

Duke University
Department of Physics

Physics 271

Spring Term 2017

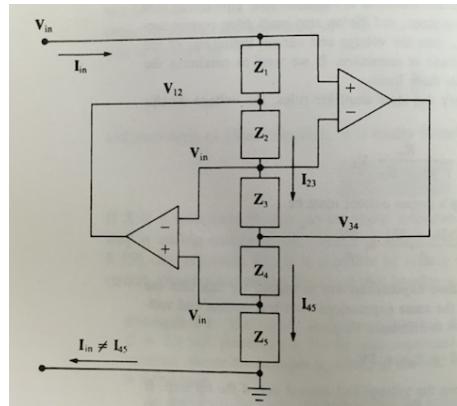
HOMEWORK 12

Available: April 6

Due: April 13, at the beginning of class.

Reading: Eggleston 8.1-8.7

Problem 1: For the gyrator circuit shown, show that the input impedance is given by $Z_{in} = \frac{Z_1 Z_3 Z_5}{Z_2 Z_4}$. Show also how this circuit can be used to simulate an inductor.



Text Problems:

Eggleston 8.1-8.4