

# Year 12 M7:Higher Tier

## Handling Data Overview

### **Learning Outcomes**

You should be able to:

- use the product rule for counting: if there are  $m$  ways of doing one task and for each of these, there are  $n$  ways of doing another task, then the total number of ways the two tasks can be done is  $m \times n$ ;
- know when to add or multiply two probabilities: if A and B are mutually exclusive, then the probability of A or B occurring is  $P(A) + P(B)$ , whereas if A and B are independent events, the probability of A and B occurring is  $P(A) \times P(B)$ ; and
- use tree diagrams to represent successive events which are independent.