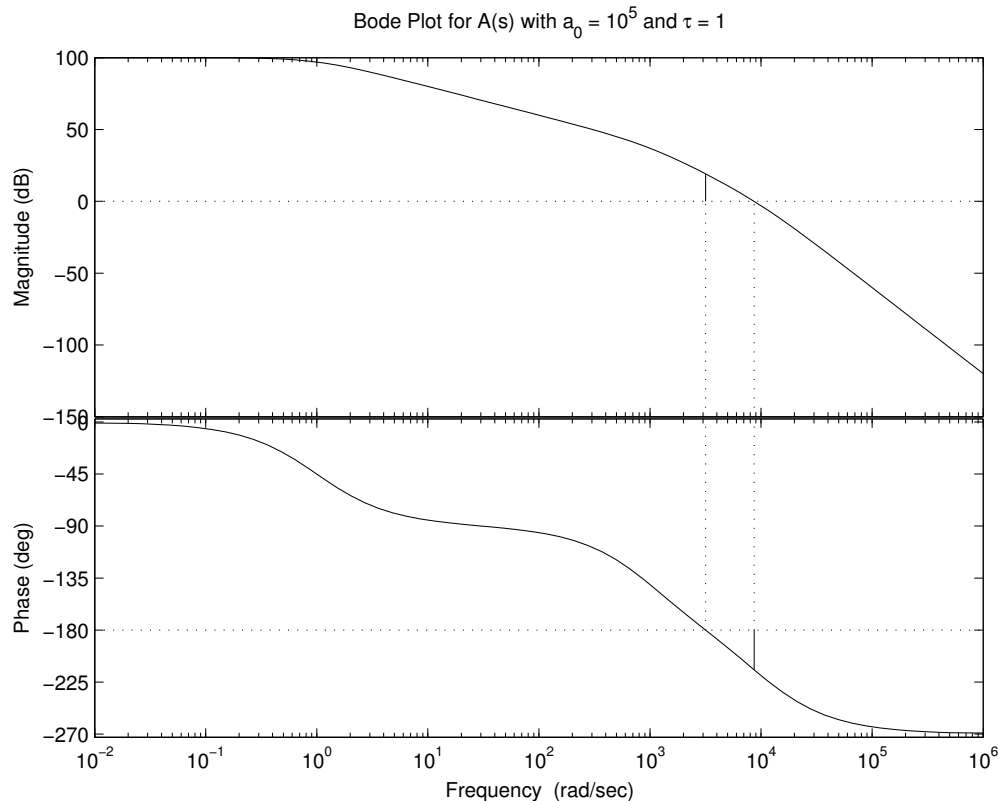


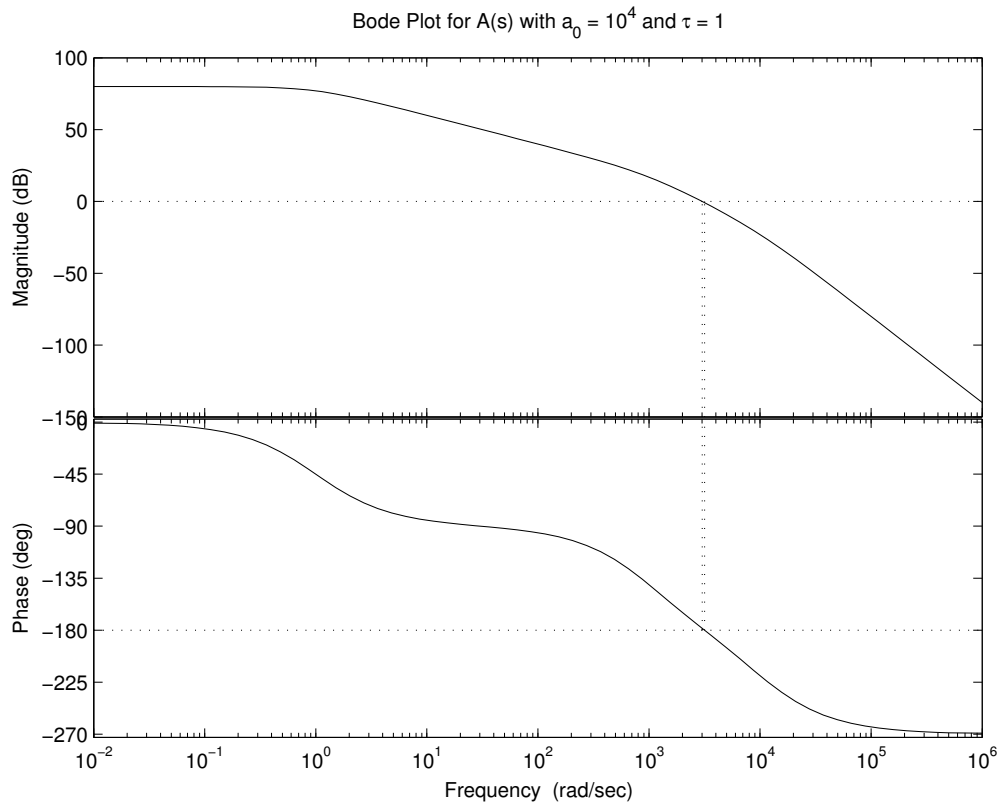
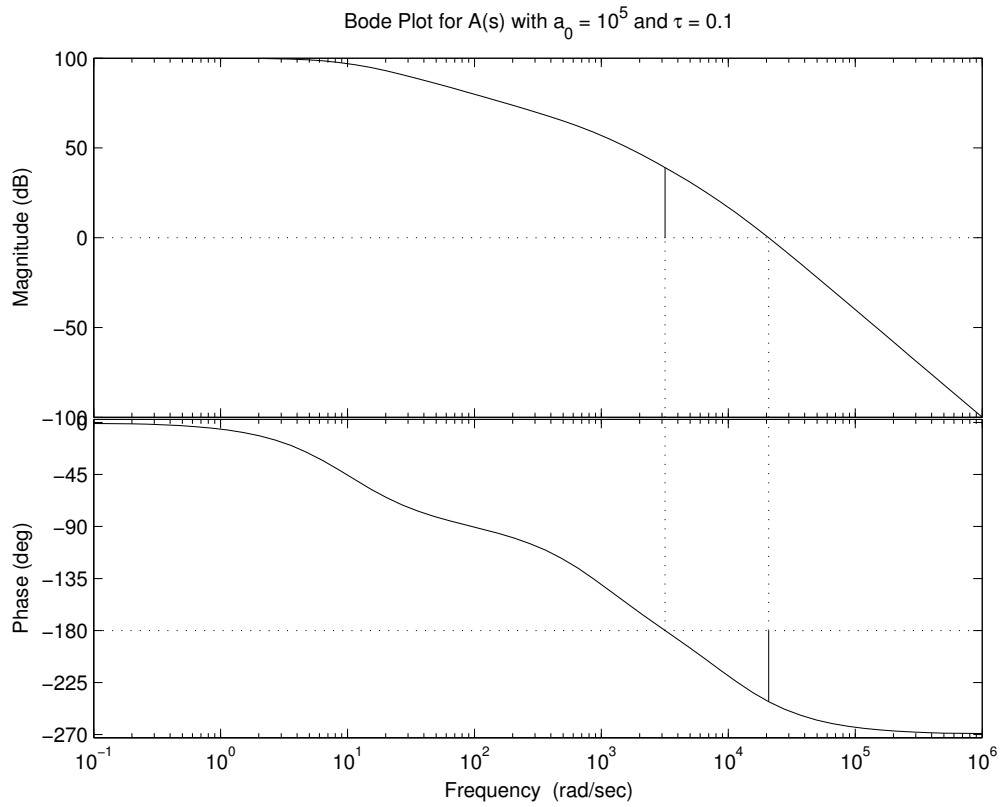
# 6.302 Prelab 2

Michael Salib

November 13, 2002

	Uncompensated	Gain	Lag	Lead
Crossover Frequency $\omega_c$	2020	745	738	3670
Bandwidth $\omega_b$	3200	1250	1256	773
Dominant Closed Loop Poles	$265 \pm 2093j$	$450 \pm 849j$	$412 \pm 817j$	$2007 \pm 4179j$
Damping Ratio $\zeta$	0.126	0.469	0.450	0.433
Natural Frequency $\omega_n$	2110	961	915	4636
Peak Overshoot $P_o$	1.67	1.19	1.21	1.22
Time to Peak $t_p$	0.0015	0.0037	0.0038	0.00075
Peak Magnitude $M_p$	4.01	1.21	1.24	1.28
Peak Frequency $\omega_p$	2076	719	706	3665
Compensator Resister		4888 $\Omega$	4878 $\Omega$	Infinity
Compensator Capacitor			2.35 $\mu F$	3.93nF





Bode Plot for  $A(s)$  with  $a_0 = 10^4$  and  $\tau = 0.1$

