## Seventh Homework: MATH 410 Due Monday, 15 October 2018

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