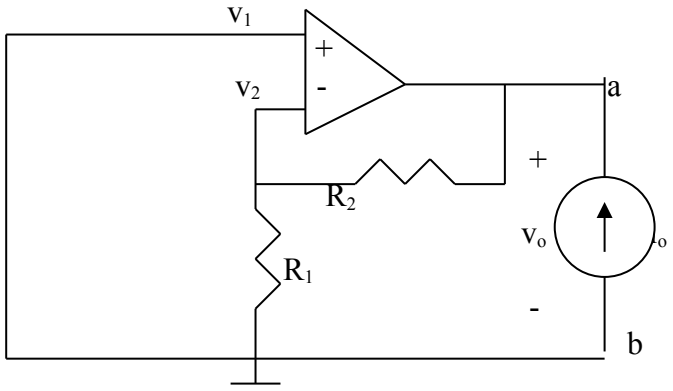
**Chapter 5, Solution 36**

$$V_{Th} = V_{ab}$$

But $v_s = \dfrac{R_1}{R_1 + R_2} V_{ab}$. Thus,

$$V_{Th} = V_{ab} = \frac{R_1 + R_2}{R_1} v_s = \underline{(1 + \frac{R_2}{R_1}) v_s}$$

To get $R_{Th}$, apply a current source $I_o$ at terminals a-b as shown below.




Since the noninverting terminal is connected to ground, $v_1 = v_2 = 0$, i.e. no current passes through $R_1$ and consequently $R_2$. Thus, $v_o = 0$ and

$$\underline{R_{Th} = \frac{v_o}{i_o} = 0}$$