The Florida State University
ECO3431 - Analysis of Economic Data
Practice Problem Set

Instructor: Dr. Javier Cano-Urbina

1 Chapter 3. Probability

- Section 3.1. Exercises: 3.1, 3.2, 3.4

- Section 3.2. Exercises: 3.14, 3.16, 3.18

- Section 3.3. Exercises: 3.20, 3.22, 3.24, 3.26, 3.38, 3.42, 3.48

2 Chapter 4. Discrete Random Variables and Probability Distributions

- Section 4.1. Exercises: 4.2, 4.4, 4.8

- Section 4.2. Exercises: 4.10, 4.14

- Section 4.3. Exercises: 4.16, 4.18, 4.19, 4.20

- Section 4.7. Exercises:

    - 4.72.c $\Rightarrow$ Use $\mu_x = 1.5, \mu_y = 0.5, \sigma_x^2 = 0.25, \sigma_y^2 = 0.25, \sigma_{xy} = 0$
    - 4.74.c $\Rightarrow$ Use $\mu_x = 1.3, \mu_y = 0.3, \sigma_x^2 = 0.21, \sigma_y^2 = 0.21, \sigma_{xy} = 0.21$
    - 4.76.c $\Rightarrow$ Use $\mu_x = 1.3, \mu_y = 0.3, \sigma_x^2 = 0.21, \sigma_y^2 = 0.21, \sigma_{xy} = 0.21$

3 Chapter 5. Continuous Random Variables and Probability Distributions

- Section 5.1. Exercises: 5.2, 5.4, 5.6

- Section 5.2. Exercises: 5.10, 5.12, 5.16

- Section 5.3. Exercises: 5.20, 5.22, 5.24, 5.26, 5.32

4 Chapter 6. Sampling and Sampling Distributions

- Section 6.1. Exercises: 6.1

- Section 6.2. Exercises: 6.6, 6.8, 6.10, 6.12, 6.14, 6.16

5 Chapter 7. Estimation: Single Population

- Section 7.1. Exercises: 7.2.b, 7.4.a

- Section 7.2. Exercises: 7.12, 7.16

- Section 7.3. Exercises: 7.19.a–7.19.b, 7.20, 7.21.b, 7.27, 7.28

6 Chapter 9. Hypothesis Testing: Single Population

- Section 9.2.

    - Do Example 9.3.
    - Exercises:
        * 9.11 $\Rightarrow$ Use $H_0 : \mu = 16$ Vs. $H_1 : \mu \neq 16$
        * 9.12 $\Rightarrow$ Use $H_0 : \mu = 50$ Vs. $H_1 : \mu \neq 50$

- Section 9.3. Exercises: 9.17, 9.24, 9.25

7 Chapter 11. Simple Regression

- Section 11.1. Exercises: 11.2.a, 11.3.a, 11.4.a, 11.6.a

- Section 11.2. Exercises: 11.8, 11.10, 11.13.a–11.13.b, 11.14

- Section 11.3. Exercises: 11.18, 11.22.a-11.22.b

- Section 11.5. Exercises: 11.32 – Do these for a two-sided test.