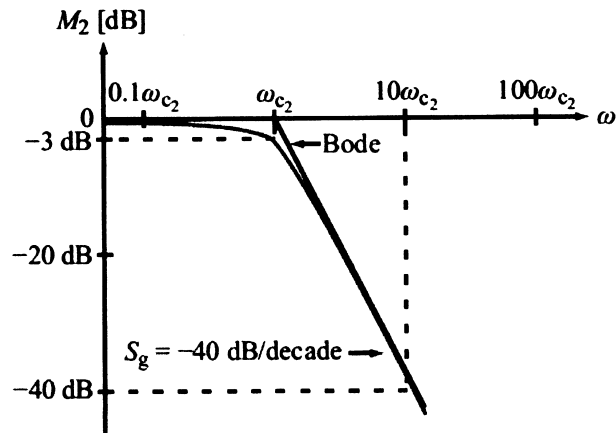
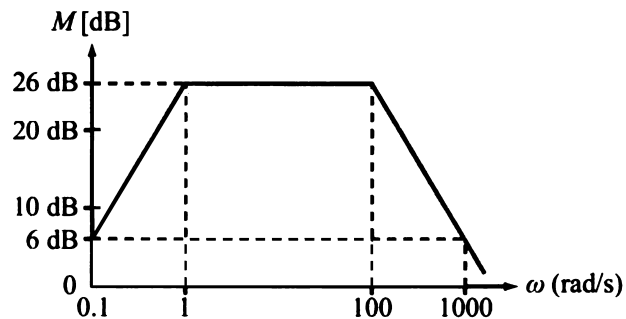


1. Bode plots and phasors

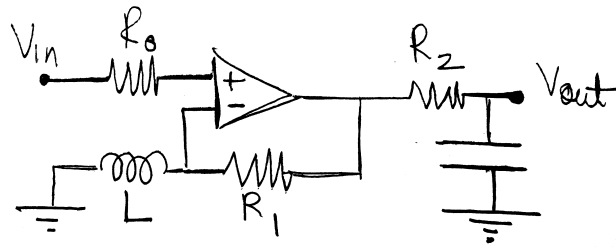
(a) Derive a transfer function that would result in the following bode plot.



(b) Derive a transfer function that would result in the following bode plot. *Hint.* $20\log_{10} 2 = 6$.

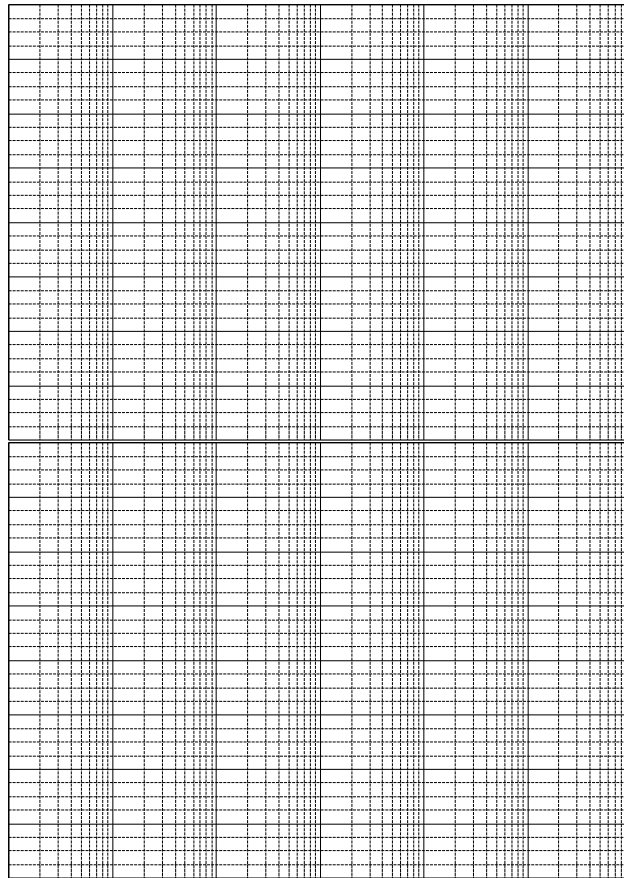


(c) Derive the transfer function and plot the magnitude and phase bode plots for the following. For the

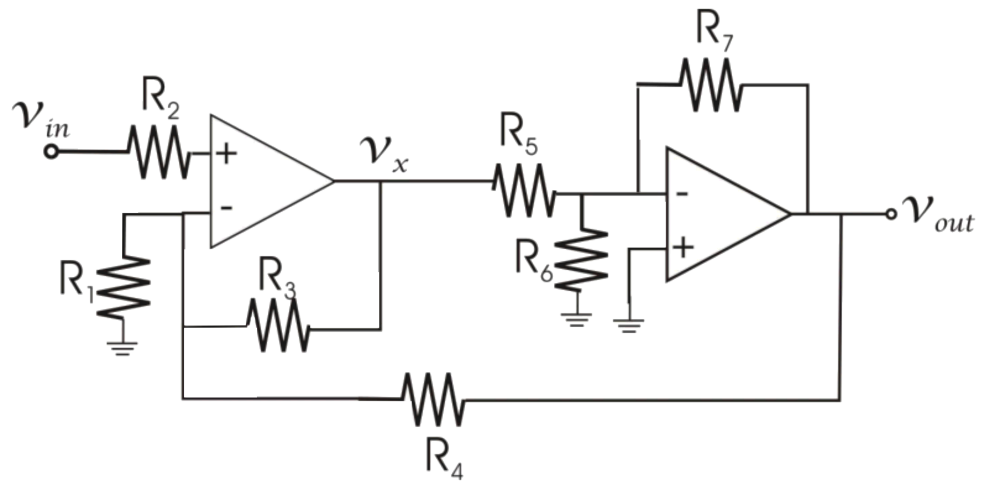


bode plots, let

$$R_0 = 100\Omega, R_1 = 1k\Omega, L = 1\mu H, R_2 = 100k\Omega, C = 1pF$$



(d) Derive the symbolic transfer function for the following circuit.



Contributors:

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