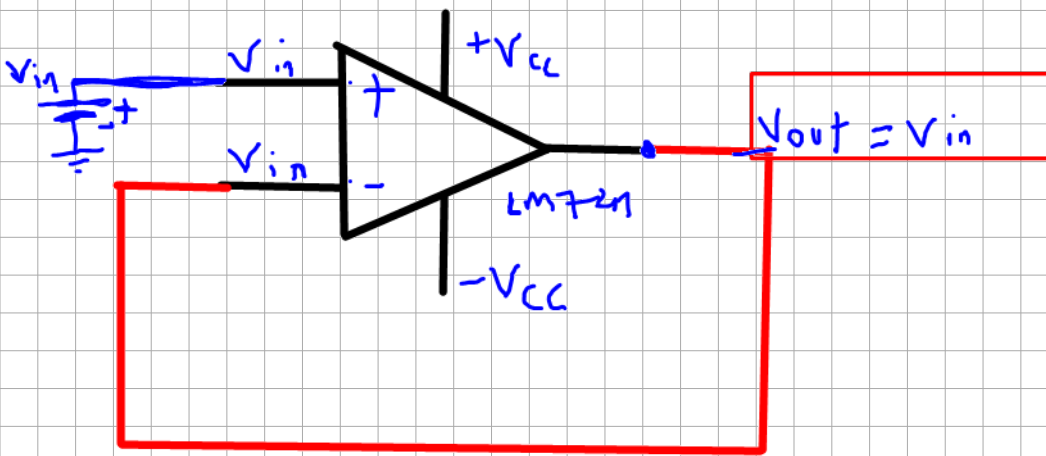
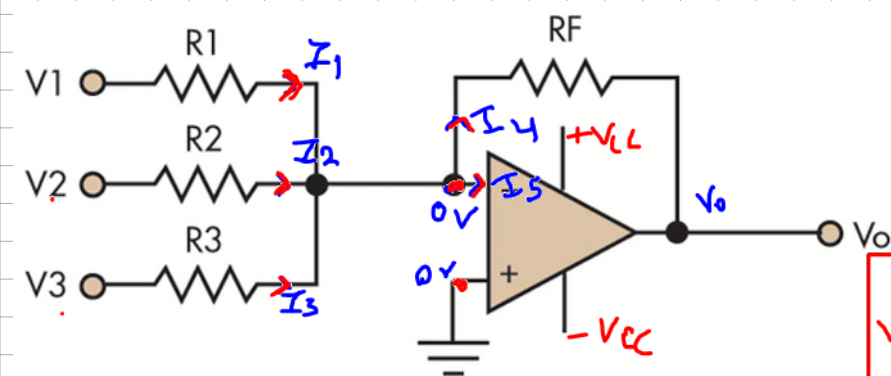


3) Voltage Follower:



4) Summing Amplifier:

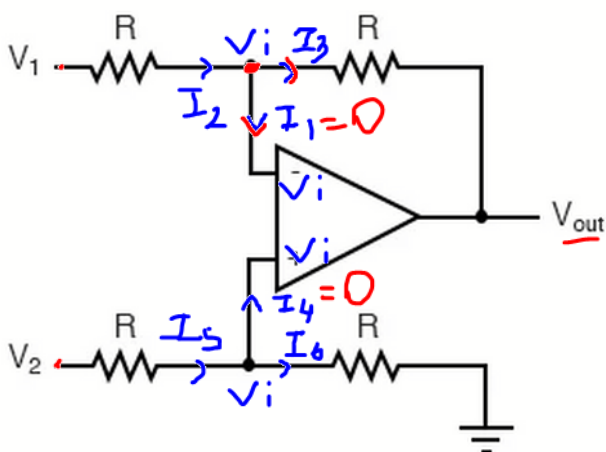


$$I_1 + I_2 + I_3 = I_4 + I_5$$

$$\frac{V_1}{R_1} + \frac{V_2}{R_2} + \frac{V_3}{R_3} = \frac{V_o}{R_F} + 0$$

$$V_o = R_F \left(\frac{V_1}{R_1} + \frac{V_2}{R_2} + \frac{V_3}{R_3} \right)$$

5) Differential Amplifier: (Farb Alci)



$$I_2 = I_1 + I_3$$

$$\frac{V_1 - V_i}{R} = 0 + \frac{V_i - V_o}{R}$$

①

$$2V_i = V_o + V_1$$

$$I_5 = I_4 + I_6$$

$$\frac{V_2 - V_i}{R} = 0 + \frac{V_i}{R}$$

②

$$2V_i = V_2$$

$$V_2 - V_1 = V_o$$

$$V_o = V_2 - V_1$$