Problem 4.35  For the circuit in Fig. P4.35, obtain an expression for $v_o$ in terms of $v_1$, $v_2$, and the four resistors. Evaluate $v_o$ if $v_1 = 0.1 \text{ V}$, $v_2 = 0.5 \text{ V}$, $R_1 = 100 \text{ }\Omega$, $R_2 = 200 \text{ }\Omega$, $R_3 = 2.4 \text{ k}\Omega$ and $R_4 = 1.2 \text{ k}\Omega$.  \textbf{(100 Points)}

\begin{center}
\textbf{Figure P4.35:} Circuit for Problem 4.35.
\end{center}
Problem 4.51  Solve for $v_0$ in terms of $v_s$ for the circuit in Fig. P4.51.

(100 Points)

![Circuit Diagram]

Figure P4.51: Circuit for Problem 4.51.