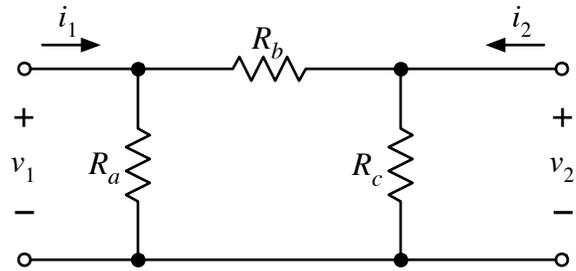For the "π - network" shown at right, determine the values for R_a, R_b, and R_c so that the corresponding two-port parameters will be:
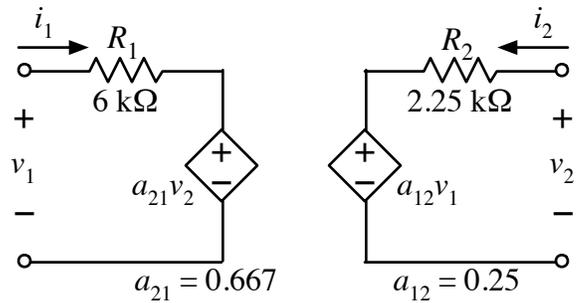

$R_1 = 6 \text{ k}\Omega$,

$a_{21} = 0.667$

$R_2 = 2.25 \text{ k}\Omega$, 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.