

TABLA 1-3 Resumen de series de Fourier

Forma de onda		Serie de Fourier
Impar		$v(t) = \frac{V}{\pi} + \frac{V}{2} \sin \omega t - \frac{2V}{3\pi} \cos 2\omega t - \frac{2V}{15\pi} \cos 4\omega t + \dots$ $v(t) = \frac{V}{\pi} + \frac{V}{2} \sin \omega t + \sum_{N=2}^{\infty} \frac{V[1 + (-1)^N]}{\pi(1 - N^2)} \cos N\omega t$
Par		$v(t) = \frac{2V}{\pi} + \frac{4V}{3\pi} \cos \omega t - \frac{4V}{15\pi} \cos 2\omega t + \dots$ $v(t) = \frac{2V}{\pi} + \sum_{N=1}^{\infty} \frac{4V(-1)^N}{\pi[1 - (2N)^2]} \cos N\omega t$
Impar		$v(t) = \frac{4V}{\pi} \sin \omega t + \frac{4V}{3\pi} \sin 3\omega t + \dots$ $v(t) = \sum_{N=\text{impar}}^{\infty} \frac{4V}{N\pi} \sin N\omega t$
Par		$v(t) = \frac{4V}{\pi} \cos \omega t - \frac{4V}{3\pi} \cos 3\omega t + \frac{4V}{5\pi} \cos 5\omega t + \dots$ $v(t) = \sum_{N=\text{impar}}^{\infty} \frac{V \sin N\pi/2}{N\pi/2} \cos N\omega t$
Par		$v(t) = \frac{V\tau}{T} + \sum_{N=1}^{\infty} \left(\frac{2V\tau}{T} \frac{\sin N\omega t/T}{N\pi\tau/T} \right) \cos N\pi t$
Par		$v(t) = \frac{8V}{\pi^2} \cos \omega t + \frac{8V}{(3\pi)^2} \cos 3\omega t + \frac{8V}{(5\pi)^2} \cos 5\omega t + \dots$ $v(t) = \sum_{N=\text{impar}}^{\infty} \frac{8V}{(N\pi)^2} \cos N\omega t$