University of Notre Dame
Department of Electrical Engineering
EE 30344 – Signals and Systems I
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October 12, 2006 mh

Homework 8

Due: Friday, October 27, 2006, in class

Reading: cf. `http:/www/nd.edu/~mhaenggi/ee344/overview.html`

Problems from textbook: 4.19; 4.23a,b,c; 4.25a,b,c; 4.26a(iii), 4.33a,c; 4.34a,b; 4.36.

Problems from exercise book: Study the tutorial 4.1 and plot the magnitude and phase of the frequency response of the systems in problems 4.33a and 4.34 using `freqs`. Create an `m`-file that produces the plots, and save the plots separately. What kind of filters are these two systems (HP, LP, BP, none of these)?
By default, `freqs` produces doubly logarithmic magnitude plots (i.e., both the frequency and magnitude axes are logarithmically scaled). Explain why this is the case. Is the logarithmic plot more meaningful than a linear plot?
Note: Be careful with the ordering of the coefficients when using `freqs`. Read the online help (`help freqs`).