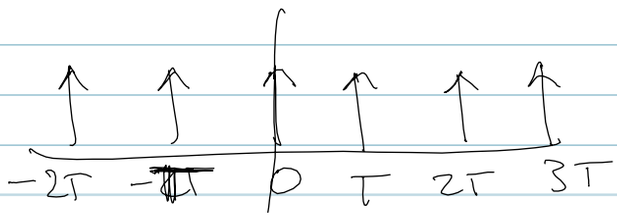
Example 4

$$f(t) = \sum_{n=-\infty}^{\infty} \delta(t - nT)$$



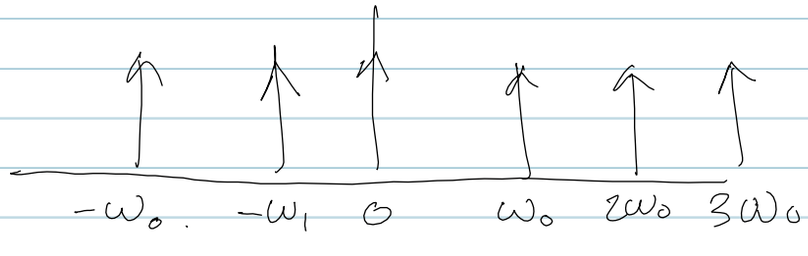
← Model of Sampling.

$$F(\omega) = 2\pi \sum_{n=-\infty}^{\infty} C_k \delta(\omega - k\omega_0)$$

$$C_k = \frac{1}{T} \int_{-T/2}^{T/2} f(t) e^{-jk\omega_0 t} \cdot dt$$

$$= \frac{1}{T} \int_{-T/2}^{T/2} \delta(t) e^{-jk\omega_0 t} dt \quad \frac{1}{T}$$

$$F(\omega) = \frac{2\pi}{T} \sum_{k=-\infty}^{\infty} \delta(\omega - k\omega_0)$$



← frequency of Sampling.