

Learning objectives

After studying this chapter and doing the exercises, you should be able to:

- 1 Explain the terms simple random sample, sampling with replacement and sampling without replacement.
- 2 Select a simple random sample from a finite population using random number tables.
- 3 Explain the terms parameter, statistic, point estimator and unbiasedness.
- 4 Identify relevant point estimators for a population mean, population standard deviation and population proportion.
- 5 Explain the term sampling distribution.
- 6 Describe the form and characteristics of the sampling distribution:
 - 6.1 of the sample mean, when the sample size is large or when the population is normal.
 - 6.2 of the sample proportion when the sample size is large.