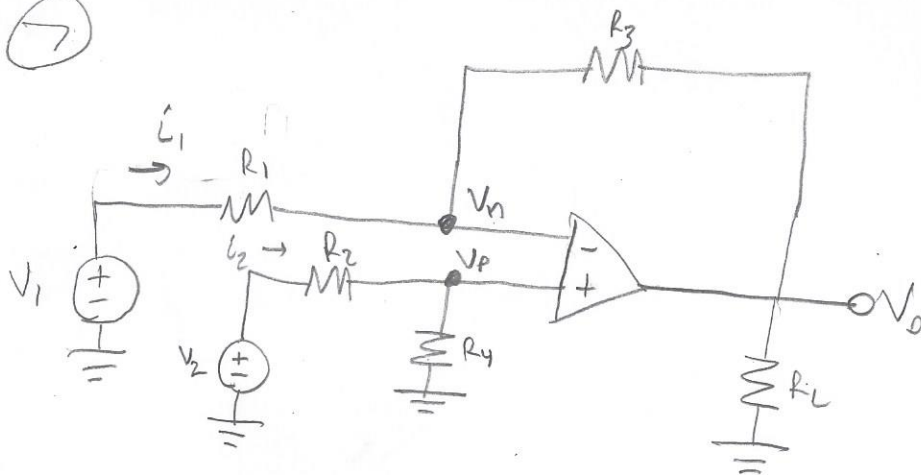


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$$V_0 = 3 \times 10^4 (i_2 - i_1)$$

$$i_1 = \frac{V_1 - 0}{R_1} = \frac{V_1}{R_1}$$

$$i_2 = \frac{V_2}{R_2}$$

$$V_0 = \left(\frac{R_4}{R_3 + R_4} \right) \left(\frac{R_1 + R_2}{R_1} \right) V_2 - \left(\frac{R_2}{R_1} \right) V_1$$

$$V_0 = \left(\frac{R_4}{R_3 + R_4} \right) \left(\frac{R_1 + R_2}{R_1} \right) \cdot \frac{R_2}{R_2} V_2 - R_2 i_1$$

$$V_0 = \underbrace{\left(\frac{R_4}{R_3 + R_4} \right) \left(\frac{R_1 + R_2}{R_1} \right)}_{3 \times 10^4} R_2 i_2 - \underbrace{R_2}_{3 \times 10^4} i_1$$

$$R_2 = 3 \times 10^4$$