## Advanced Statistical Inference I Homework 4: Multiple Random Variables Due Date: November 30th

- 1. (Basic Calculation)
  - (a) Exercise 4.4.
  - (b) Exercise 4.5.
  - (c) Exercise 4.7.
- 2. (Check on Independence and Dependence)
  - (a) Exercise 4.9.
  - (**b**) Exercise 4.10.
  - (c) Exercise 4.11.
- 3. (Box-Muller Transformation)
  - (a) Exercise 4.20.
  - **(b)** Exercise 4.21.
- 4. (Censored Data) Exercise 4.26.
- 5. (Mixture and Hierarchical Modeling) Exercise 4.37.
- 6. (Multivariate Normal Distribution)
  - (a) Exercise 4.45.
  - **(b)** Exercise 4.46.
  - (c) Exercise 4.47.
- 7. (Group Testing) Exercise 4.56.
- 8. (Conditioning)
  - (a) Exercise 4.58.
  - **(b)** Exercise 4.59.
  - (c) Exercise 4.35.