

CSE 220: Online C1-C2

Fourier Transform

Time: 40 minutes

Problem Statement

You have been given below function:

$$f(t) = 2 \sin(14\pi t) - \sin(2\pi t) (4 \sin(2\pi t) \sin(14\pi t) - 1)$$

- This function is summation of some sine/cosine waves. They have different frequencies but all of their amplitudes are 1 and phases are 0.
- First, plot the above function. Now try to find the functions whose summation will result the above function. Find the frequency of them using FT. Then plot their summation and check if it equals to the above function.

Submission Instructions

- Submit your Python file named as 2105XXX.py