4.5 Probability and expected outcomes

Checklist

What you should know

By the end of this subtopic you should be able to:

- identify the sample space for a random experiment
- understand the difference between experimental and theoretical probability
- calculate the theoretical probability of an event A using the formula $\mathrm{P(A)} = \frac{\mathrm{n(A)}}{\mathrm{n(U)}}$
- use the complement of an event to determine the probability that it does not happen
- use probability to calculate the expected number of outcomes in n trials.