① $G(s) = \frac{200(s+4)}{(s+2)(s+20)}$

polos: $s = -2$; $s = -20$

zeros: $s = -4$.

$200(s+4) = 0$

$s = -4$

$s + 2 = 0$ $\quad$ $s + 20 = 0$

$s = -2$ $\quad$ $s = -20$

② $G(s) = \frac{\omega_n^2}{s^2 + 2\varepsilon\omega_n s + \omega_n^2}$

$\omega \gg \omega_n \Rightarrow dB = 0$

$\omega_n \gg \omega \Rightarrow -20 \log \omega^2$

$\omega = \omega_n \Rightarrow \frac{1}{2\varepsilon} = -20 \log 2\varepsilon$