Exam 2 Logistics

- Covers all of Chapter 3
- Allowed **ONE** single-sided sheet of notes
- I will collect these notes with the exam and return them with the exam
- Sit with a space between you and your neighbor
- DLC 304 will also be available
- Don’t cheat
- Baseball hats must be removed or turned backwards
- No calculators
- Turn off pagers and cell phones

Exam 2 Topics

- Exam will include questions on
  - Relationship of FT/FS to LTI systems
  - Relationship of signal properties to transform properties
  - Transform properties
  - Matching of signals to transforms?
  - Many conceptual questions
- Similar to exams in previous years
- Will not ask you to prove properties
- More topics posted on the class web site

Miscellaneous

- Homework 6: complete exam 2 from last year
- Due next Wednesday
- Read Chapter 3
- Study for Exam 2
Key Concepts from Last Time

- Amplitude of the FT/FS is usually the most useful for signal analysis
- Periodic/quasi-periodic signals appear at integer multiples of the fundamental frequency
- Only plotted for positive frequencies
- Convolution in the time-domain is equivalent to multiplication in the frequency domain
- Multiplication in the time-domain is equivalent to convolution in the frequency domain
- Differentiation and integration are best treated with the Laplace and $z$ transforms
- Windowing causes a blurring of the spectrum

Lecture Overview

Last Time

- Continue Fourier properties
  - How to plot & interpret the FT/FS
  - Convolution in time (regular & circular)
  - Multiplication in time
  - Windowing

This Time

- Finish Fourier properties
  - Time & frequency scaling
  - Parseval’s theorem
  - Duality
- Exam 2 prep — review of last year’s exam