

**MATH 281 FALL 2023  
HOMEWORK 8  
“DUE” NOVEMBER 20, 2023.**

INSTRUCTOR: ROBERT LIPSHITZ

**Required problems:**

(Quiz problems drawn from these.)

- Section 14.7: 1, 3, 7, 13, 17, 19, 45, 47, 60.

If you got help with one of these problems, solve a similar one on your own!

**Suggested challenge problems:**

(Conceptually interesting problems in the text to think about. Will not be on a quiz.)

- 14.7: 24, 41, 42, 61.

**Comments on some of these problems:**

- The graph of the function in problem 17 looks like a monkey saddle, but isn't quite.
- We will have another technique for solving 45 and 47 in a week. It's interesting to compare the two approaches.
- Problem 61 is about “least squares,” an extremely common tool for studying data, and explains why the formulas used to find least squares solutions work. (Another, quite different, explanation is give in Math 342.)
- The other challenge problems are also interesting, not that much harder than the rest of the problems, and would be fair game for an exam.

*Email address:* lipshitz@uoregon.edu