Example C-4: Consider a triangular wave $x(t)$ with period $T_0 = 0.04$ s, as depicted in the top plot of Fig. **??**. The Fourier series coefficients a_k for the triangular wave $x(t)$ are given by (**??**) and the period is $T_0 = 0.04$ s, so $\omega_0 = 50\pi$. Therefore, the Fourier series coefficients of the delayed signal $y(t) = x(t-0.01)$ are $b_k = a_k e^{-j(50\pi)k(0.01)} = a_k e^{-j\pi k/2} = (-j)^k a_k$ or

$$b_k = (-j)^k a_k = \begin{cases} \dfrac{j2(-1)^{k+1}}{\pi^2 k^2} & k = \pm 1, \pm 3, \pm 5, \ldots \\ 0 & k = \pm 2, \pm 4, \pm 6, \ldots \\ 1/2 & k = 0 \end{cases} \tag{C.1}$$

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