Unit 9 Chart Exercises

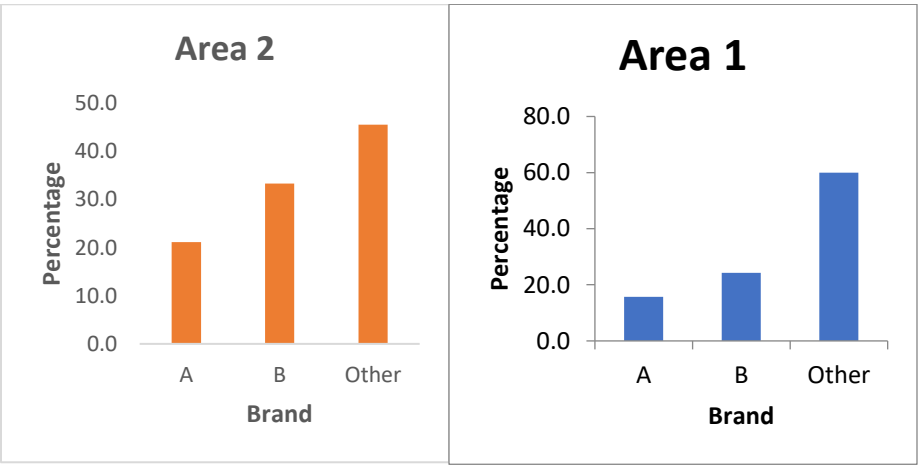
9.1

Exercise 9.1

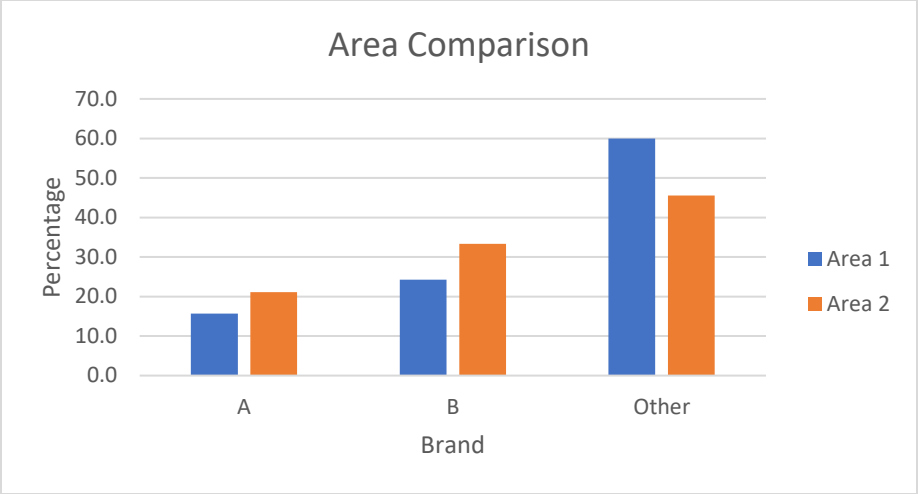
Open the Excel workbook in **Exe 9.1D.xlsx** from the Exercises folder. This contains the percentage frequencies together with the bar chart just created in the above example. Add a percentage frequency bar chart showing the brand preferences in Area 2, using the same format as that employed for the Area1 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 B is favoured over brand B by roughly the same percentage in both areas. It should also be noted that the majority of Area 1 residents prefer a different cereal than either brand A or B, while in Area 2 55% of the population chose either brand A or B.



The two charts placed side by side illustrate one of the problems with Excel's automatic charting. Reducing the Y axis on the area 2 chart gives the illusion that the "other" category is lower than Area 2, potentially missing a key difference bettween the two demographic regions.



From a marketing perspective, Brand B is outselling Brand A in both regions so that portion of the strategy is working but has much lower market penetration overall in Area 1 so the differences between Area 2 and Area 1 should be assessed.

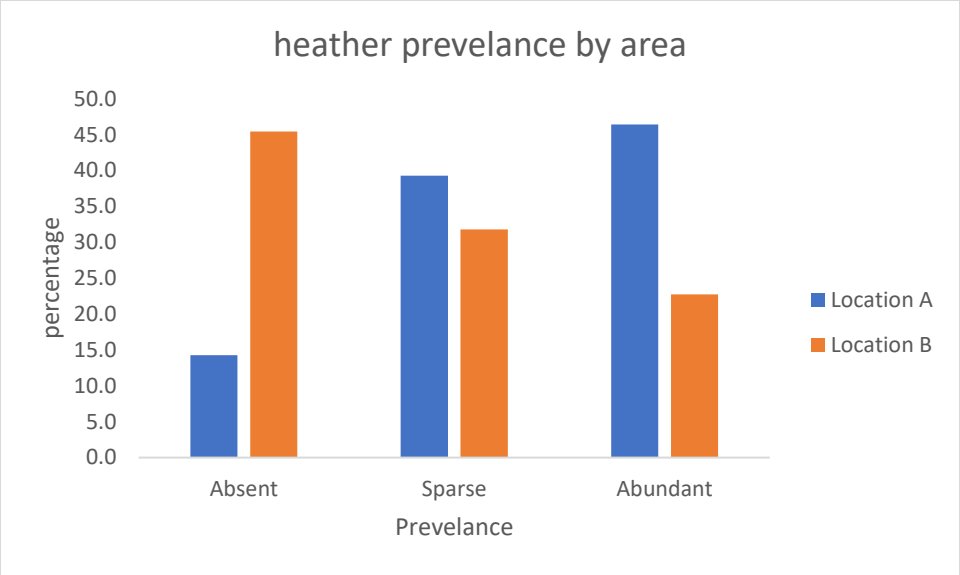
9.2

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.

When comparing the two areas it appears that location A has much more heather than Location B, is is absent in 45% of the sample locations and observed only sparsely observed in 30% of the others. Conversely, only 15% of Area A sample areas had no heather.



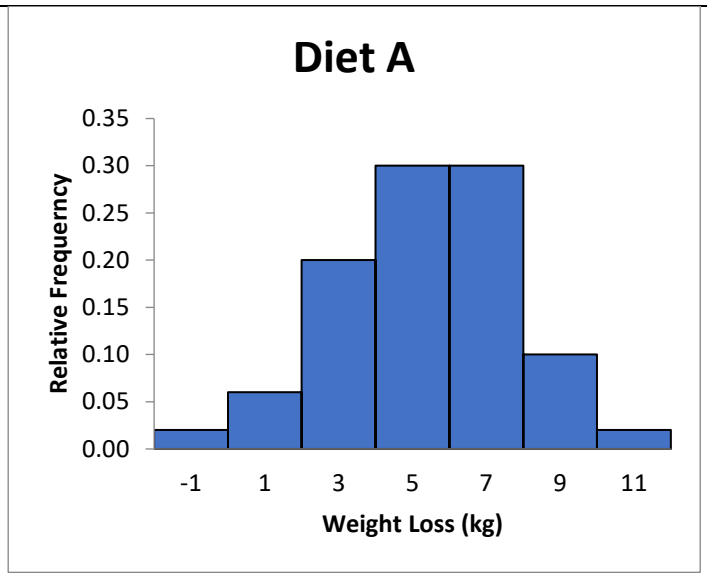
9.3

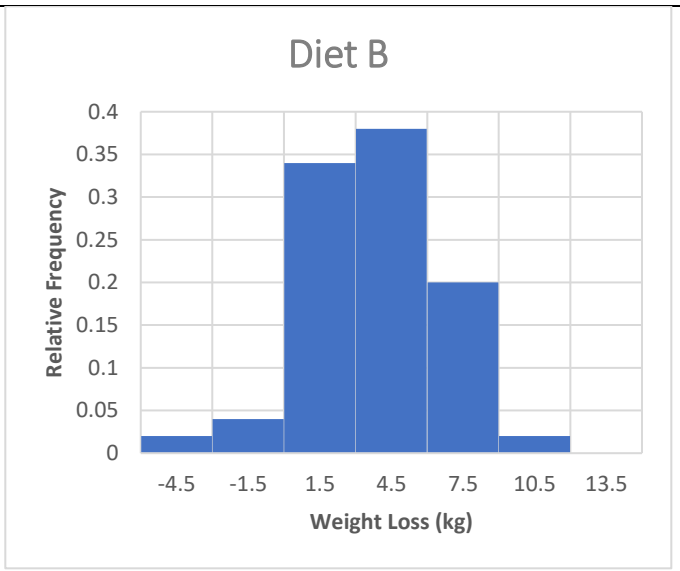
Exercise 9.3

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?

Comparing diet A to diet B it appears more people lost weight on diet A, and when they did loose weight they tended to lose more. 60% of diet A participants lost 4-8 KG while over 70% of diet B participants lost 0 – 6 KG. The distribution of loss amounts is similar enough to assume most other variables like metabolism and cheating were similar so it would appear diet A is the better choice.


Diet A
Relative Frequerncy
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
-1
1
3
5
7
9
11
Weight Loss (kg)


Diet B
Relative Frequency
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
-4.5
-1.5
1.5
4.5
7.5
10.5
13.5
Weight Loss (kg)