

Math 53 Homework 5

Due Wednesday 10/9/13 in section

(The problems in parentheses are for extra practice and optional. Only turn in the underlined problems.)

Monday 9/30 – Chain rule

- **Read:** section 14.5.
- **Work:** 14.5: 1, (5), 7, 13, (17), 19, (23), (39), 43, 45, (47), 51, (53).

Wednesday 10/2 – Gradient, directional derivatives

- **Read:** section 14.6.
- **Work:** 14.6: 1, 7, (9), (11), (21), 25, 27, (37), 38, 41, (43), 49, (51), 56.¹

Friday 10/4 – Max-min problems

- **Read:** section 14.7.
- **Work:** 14.7: (1), 3, (7), 11, (21), (29), 33, 34, (37), 41, (45), 47.

(Optional: if you are done early, you can get a head start on the review problems that are on the next homework assignment. Problems 1–4 on Homework 6 can all be done at this point. Don't turn them in yet, though!)

¹6th ed: 14.6: 1, 7, (9), (11), (21), 25, 27, (37), 38, 39, (41), 47, (49), 54.