

ECS 332: Quiz 1 solution

Instructions

1. Separate into groups of no more than three persons.
2. Only one submission is needed for each group. Late submission will not be accepted.
3. **Write down all the steps** that you have done to obtain your answers. You may not get full credit even when your answer is correct without showing how you get your answer.
4. **Do not panic.**

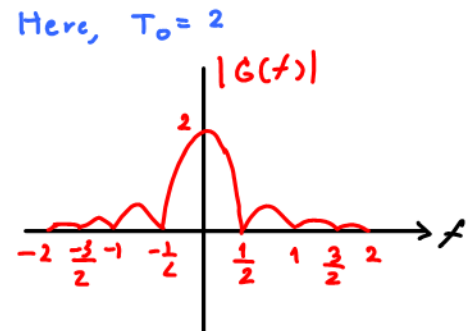
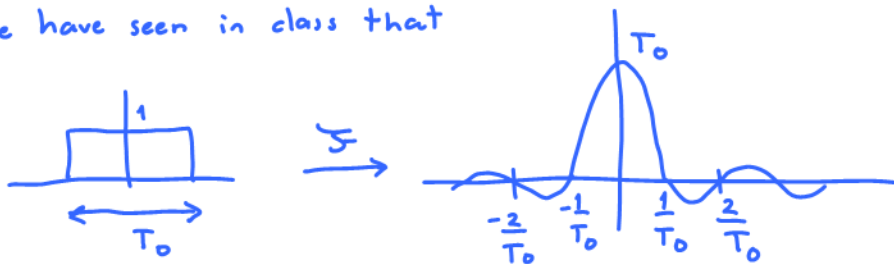
Name	ID
Prapun	

1. (Course Organization) When is/are Aj. Prapun's office hour(s)?

Monday : 14:40 - 16:00 (period 4)
 Friday : 14:00 - 16:00 (Later part of period 3 + period 4)

2. (Fourier Transform) Let $g(t) = 1[-1 \leq t \leq 1]$. Plot $|G(f)|$.

We have seen in class that



3. (Fourier Transform) Let $x(t) = 1[2 \leq t \leq 4]$. Plot $|X(f)|$.

same width as in Q2

$T_0 = 2$

$x(t) = g(t)$ time-shifted by 2.

$= g(t - t_1)$ where $t_1 = 2$.

$\xrightarrow{F} X(f) = e^{-j2\pi f t_1} G(f)$

$|X(f)| = |G(f)| \rightarrow$ same plot as in Q2

$|e^{-j2\pi f t_1}| = 1$

