Exercise 7.1B – Summary Statistics for Diet B

- **Sample Size**: 50

- **Mean Weight Loss**: 3.710 kg

- **Standard Deviation**: 2.769 kg

Correct Interpretation:

Diet B showed a lower mean weight loss than Diet A (5.341 kg), suggesting Diet A is more effective. The moderate standard deviation indicates some variation in the results for Diet B.

Exercise 7.2B – Median, Quartiles, and IQR for Diet B

- **Median**: 3.745 kg

- **Q1 (25th percentile)**: 1.953 kg

- **Q3 (75th percentile)**: 5.945 kg

- **IQR**: 3.992 kg

Correct Interpretation:

The wider IQR for Diet B compared to Diet A (3.285 kg) shows greater variability in middle-range outcomes. The lower median suggests that most Diet B participants lost less weight than those on Diet A.

Exercise 7.3D – Brand Preferences in Area 2

- **Frequencies**:

- Brand A = 9

- Brand B = 16

- Other = 45

- **Percentages**:

  - Brand A = 12.9%

  - Brand B = 22.9%

  - Other = 64.3%

Correct Interpretation:

Brand preferences in Area 2 mirror those in Area 1, with "Other" being most preferred. This shows a consistent pattern across demographic areas, suggesting limited preference for Brand A.