2. Indicar la RTA asintótica:

A) $|H(j\omega)| = \frac{\sqrt{(\omega_0/Q)^2 \cdot \omega^2}}{\left[(\omega_0^2 - \omega^2)^2 + \omega^2\left(\frac{\omega_0}{Q}\right)^2\right]^{1/2}}$

$\Rightarrow \lim_{\omega \to 0} |H(j\omega)| = 0$

$\lim_{\omega \to \infty} |H(j\omega)| \simeq \frac{1}{\omega} \Rightarrow$

asintota con pendiente de $-20 \frac{dB}{dec}$

NOTA

B) $|H(j\omega)| = \dfrac{\sqrt{\omega^4}}{[(\omega_0^2-\omega^2)^2 + \omega^2(\omega_0\xi)^2]^{1/2}}$ $\Rightarrow \lim_{\omega\to 0} |H(j\omega)| = 0$

$\lim_{\omega\to\infty} |H(j\omega)| = 1 \Rightarrow$

$20\log|1| = 0\ dB \Rightarrow$ asintota con pendiente de $0\ dB$