

### Exercise 9.1

Open the Excel workbook in **Exe 9.1D.xlsx** from the Exercises folder. This contains the percentage frequencies together with the bar chart just created in the above example. Add a percentage frequency bar chart showing the brand preferences in Area 2, using the same format as that employed for the Area 1 results in the above example. Drag your new chart so that it lies alongside that for Area 1.

Briefly interpret your findings. What do these results tell you about the patterns of brand preferences for each of the two demographic areas?

Brand A is least preferred in the two areas Area 1 and Area 2, followed by Brand B, whilst the most preferred is some other brand.

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### Exercise 9.2

Open the Excel workbook in **Exe 9.2E.xlsx** from the Exercises folder. This contains the frequency distributions for Data Set E (see the Data Annexe) to which has been added the corresponding percentage frequency distributions. Complete a percentage frequency clustered column bar chart showing the heather species prevalences in the two different locations.

Briefly interpret your findings.

Location A seems to have a better prevalence of the heather species compared to Location B. In the absence category, the difference in prevalence between the two areas is most evident.

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### Exercise 9.3

Open the Excel workbook in **Exe 9.3B.xlsx** from the Exercises folder. This contains the relative frequency histogram for the Diet A weight loss produced in Example 9.3 together with some of the Diet B weight loss summary statistics. Add a relative frequency histogram of the weight loss for Diet B, where possible using the same classes as those employed for the Diet A results in the above example.

Briefly interpret your histogram. What do these results tell you about the patterns of weight loss for each of the two diets?

When compared to Diet B, Diet A results in a greater mean weight loss, but with less variation. people on Diet A lose more weight than people on Diet B. However, diet B's loss of weight results are more spread away from the mean, indicating higher variability in outcomes, with some people likely losing more weight than the average of Diet A.