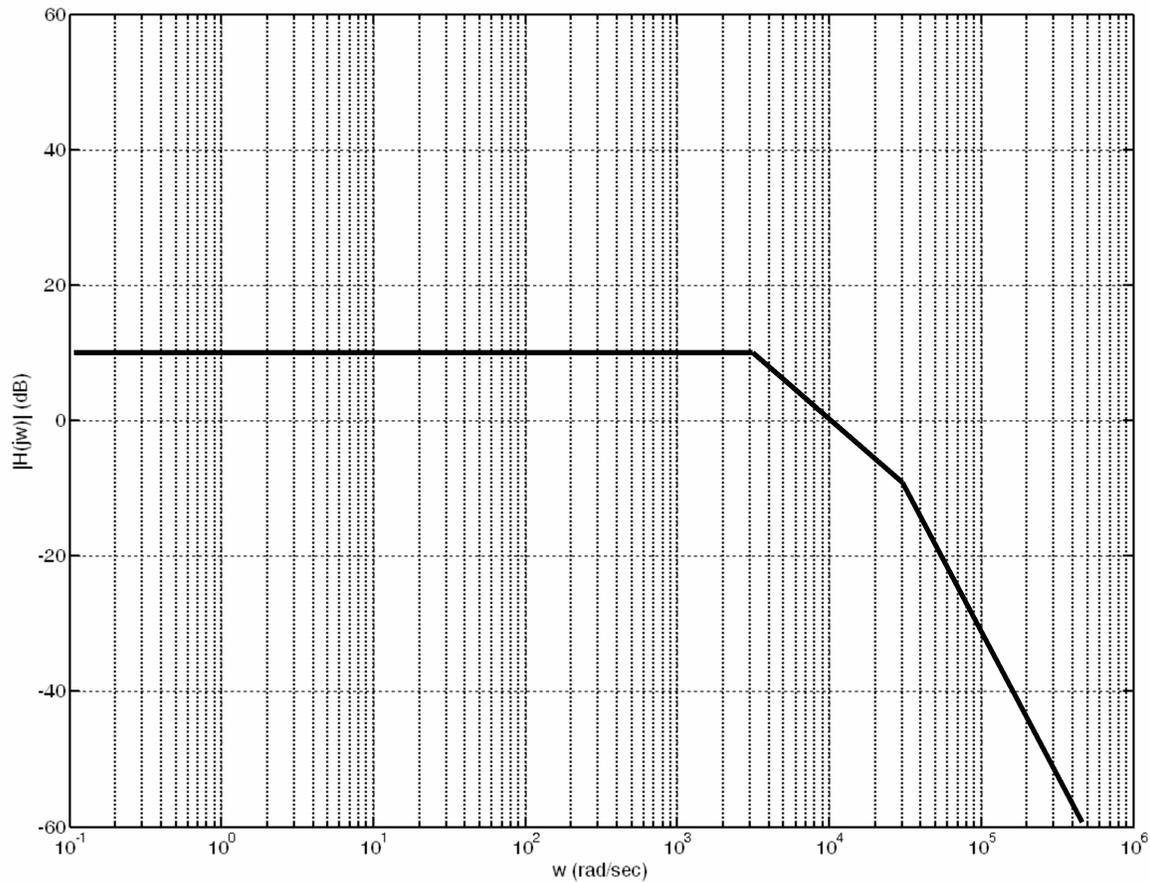


EE322 Fall 2012 Homework Problem Set 32 (PS32)

Be sure to show your work.

1. Text, Problem 12-11a. You only need do the straight line approximations of the magnitude.
1. Given the Bode magnitude plot below, derive a transfer function ($H(j\omega)$) that corresponds to that magnitude plot. Note: if it is hard to read, the frequency axis runs from $\omega=0.1$ rad/sec to $\omega=10^6$ rad/sec, and the magnitude axis runs from -60 dB to +60 dB.



3. Text, problem 12-32a. Derive the frequency response and plot the straight-line approximation Bode plot of its magnitude. Hint: the denominator of $H(j\omega)$ is a quadratic polynomial of $j\omega$. You must factor it into two terms and put them in the correct form for Bode analysis.