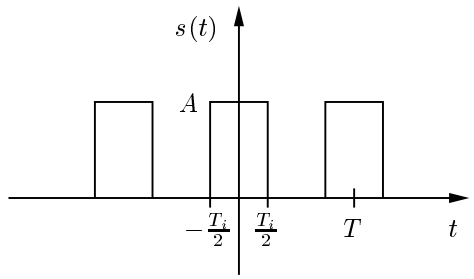
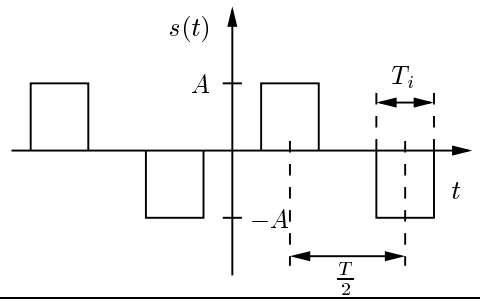
Fourier series

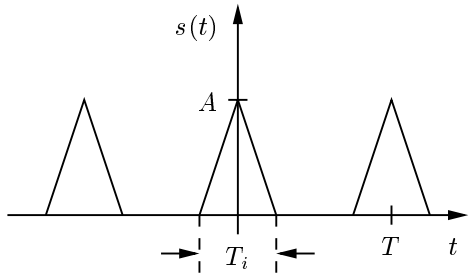


$$s(t) = \sum_{n=-\infty}^{\infty} c_n \cdot e^{jn\omega_0 t}$$

$$c_n = \frac{A \cdot T_i}{T} \cdot si\left(n \cdot \pi \cdot \frac{T_i}{T}\right)$$



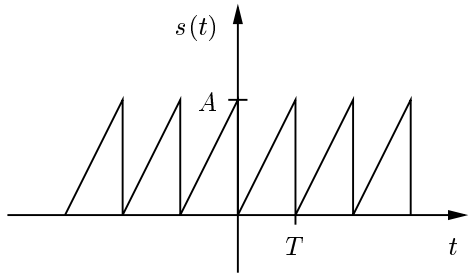
$$c_n = -j \cdot \frac{2 \cdot A \cdot T_i}{T} \cdot si\left(n \cdot \pi \frac{T_i}{T}\right) \cdot \sin\left(n \cdot \frac{\pi}{2}\right)$$



$$c_0 = \frac{A}{2} \cdot \frac{T_i}{T}$$

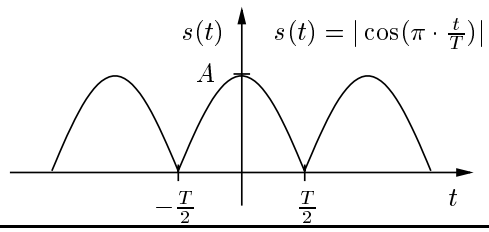
$$c_n = \frac{A \cdot T}{n^2 \cdot \pi^2 \cdot T_i} \cdot \left(1 - \cos\left(n \cdot \pi \cdot \frac{T_i}{T}\right)\right)$$

$$n \neq 0$$



$$c_n = j \cdot \frac{A}{2 \cdot \pi \cdot n} \quad \text{für} \quad n \neq 0$$

$$c_0 = \frac{A}{2}$$



$$c_n = \frac{-2 \cdot A}{(4n^2 - 1) \cdot \pi} \cdot \cos(n \cdot \pi)$$

$$\omega_0 = \frac{2 \cdot \pi}{T}$$