

Homework 14

Math 147 (section 510–511-512), Fall 2014

This homework is due on Thursday, December 4.

0. Read Sections 5.8 and 6.1. Re-read page 257 (Section 5.6) before the exam: what is a criterion for oscillations vs. no oscillations? After reading these sections, you should be able to answer the following questions (which are *not* to be turned in).

- Is $2 \sin x$ an antiderivative of $\sin^2 x$?
- Is $\cos x + \ln 5$ an antiderivative of $-\sin x$?
- If f is an even function ($f(-c) = f(c)$ for all real numbers c), does this imply that $\int_{-2}^2 f(x)dx = 0$?

1. Section 5.8 # 9, 10, 24, 26, 70

2. Section 6.1 # 18, 28, 36, 44, 50, 62, 68

3. (These problems are *not* to be turned in!)

(a) Section 5.8 # 5, 9, 31, 35, 67

(b) Section 6.1 # 1, 3, 5, 15, 21, 23