$$\frac{1}{\sqrt{1+\left(\frac{f_a}{f_p}\right)^{2n}}} = 10^{b/20} \iff \frac{1}{1+\left(\frac{f_a}{f_p}\right)^{2n}} = 10^{b/10}$$

$$1 = \left[1+\left(\frac{f_a}{f_p}\right)^{2n}\right] \cdot 10^{b/10} \iff \left(\frac{f_a}{f_p}\right)^{2n} = \frac{1}{10^{b/10}} - 1$$

$$\left(\frac{f_a}{f_p}\right)^{2n} = 10^{-b/10} - 1 \iff 2n \log\left(\frac{f_a}{f_p}\right) = \log\left[10^{-b/10} - 1\right]$$

$$\iff \boxed{n \geq \frac{\log\left[10^{-b/10}-1\right]}{2\log\left(\frac{f_a}{f_p}\right)}}$$

Rq. i.e. $\boxed{b = -38\,dB.}$

A.N $\quad n \geq \dfrac{3,79}{0,795} = 4,76 \Rightarrow$ ordre du filtre : $\boxed{5}$

$H(j\omega) \hookrightarrow |H(j\omega)| \xrightarrow{20\log} 20\log|H(j\omega)|\,(dB)$

$20\log 10^{\frac{b}{20}} \quad \frac{b}{20} \quad \text{lin } 10^{\frac{b}{20}} \quad b \text{ (en dB)}$

$1\,mW \quad 10\log P(mW) \quad dBm$