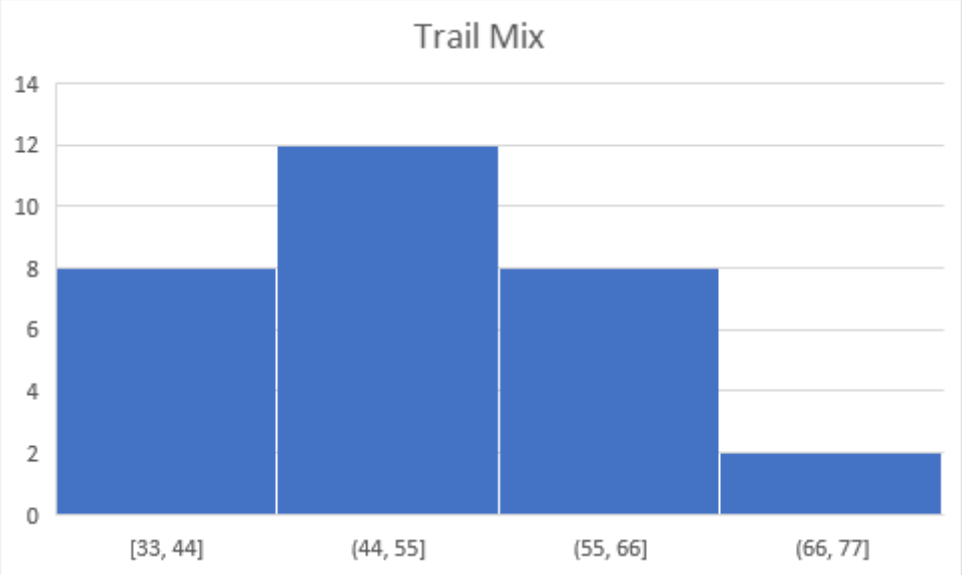
Question 1



Typically, there are between 44-55 candies in each 26 oz. bag of trail mix.

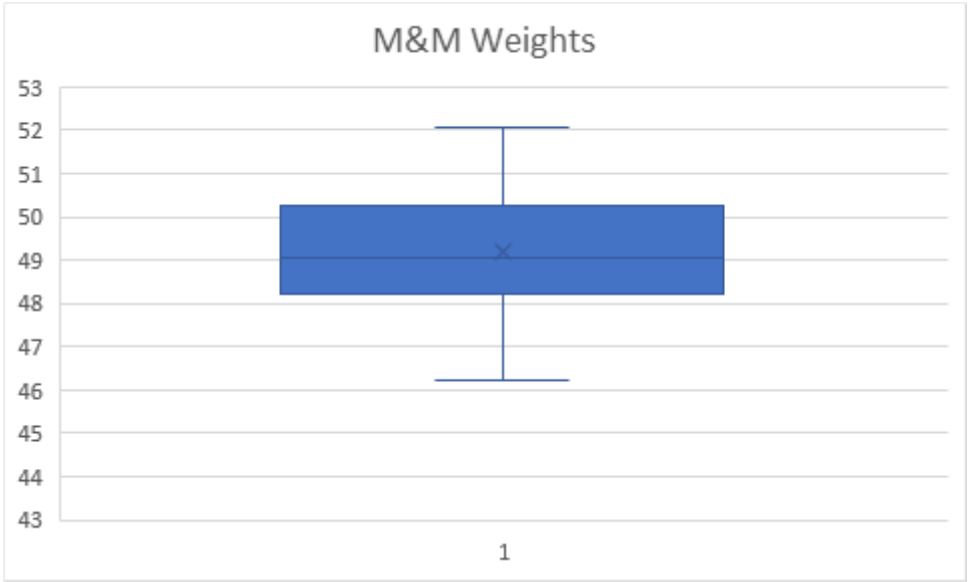
Question 8

M&M Weights

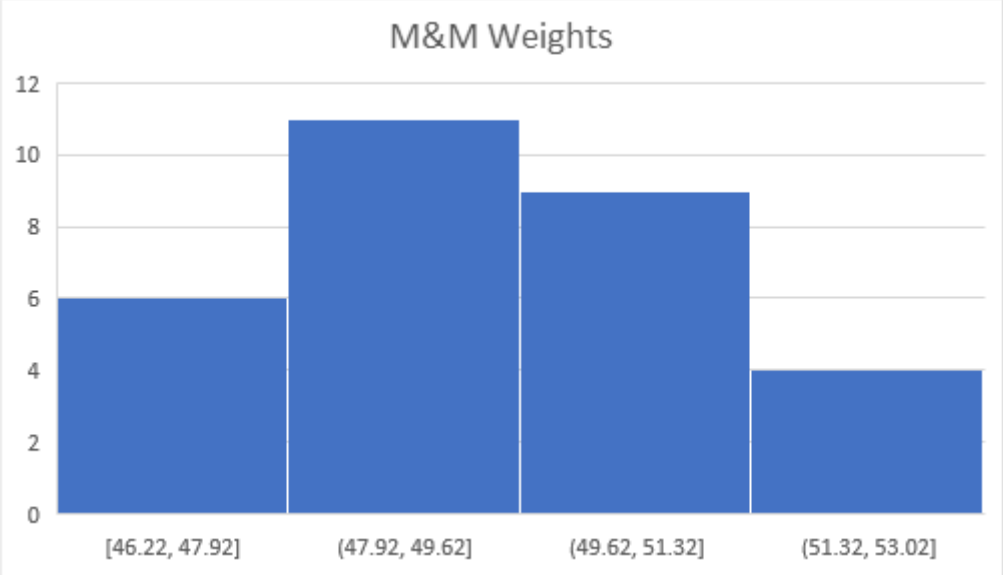
1. Using technology, calculate the mean and median weights for the sample. Show the output and clearly state your answers. Round to 3 decimal places.

$$\begin{aligned} Mean &= 49.070 \\ Median &= 49.192 \end{aligned} \tag{1}$$

2. Using technology, produce a histogram of the weights of bags of M&Ms. Paste this image into the document. Using the histogram, describe the shape of the distribution of weights.



3. Using technology, produce a modified box plot of the weights of bags of M&Ms. Paste this image into the document. Using the box plot, indicate if there are any outliers.



4. Is the mean an adequate measure of a typical weight for this sample? Explain why or why not.

Yes, because the data is relatively symmetrical.

Question 11

Highway Patrol Speeds

1. On a separate document, state the 5-number summary and the mean speed.

$$\begin{aligned} Min &= 30 \\ Q1 &= 41 \\ Median &= 43 \\ Q3 &= 48 \\ Max &= 50 \end{aligned} \tag{2}$$

2. On a separate document, show lower and upper fences and explain the meaning of these values.

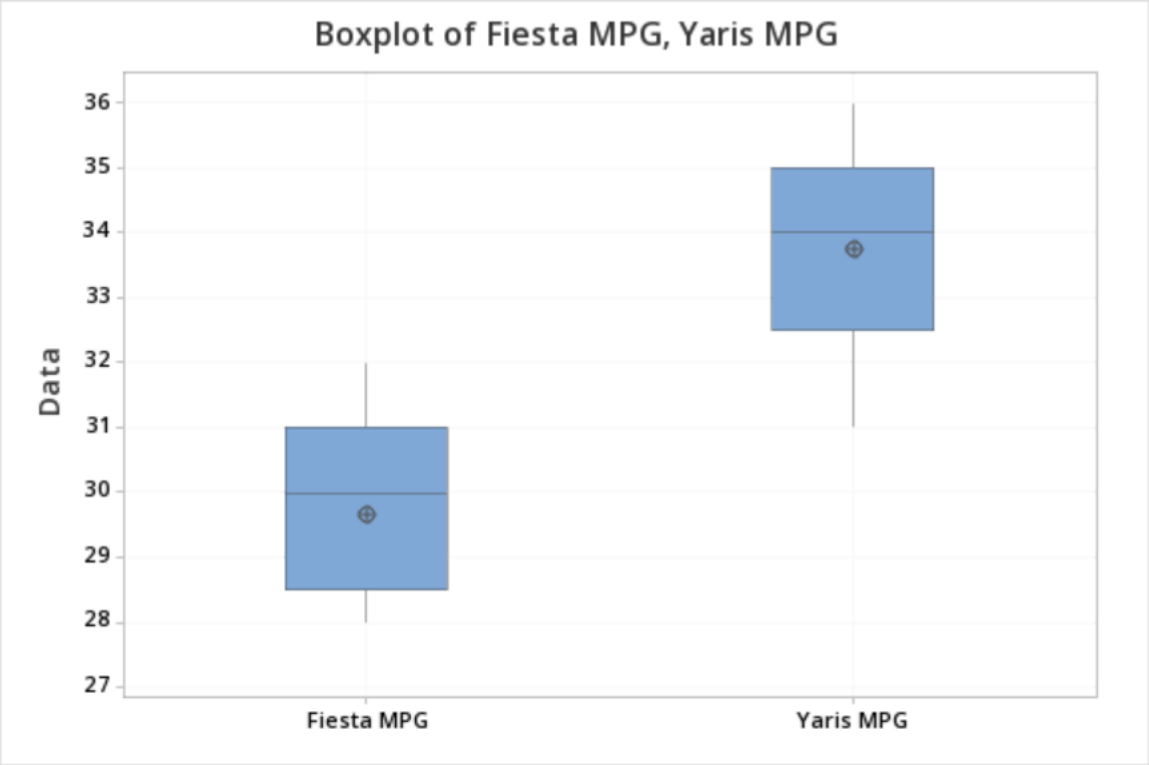
$$\begin{aligned} Upper\ Fence &= 30.5 \\ Lower\ Fence &= 51.5 \end{aligned} \tag{3}$$

This means that all information is within error.

3. On a separate document, show the modified box plot (build it with statistical technology).

Question 12

2019 Cars



1. On a separate document, describe the shape of the distributions of MPG for the Fiesta and Yaris.
   The distributions are relatively symmetrical.
2. On a separate document, compare the center/typical MPG for the Fiesta and Yaris. Do not report the values, compare with terms like 'greater than, less than, etc.'
   The Fiesta has a lower typical and center than the Yaris.