## First Homework: MATH 410 Due Wednesday, 4 September 2019

- 1. Exercise 2 of Section 1.1 in the text.
- 2. Exercise 4 of Section 1.1 in the text. (Justify the formula!)
- 3. Exercise 14 of Section 1.1 in the text.
- 4. Exercise 16 of Section 1.1 in the text.
- 5. Exercise 19 of Section 1.1 in the text.
- 6. Exercise 3 of Section 1.2 in the text.
- 7. Exercise 4 of Section 1.2 in the text.
- 8. Exercise 7 of Section 1.2 in the text.
- 9. Exercise 3 of Section 1.3 in the text.
- 10. Exercise 5 of Section 1.3 in the text.
- 11. Exercise 12 of Section 1.3 in the text.
- 12. Exercise 17 of Section 1.3 in the text.
- 13. Use the Field Axioms to show that  $(-1)^2 = 1$ .
- 14. Use the Ordered Field Axioms to show that 0 < 1.
- 15. Prove assertion (a) of Proposition 1.18 on page 12 of the notes.