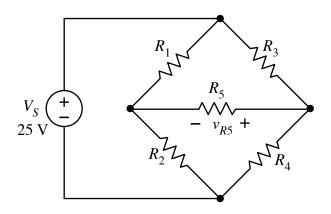
Use the node-voltage method in the following calculations.



a. Calculate the voltage across R_5 , if all five resistances are equal to 100 Ω .

 $v_{R5} =$ _____

b. Calculate the voltage across R_5 , if $R_1 = R_4 = 50 \Omega$ and $R_2 = R_3 = 150 \Omega$ and $R_5 = 100 \Omega$.

 $v_{R5} =$ _____