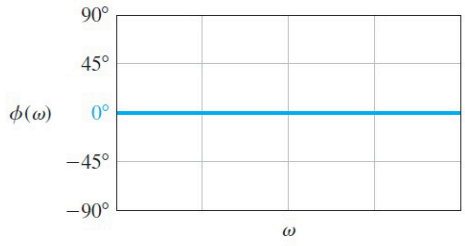
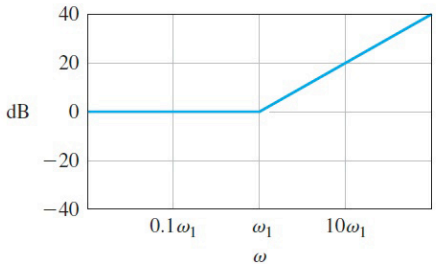
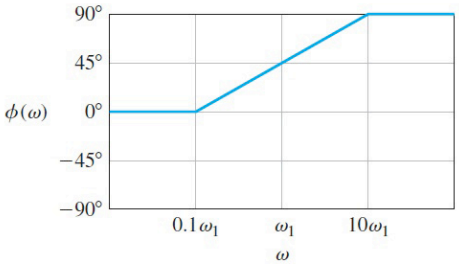
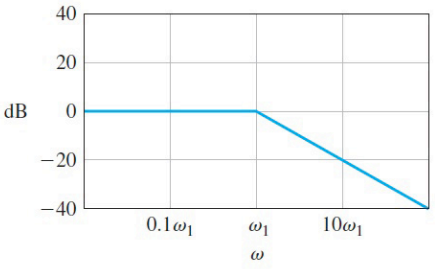
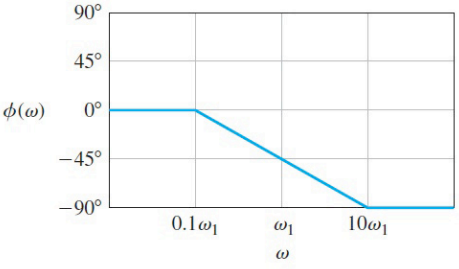
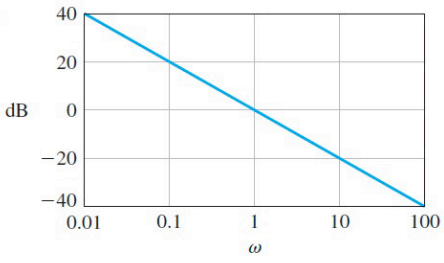
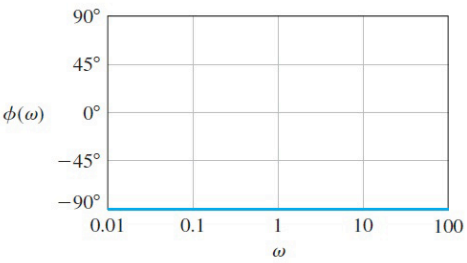
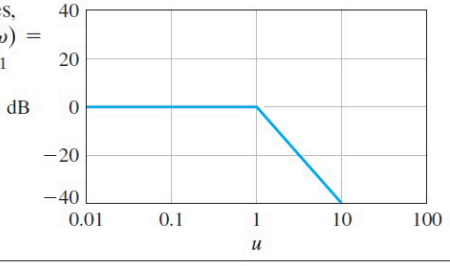
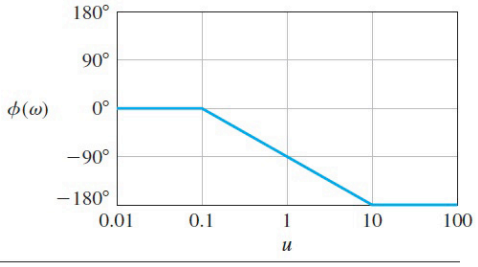
Table 8.3 Asymptotic Curves for Basic Terms of a Transfer Function

Term	Magnitude $20 \log \lvert G \rvert$	Phase $\phi(\omega)$
1. Gain, $G(j\omega) = K$		
2. Zero, $G(j\omega) = 1 + j\omega/\omega_1$		
3. Pole, $G(j\omega) = (1 + j\omega/\omega_1)^{-1}$		
4. Pole at the origin, $G(j\omega) = 1/j\omega$		
5. Two complex poles, $0.1 < \zeta < 1$, $G(j\omega) = (1 + j2\zeta u - u^2)^{-1}$ $u = \omega/\omega_n$		

Taken from Modern Control Systems (12th edition) by Dorf and Bishop.