## Twelfth Homework: MATH 410 Due Monday, 18 November 2019

- 1. Exercise 2 of Section 6.3 in the text.
- 2. Exercise 1 of Section 6.4 in the text.
- 3. Exercise 3 of Section 6.4 in the text.
- 4. Exercise 6 of Section 6.4 in the text.
- 5. Exercise 9 of Section 6.4 in the text.
- 6. Prove Proposition 10.1 in the lecture notes
- 7. Prove Proposition 10.2 in the lecture notes
- 8. Prove Proposition 10.3 in the lecture notes
- 9. Prove Proposition 10.6 in the lecture notes
- 10. Prove Theorem 10.5 in the lecture notes
- 11. Prove Lemma 10.3 in the lecture notes.
- 12. Prove the claim made in the proof of Proposition 10.9 in the lecture notes.
- 13. Show that the Cantor set has measure zero.