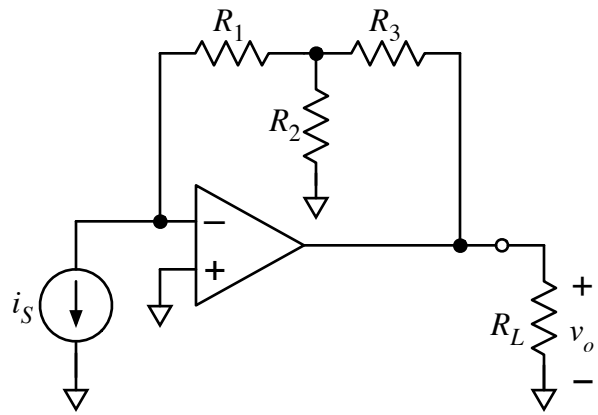


For the circuit shown at right, calculate an expression for the output voltage in term of the current source and the resistors.



$v_o =$ _____.

If $i_S = 0.5 \text{ mA}$, $R_1 = 3.3 \text{ k}\Omega$, $R_2 = 1 \text{ k}\Omega$, $R_3 = 2.2 \text{ k}\Omega$, and $R_L = 1 \text{ k}\Omega$, use your expression to calculate the value of the output voltage.

$v_o =$ _____.