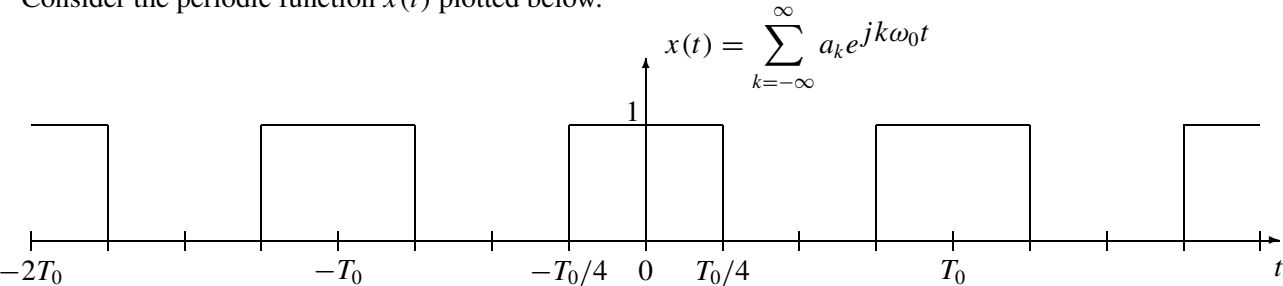


PROBLEM:

Consider the periodic function $x(t)$ plotted below.



- (a) Find the “DC” value a_0 and the other Fourier coefficients a_k for $k \neq 0$ in the Fourier series representation of $x(t)$.
- (b) Sketch the waveform of the signal $y(t) = 2x(t - T_0/2)$ and use the results of Problem 4.4 to write down the Fourier series coefficients b_0 and b_k for $k \neq 0$ for the periodic signal $y(t)$ without evaluating any integrals. **Note: You will use this result in Section 4 of Lab #3.**