

ECE 351 - Lab 8 Prelab

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$$a_k = 0$$

$$b_k = \frac{2}{T} * 2 \int_0^{T/2} \sin(k\omega_o t) dt = \frac{4}{k\pi} \sin^2\left(\frac{n\pi}{2}\right)$$

$$x(t) = \sum_{k=1}^{\infty} \frac{4}{k\pi} \sin^2\left(\frac{n\pi}{2}\right) \sin(k\omega_o t) = \frac{4}{\pi} \sum_{k=1}^{\infty} \frac{1}{k} \sin^2\left(\frac{n\pi}{2}\right) \sin(k\omega_o t)$$