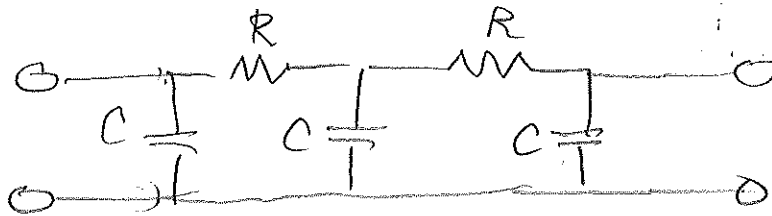


ECE 580

HOMEWORK 2

Due Oct. 24, 2014

1. Find the \underline{Z} matrix of the two-port shown below:



$$R = 1 \text{ k}\Omega$$
$$C = 1 \text{ pF}$$

2. Find a two-port matrix for the following circuits:

a. Gyrator

b. Ideal transformer

c. "Physical" transformer.

Use the Laplace (s) variable. Choose the matrix which is the simplest to find!