

Exercise 9.1

Answer:

In Area 1, majority of consumers (60.0%) prefer "Other" brands, while Brand B captures 24.3% of preferences and Brand A has the smallest share at 15.7%. This indicates a strong preference for alternative cereal brands in this demographic area, with relatively lower loyalty to the two main brands.

In comparison, Area 2 shows more balanced preferences. While "Other" brands still lead at 45.6%, this percentage is considerably lower than in Area 1. Brands A and B together account for over half the preferences in Area 2 (54.4% combined), with Brand B being particularly stronger at 33.3% compared to Brand A's 21.1%.

The most notable differences between the areas are:

- Brand B performs better in Area 2 (33.3%) than in Area 1 (24.3%), showing a 9 percentage point difference
- Brand A also has stronger performance in Area 2 (21.1%) compared to Area 1 (15.7%)
- "Other" brands have substantially less market share in Area 2 (45.6%) than in Area 1 (60.0%)

Exercise 9.2.

Answer:

Heather prevalence differs markedly between the two locations. Location A shows predominantly abundant heather (46.4%) with significant sparse coverage (39.3%) and minimal absence (14.3%). In contrast, Location B has much less heather overall, with absence being most common (45.5%), followed by sparse coverage (31.8%) and

only 22.7% abundant growth. This indicates that Location A provides substantially more favourable conditions for heather growth than Location B.

Exercise 9.3.

Answer:

Diet B shows a distribution skewed toward lower weight loss values, with the highest frequency (30%) at 3 pounds lost. Most participants (78%) lost between 1-5 pounds, while only 22% lost more than 5 pounds. A small percentage (6%) gained weight.

Comparing the two diets, Diet A generally produced greater weight loss than Diet B. Diet A's distribution peaks at higher values (5-7 pounds) with 60% of participants losing 5-7 pounds. In contrast, Diet B's distribution peaks at lower values (1-3 pounds) with 50% losing 1-3 pounds. Diet A also had fewer participants who gained weight (2% vs 6%) and more who achieved substantial weight loss (12% losing 9+ pounds vs only 6% for Diet B). Overall, Diet A appears more effective for weight reduction.