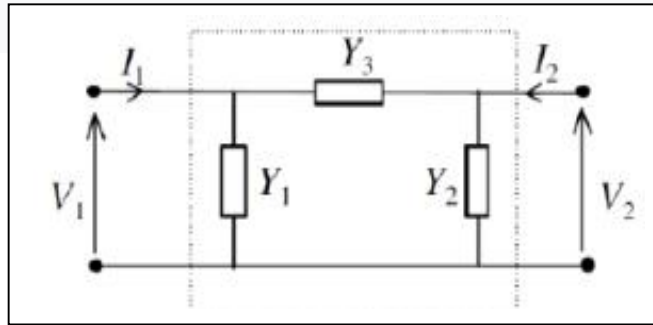


Exercises on two-port network

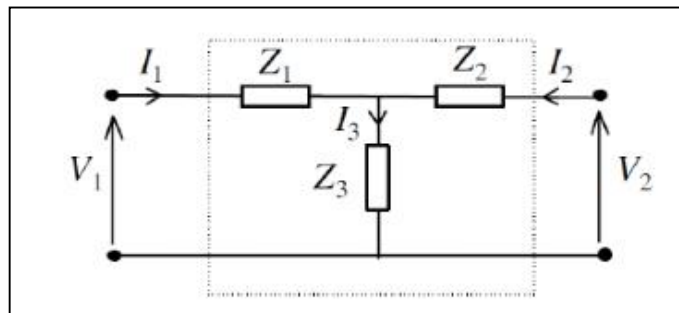
Exercise 1:

Consider the π -shaped two-port network in the figure below. Calculate the Z parameters of the impedance matrix of this two-port network.



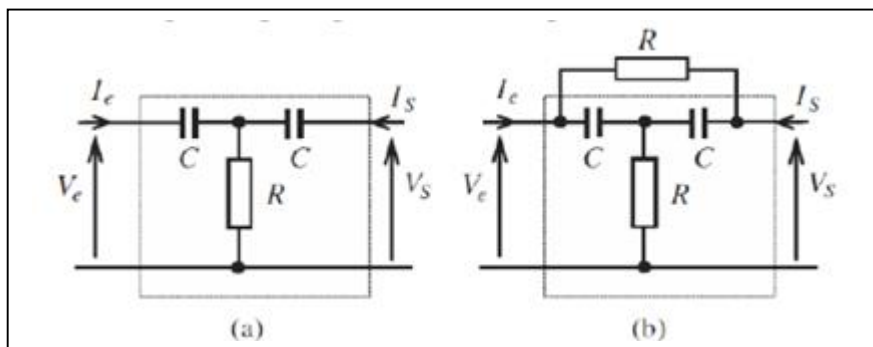
Exercise 2:

Consider the T-shaped two-port network in the figure below. Calculate the Y parameters of the admittance matrix of this two-port network.



Exercise 3:

Consider the T-network, bridged T-network in the figure below.



Determine the admittance matrix of the two-port network in figure a.

In the same way as in the previous exercise with:

$$Z1 = \frac{1}{j\omega C}, \quad Z2 = \frac{1}{j\omega C}, \quad Z3 = R$$

Deduce the admittance matrix of the two-port network in figure b.