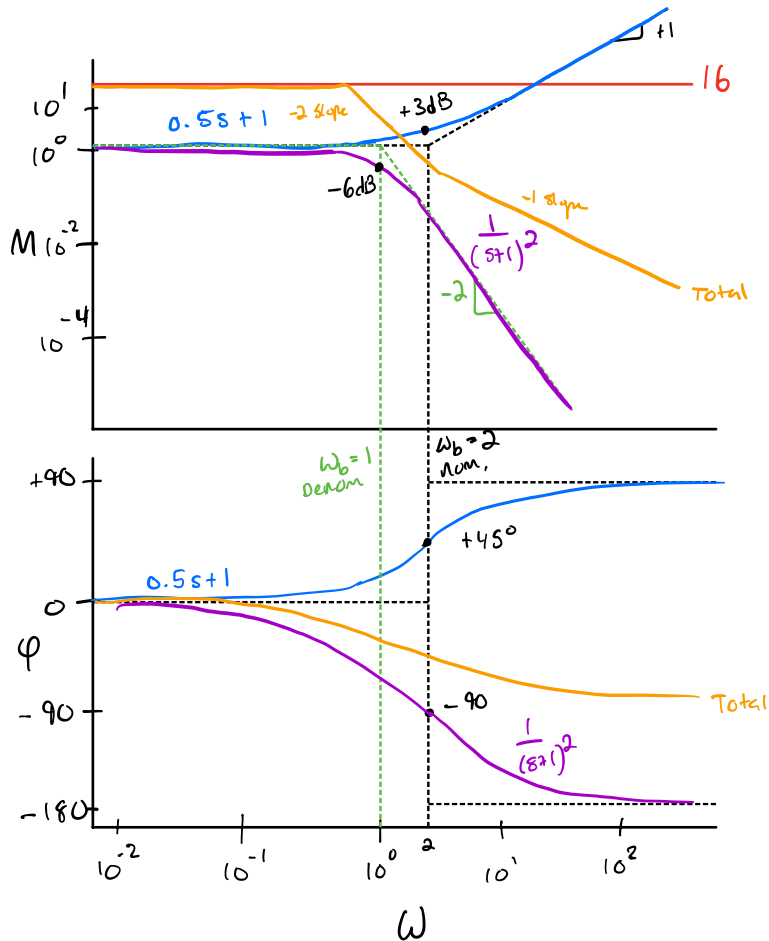


Lec 19 example cont'd



In matlab: `bode(G0, 'r', G1, 'b', ...)`

$G0 = tf([16], [1])$, $G1 = 0.5s+1$...

or `h = bodeplot(...)`

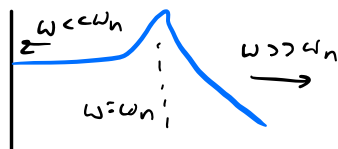
`p = getoptions(h)`

p. mag units = 'abs'

etc.

Response w/ complex conj. pair: $\frac{\omega_n^2}{s^2 + 2\zeta\omega_n s + \omega_n^2}$

$\rightarrow G(j\omega)$



Low freq: $M \approx 1, \log M = 0$

High freq: $M \approx \frac{1}{(\frac{\omega}{\omega_n})^2} \rightarrow \log M \approx -2 \log(\frac{\omega}{\omega_n})$

same magnitude asymptotes as
repeated roots