

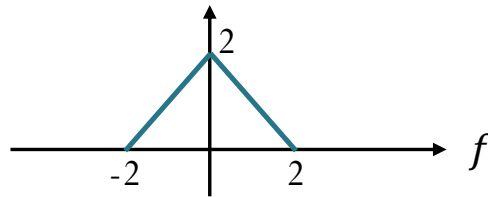
ECS 332: In-Class Exercise # 18_1

Instructions

1. Separate into groups of no more than three persons. **The group cannot be the same as any of your former groups after the midterm.**
2. 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.
3. **Do not panic.**

Date: __ / __ / 2018			
Name			ID <small>(last 3 digits)</small>

Consider a continuous-time signal $g(t)$ whose **Fourier transform** is plotted below.

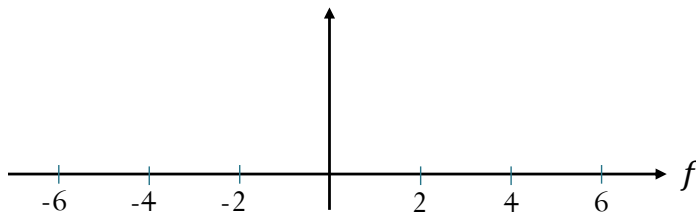


(a) Find the Nyquist sampling rate for this signal.

(b) The ideal sampled signal $g_\delta(t)$ is defined by $g_\delta(t) = \sum_{n=-\infty}^{\infty} g[n] \delta(t - nT_s)$ where T_s is the sampling interval.

Plot the **Fourier transform** of $g_\delta(t)$ from $f = -6$ to $f = 6$.

a. when $T_s = 0.2$



b. when $T_s = 1/3$

