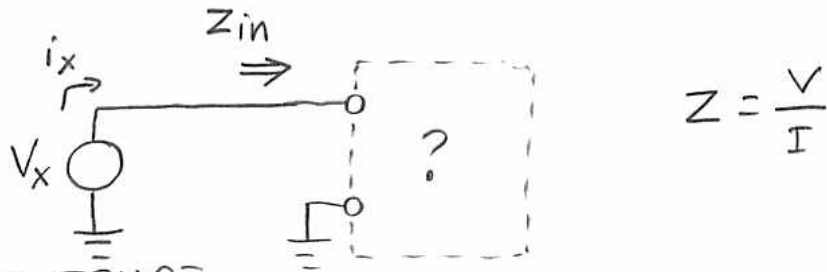


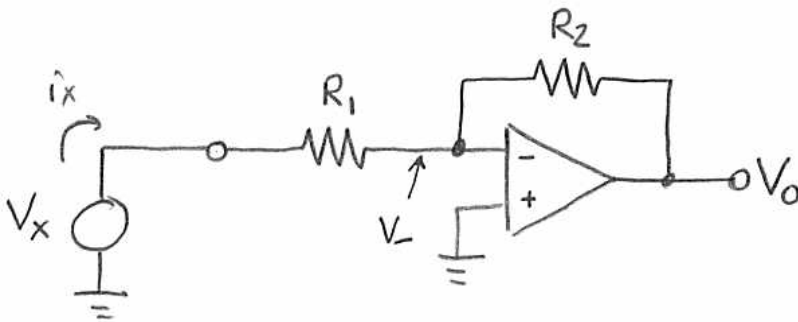
IMPEDANCE AT A NODE



PROCEDURE

APPLY TEST V_x , CALCULATE i_x

EXAMPLE: INVERTING OP-AMP CIRCUIT



OHM'S LAW FOR R_1

$$i_x = \frac{V_x - V_-}{R_1}$$

VIRTUAL GROUND: $V_- = 0$

$$i_x = \frac{V_x}{R_1} \Rightarrow \frac{V_x}{i_x} = R_1$$