EECS 210 Section 2 – Lecture Summaries
Lecture 36, Friday, April 6, 2001

- 5 parameters characterize a bandpass filter
  - The center frequency, ω_0
  - The two cutoff frequencies, ω_{c1} and ω_{c2} (-3 dB points), (Note that ω_0 is geometric mean of ω_{c1} and ω_{c2})
  - The bandwidth, $\beta = \omega_{c2} - \omega_{c1}$
  - And the Quality Factor, $Q = \omega_0/\beta$
- Recipe for solution
  - Write $H(\omega)$
  - Convert to s-domain, $H(s)$
  - Find zeros and poles of $H(s)$
  - For $s = j\omega$, write $H(\omega)$
  - Plot $A_{dB} = 20 \log_{10} |H(\omega)|$ and $\angle H(\omega)$