

ECE2150J

Introduction to Circuits

Homework 8

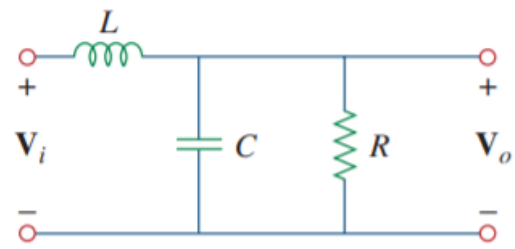


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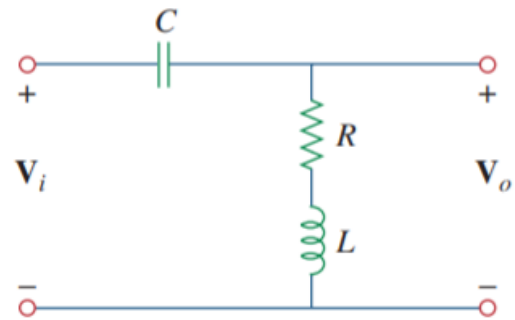
Please name your file as *NAME_HW8_STUDENTID*.

In order to receive full marks, you shall write all the intermediate steps of calculation or proof unless otherwise indicated.

Exercise 8.1 (30%) Find the transfer function $H(\omega) = V_o/V_i$ of the circuits.



(a)

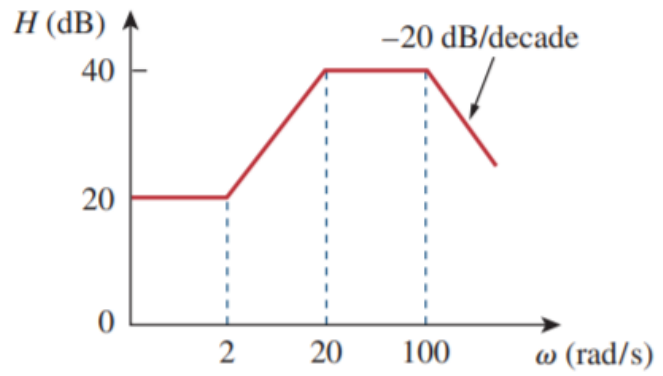


(b)

Exercise 8.2 (30%) Sketch the bode plots for

$$H(\omega) = \frac{250(j\omega + 1)}{j\omega(-\omega^2 + 10j\omega + 25)}$$

Exercise 8.3 (30%) Find the transfer function $H(\omega)$ with the Bode magnitude plot



Exercise 8.4 (10%) Congratulations! You've finished the last assignment of this course. You can leave whatever you want here. It's good to be with you in VE215. Good luck in the final exam!