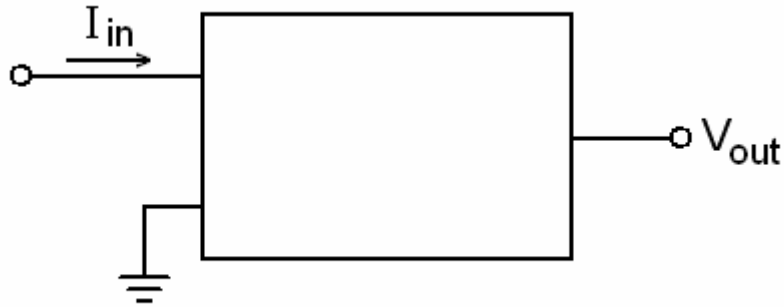


### Problem T8

Suppose you need a current-to-voltage converter, represented as the box below.



(a) Design a converter using one ideal op-amp and at most two resistors. It must have a vanishing input impedance and a gain that will give an output voltage of 1.0 V per 2 mA input current. Be sure to give the values of the resistor(s).

(b) Suppose that you do not care about the input impedance or the output impedance. Design the simplest possible current-to-voltage converter that will give an output voltage of 1.0 V per 2 mA input current.