$\qquad$

For the " $\pi$ - network" shown at right, determine the values for $R_{a}, R_{b}$, and $R_{c}$ so that the corresponding twoport parameters will be:

$R_{1}=6 \mathrm{k} \Omega$,
$a_{21}=0.667$
$R_{2}=2.25 \mathrm{k} \Omega$, and
$a_{12}=0.25$.


Note: You will need to "work backwards". Use the method described in the notes to express $R_{1}, a_{21}$, etc in terms of $R_{a}, R_{b}$, and $R_{c}$. Then using the relationships, determine values for the three resistors in the original circuit.

