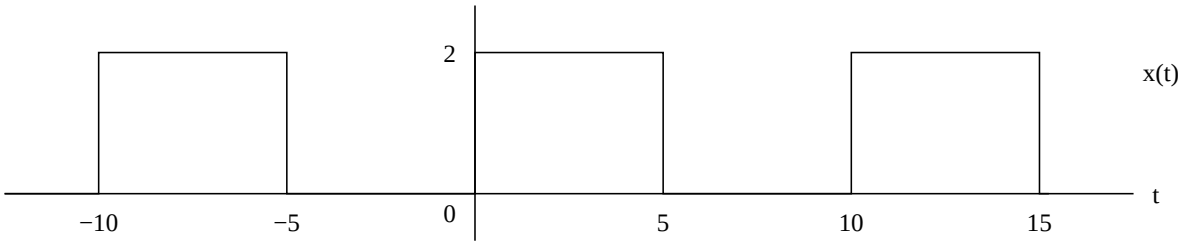
EEE2035F: quiz 2 2008

Find a Fourier series expansion for the signal below, and plot the magnitude and phase of the coefficients:



RECALL: If a signal $x(t)$ is periodic with period T, then it can be written in the form

$$x(t) = \sum_{k=-\infty}^{\infty} c_k e^{jk\omega_0 t}$$

with $\omega_0 = 2\pi/T$. The coefficients can be calculated using

$$c_k = \frac{1}{T}\int_a^{a+T} x(t)e^{-jk\omega_0 t}.$$

Normally I wouldn't tell you this!