CHAPTER 7: Sampling and Sampling Distributions

Learning Objectives

Know how to compute probability values for a continuous uniform probability distribution and be able to compute the expected value and After studying this chapter and doing the exercises, you should be able to:

1. Explain what is meant by the terms simple random sample, sampling with replacement and sampling without replacement.

2. Explain the meaning of the terms parameter, statistic and point estimator.

3. Explain the meaning of the term unbiasedness in relation to point estimators.

4. Identify relevant point estimators for a population mean, population standard deviation and population proportion.

5. Select a simple random sample from a finite population using random number tables.

6. Explain what is meant by the term sampling distribution.

7. Describe the form and characteristics of the sampling distribution:

   7.1   of the sample mean, when the sample size is large or when the population is normal

   7.2   of the sample proportion when the sample size is large.