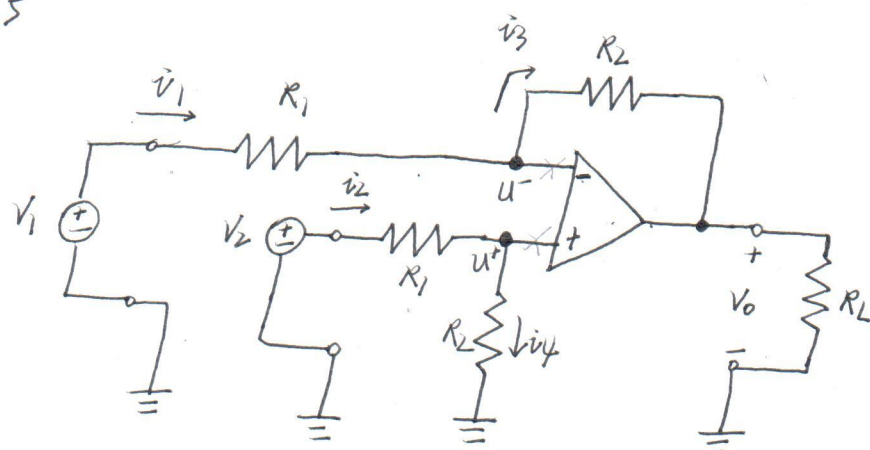


4.5



First, we verify that negative feedback is present.
According to the summing-point constraint:

$$\begin{cases} i_1 = i_3 \\ i_2 = i_4 \end{cases}$$

$$\Rightarrow \frac{V_1 - U^-}{R_1} = \frac{U^- - V_0}{R_2} \quad (1)$$

$$\frac{V_2 - U^+}{R_1} = \frac{U^+}{R_2} \quad (2) \Rightarrow U^+ = \frac{R_2}{R_1 + R_2} V_2$$

$$\therefore U^- = U^+ \text{ (summing-point constraint)}$$

$$\therefore U^- = U^+ = \frac{R_2}{R_1 + R_2} V_2$$

$$V_0 = -\frac{R_2}{R_1} (V_1 - U^-) + U^-$$

$$= \frac{R_2}{R_1} (V_2 - V_1)$$