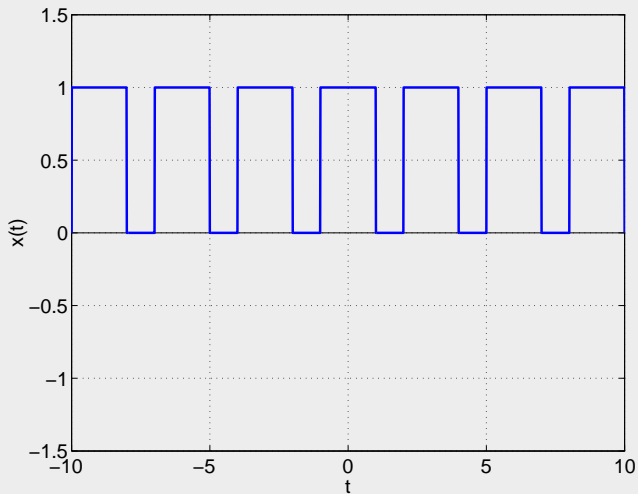


Serie de Fourier



Señal Original

- Coeficientes de la serie de Fourier:

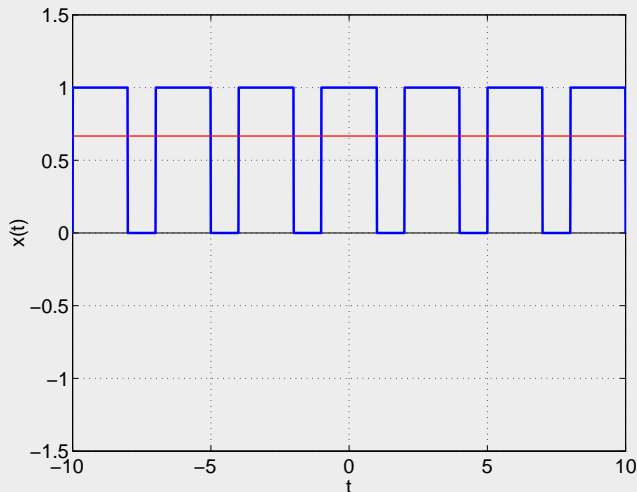
$$C_k = \frac{2A}{T_0} \operatorname{sinc} \left(\frac{2A}{T_0} k \right)$$

- Serie de Fourier (señales reales):

$$x(t) = \frac{2A}{T_0} + \frac{4A}{T_0} \sum_{k=1}^{\infty} \operatorname{sinc} \left(\frac{2A}{T_0} k \right) \cos \left(k \frac{2\pi}{T_0} t \right)$$

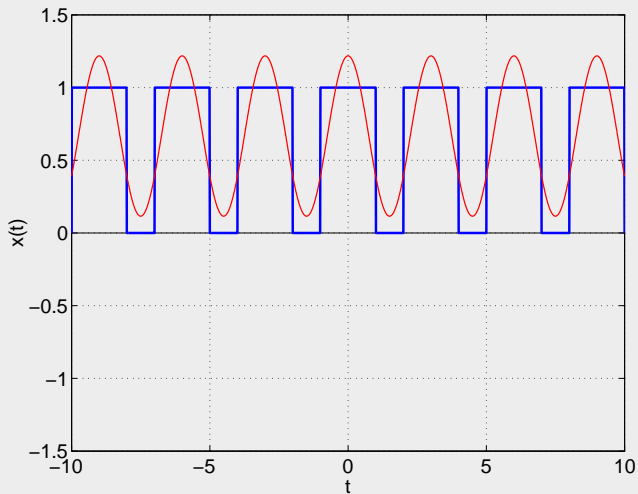
- En el ejemplo $A = 1$, $T_0 = 3$

Serie de Fourier



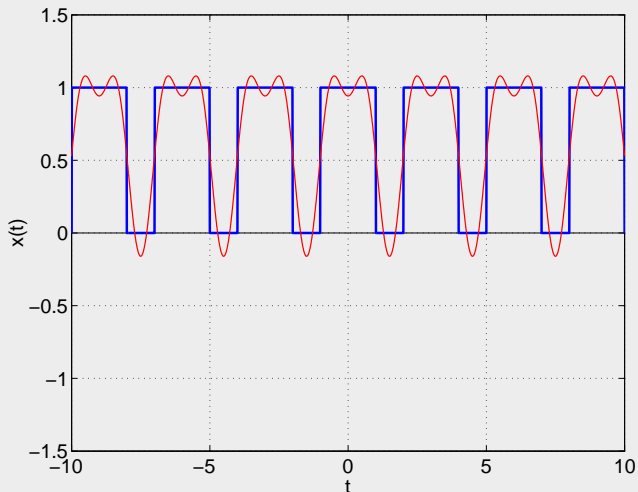
Serie de Fourier (Coeficiente C_0)

Serie de Fourier



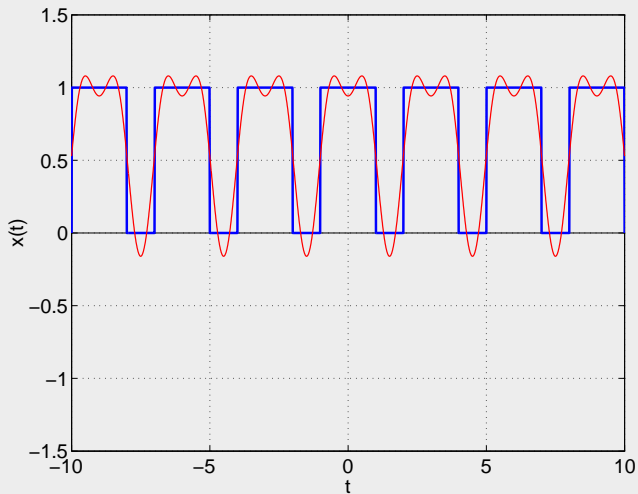
Serie de Fourier ($C_0 + 1$ coeficiente)

Serie de Fourier



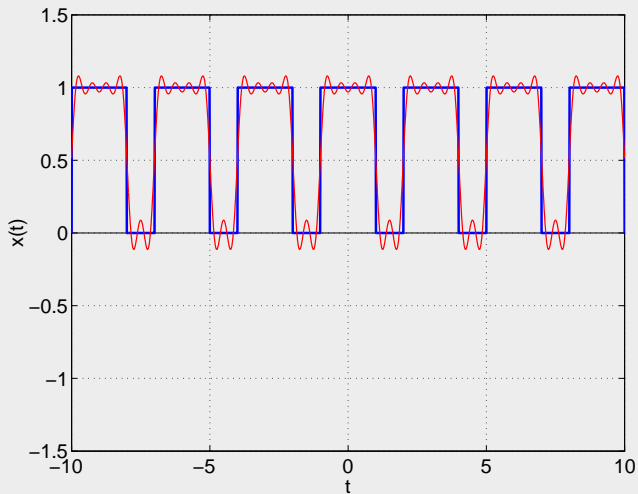
Serie de Fourier ($C_0 + 2$ coeficientes)

Serie de Fourier



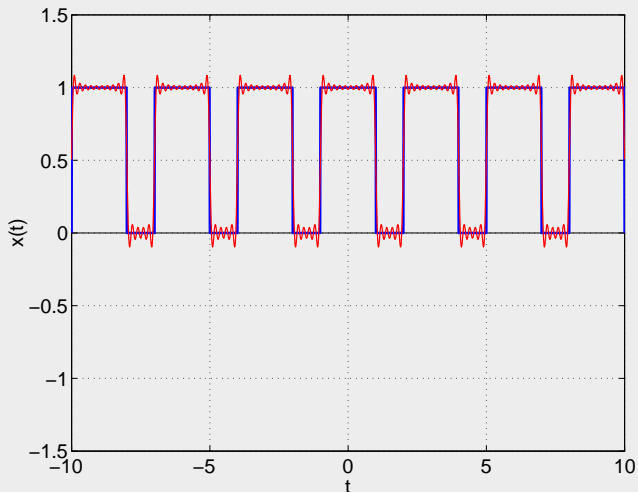
Serie de Fourier ($C_0 + 3$ coeficientes)

Serie de Fourier



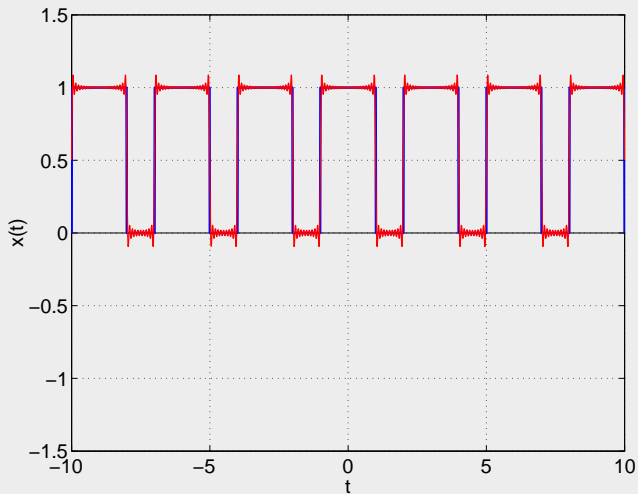
Serie de Fourier ($C_0 + 6$ coeficientes)

Serie de Fourier



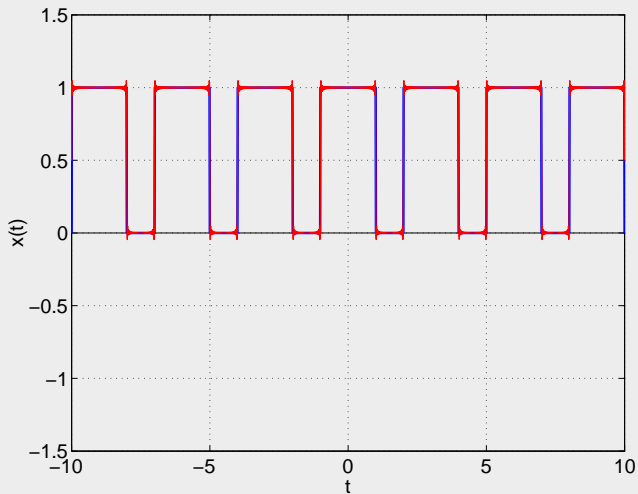
Serie de Fourier ($C_0 + 15$ coeficientes)

Serie de Fourier



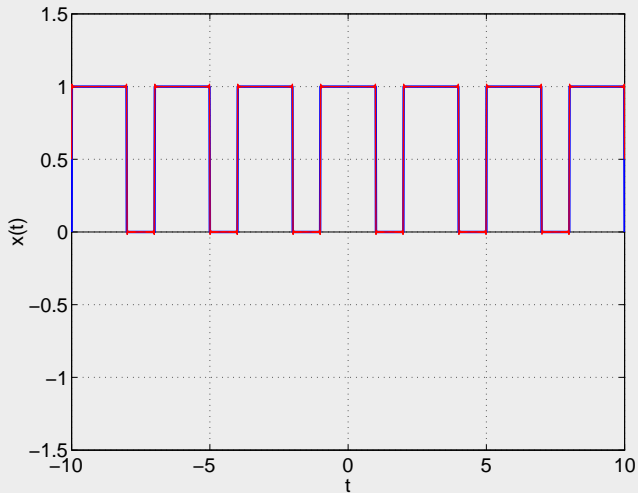
Serie de Fourier ($C_0 + 30$ coeficientes)

Serie de Fourier



Serie de Fourier ($C_0 + 100$ coeficientes)

Serie de Fourier



Serie de Fourier ($C_0 + 500$ coeficientes)