

5 Assignment 4 — Continuous-Time Fourier Series

Before starting work on this assignment, it is **critically important** that the student carefully read Section 1 (titled “General Information”), which starts on page 1 of this document.

Regular Problems

- ◇ 5.1 a c [find Fourier series]
- ◇ 5.2 c [find Fourier series]
- ◇ 5.3 a [find Fourier series]
- ◇ 5.7 b [odd harmonic proof]
- ◇ 5.9 [find/plot frequency spectrum]
- ◇ 5.10 [filtering]

MATLAB Problems

- ◇ 5.201 a b c [Fourier series convergence] [Note: It is not a requirement that you use the Symbolic Math Toolbox for this problem. If, however, you do use this approach, Appendix D of the textbook has some helpful material on the MATLAB Symbolic Math Toolbox (e.g., functions such as `symsum`, `sym`, `subs`, etc.). Refer to the section titled “Symbolic Math Toolbox”.]