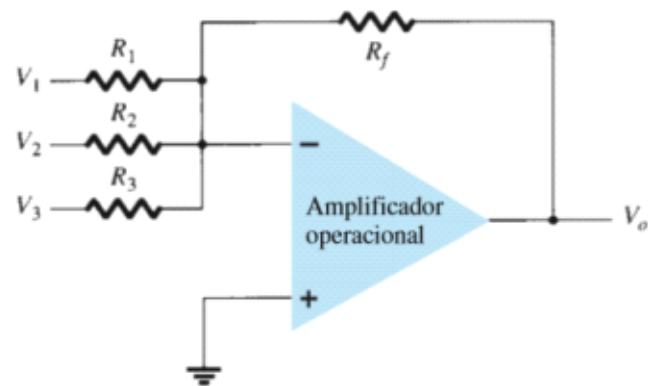


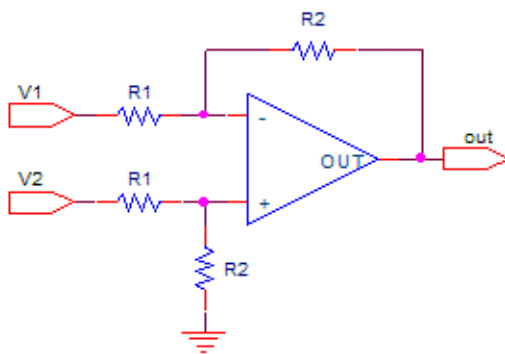
German Alfaro Alfaro
Ced 204920538

Amplificador operacional sumador

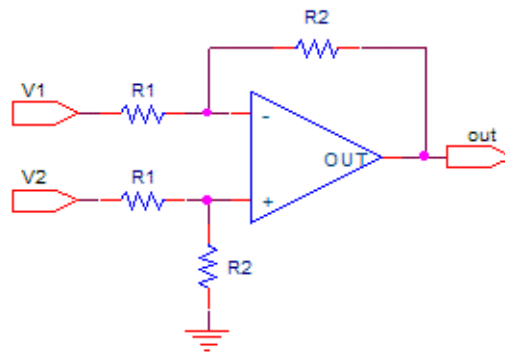


La salida está dada por:

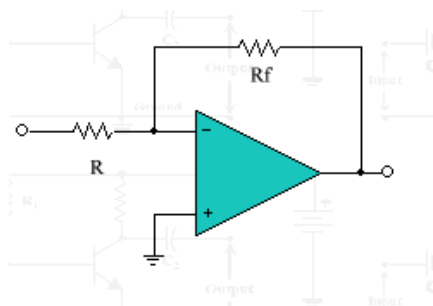
$$V_o = -\left(V_1 \cdot \frac{R_f}{R_1} + V_2 \cdot \frac{R_f}{R_2} + V_3 \cdot \frac{R_f}{R_3}\right)$$



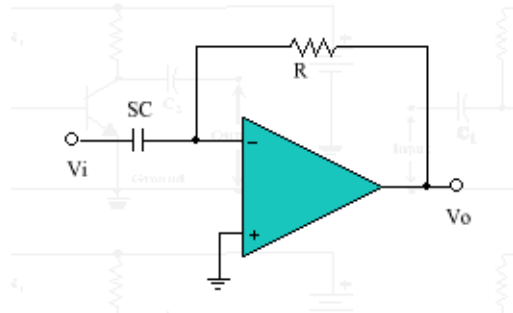
Resta amplificador operacional



Amplificador operacional inversor



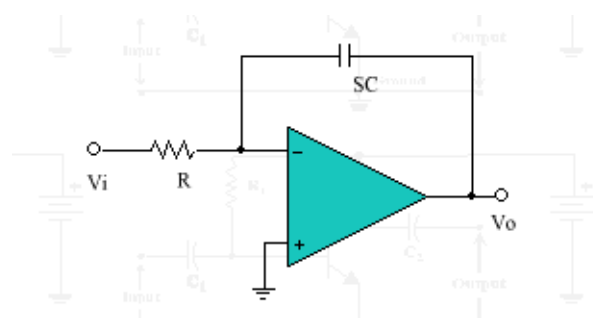
Amplificador operacional derivador



$$v_o(s) = - \frac{R}{\left(\frac{1}{sC} \right)} v_i(s)$$

$$v_o(s) = -R s C v_i(s)$$

Amplificador operacional integrador



$$v_o(s) = -\left(\frac{1}{sC}\right) \frac{v_i(s)}{R}$$

$$v_o(s) = -\frac{1}{RsC} v_i(s)$$