

Fourier Series Example

Consider the signal

$$x(t) = 5 + 16 \cos\left(2\pi \cdot 500 \cdot t - \frac{\pi}{4}\right) + 10 \sin\left(2\pi \cdot 5000 \cdot t + \frac{\pi}{8}\right)$$

- Find the Fourier series coefficients, $\{a_k\}$; which harmonics are present?
-

- For the periodic waveform shown below find the a_0 Fourier series coefficient, the period, T_0 , and fundamental freq. f_0

