

Part 1: The Five-Number Summary

In the table below, you will find the five-number summary values for the visitor counts to the 10 Carnival attractions that your class identified during the human number line activity.

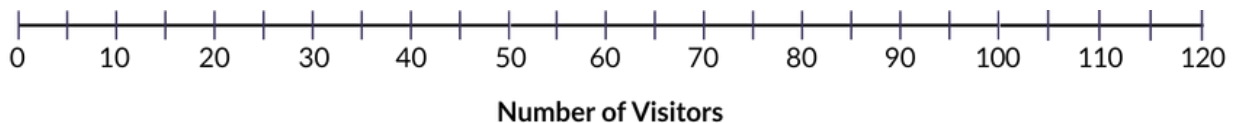
Minimum	Q1	Median	Q3	Maximum
5	78	99.5	103	114

Calculate the IQR: $IQR = Q3 - Q1 = \underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Interpret the IQR: The middle 50% of Carnival attractions had a spread of visitors, with counts ranging from to visitors.

Part 2: Build Your Boxplot

Using the steps below, follow along as your teacher guides you through how to draw a boxplot of the Carnival attractions data.



Step	Task	What to Do
1	Mark the Anchor Points	Place a dot above the number line at each of the values from the five-number summary.
2	Draw the Box	Draw a rectangular box using Q1 as the left edge and Q3 as the right edge. This box is the visual representation of the IQR.
3	Draw the Median Line	Draw a vertical line inside the box at the median value. This divides the box into the lower-middle 25% and the upper-middle 25%.
4	Draw the Whiskers	Draw a horizontal line from the left edge of the box (Q1) to the minimum. Draw a horizontal line from the right edge of the box (Q3) to the maximum.

Part 3: Practice On Your Own

Revisiting the Water Park Splash Zone data over 12 days in summer.

Use the data below to fill in the five-number summary table, calculate and interpret the IQR, and draw a boxplot of the data.

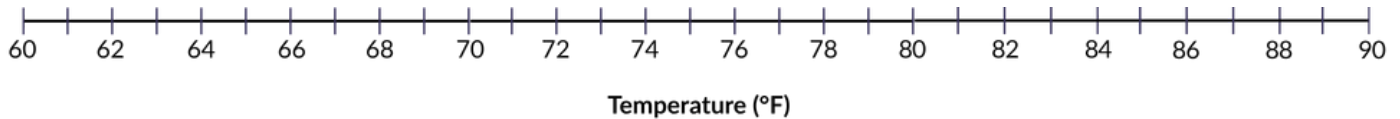
1. Water temperature in °F: 72, 75, 88, 68, 70, 70, 85, 84, 80, 65, 66, 73

Minimum	Q1	Median	Q3	Maximum

Calculate the IQR:

Interpret the IQR:

Draw a boxplot of the data:



Competing Water Park Aquatic Adventures data over 13 days in summer.

Use the data below to fill in the five-number summary table, calculate and interpret the IQR, and draw a boxplot of the data.

2. Water temperature in °F: 87, 67, 89, 67, 71, 73, 81, 73, 81, 64, 89, 82, 88

Minimum	Q1	Median	Q3	Maximum

Calculate the IQR:

Interpret the IQR:

Draw a boxplot of the data:

