

Learning objectives

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

- 1 Understand the concepts of a random variable and a probability distribution.
- 2 Distinguish between discrete and continuous random variables.
- 3 Compute and interpret the expected value, variance and standard deviation for a discrete random variable.
- 4 Compute and work with probabilities involving a binomial probability distribution.
- 5 Compute and work with probabilities involving a Poisson probability distribution.
- 6 Know when and how to use the hypergeometric probability distribution.