ECE 209L - FOURIER SERIES - LAB 19
CHARACTERISTICS OF PERIODIC SIGNALS

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OBJECTIVE

The objective of this lab is to demonstrate the relationship between the frequency and period of a periodic signal.

LAB

1. **Prelab** - What is the frequency of the following periodic signal in Hz

2. Take measurements of the frequency and period of a pulse train as you increase the frequency

3. **Prelab** - Make use of Mathcad to obtain a graph of frequency f as a function of period T for periodic signals

4. Put your data from Problem (4) on your graph from the prelab

5. Describe how frequency and period are related.

6. How does increasing the amplitude of a periodic signal affect its frequency.

7. How does adding a DC offset to a periodic signal affect its frequency.

8. How does delaying a periodic signal affect its frequency