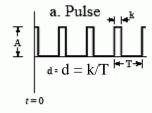
Table of Fourier Series

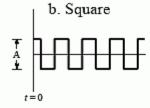
The table below assumes a Fourier series representation of the form

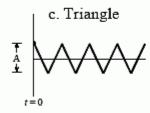
$$f(t) = a_0 + \sum_{n=1}^{\infty} \left[a_n \cos(n\omega_0 t) + b_n \sin(n\omega_0 t) \right]$$
 where $\omega_0 = \frac{2\pi}{T}$

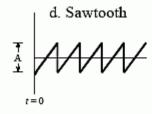
The signal must be periodic with a period T

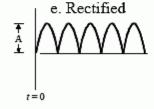
Time Domain



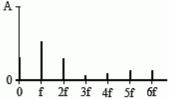


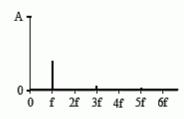


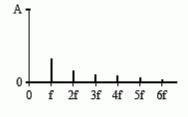


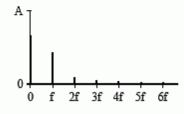


Frequency Domain







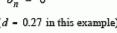


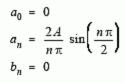
$$a_0 = A d$$

$$a_n = \frac{2A}{n\pi} \sin(n\pi d)$$

$$b_n = 0$$

$$(d - 0.27 \text{ in this example})$$





(all even harmonics are zero)

$$a_0 = 0$$

$$a_n = \frac{4A}{(n\pi)^2}$$

$$b_n = 0$$

(all even harmonics are zero)

$$a_0 = 0$$

$$a_n = 0$$

$$b_n = \frac{A}{n\pi}$$

$$a_0 = 2A/\pi$$

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

$$b_n = 0$$