

Seventh Homework: MATH 410
Due Wednesday, 16 October 2019

1. Exercise 2 of Section 3.7 in the text.
2. Exercise 9 of Section 3.7 in the text.
3. Exercise 12 of Section 3.7 in the text.
4. Prove Proposition 5.8 in the notes.
5. Exercise 1 of Section 3.6 in the text.
6. Exercise 4 of Section 3.6 in the text.
7. Exercise 6 of Section 3.6 in the text.
8. Exercise 1 of Section 4.1 in the text.
9. Exercise 5 of Section 4.1 in the text.
10. Exercise 9 of Section 4.1 in the text.
11. Exercise 1 of Section 4.2 in the text.
12. Exercise 6 of Section 4.2 in the text.
13. Exercise 9 of Section 4.2 in the text.
14. Give a function $f : [-1, 1] \rightarrow \mathbb{R}$ that is differentiable over $[-1, 1]$ but whose derivative is not continuous over $[-1, 1]$.
15. Prove Proposition 6.3 on page 18 of the class notes.