$$x(t) = e^{-2t} \cdot u(t)$$

$$P_\infty = \lim_{T\to\infty} \frac{1}{2T} \int_{-T}^{T} |x(t)|^2 \cdot dt$$

Power of $x(t)$: $P_\infty = \lim_{T\to\infty} \frac{1}{2T} \int_{0}^{T} e^{-4t} \cdot dt = \lim_{T\to\infty} \frac{\int_0^T e^{-4t} \cdot dt}{2T}$

- e^{-4t} → always positive for $t > 0$
- $\int_0^T e^{-4t} \cdot dt = \frac{-1}{4} e^{-4t} \Big|_0^\infty$ → finite
- $2T$ → infinite
- $\int_0^T$ → because of $u(t)$

$= 0$