I_S 8.5 mA

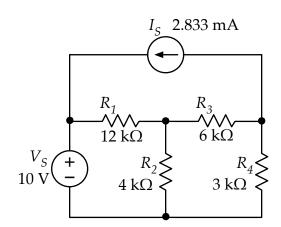
a. Use the node-voltage method to find the power dissipated in resistor R_4 .

 $\begin{array}{c|cccc}
R_1 & R_3 \\
\hline
& 8 \text{ k}\Omega & 4 \text{ k}\Omega
\end{array}$ $\begin{array}{c|cccc}
V_S & R_2 & R_2 \\
\hline
& 2.33 \text{ k}\Omega & 2 \text{ k}\Omega
\end{array}$

 $P_{R4} =$

b. Use the mesh-current method to find the power dissipated in resistor R_4 .

 $P_{R4} = \underline{\hspace{1cm}}$



c. Use the superposition method to find the power dissipated in resistor R_4 . (Be careful. Note the comments about superposition and power.)

 $P_{R4} =$ ______

