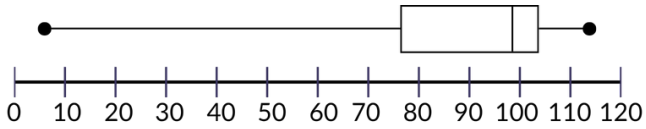
Part 1: Interpreting the Carnival Boxplot

Use the five-number summary and boxplot of the Carnival data to answer the questions below.

Minimum	Q1	Median	Q3	Maximum
5	78	99.5	103	114



Number of Visitors

1. Which side of the boxplot has a longer tail? In other words, which whisker is longer – the left whisker or right whisker? Calculate the following lengths to support your answer.

   Left whisker length = Q1 – Minimum = _____ – _____ = _____

   Right whisker length = Maximum – Q3 = _____ – _____ = _____

   The longer whisker is on the **LEFT SIDE** / **RIGHT SIDE** of the boxplot. (Circle one.)

2. What does the length of the longer side/whisker tell us about the ***SHAPE*** of this distribution?

   SKEWED LEFT **SYMMETRIC** **SKEWED RIGHT**

   Explain your reasoning: _____

   _____

3. Where does the median line sit inside the box? Calculate the following lengths to support your answer.

   Left side of box length = Median – Q1 = _____ – _____ = _____

   Right side of box length = Q3 – Median = _____ – _____ = _____

   The median is **CLOSER to Q1** (left edge) / **ABOUT in the MIDDLE** / **CLOSER to Q3** (right edge).

4. What does the placement of the median line tell us about the ***SHAPE*** of this distribution?

   SKEWED LEFT **SYMMETRIC** **SKEWED RIGHT**

   Explain your reasoning: _____

   _____

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Part 2: Practice Reading the Shape

For each boxplot, calculate the whisker lengths and the box halves. Then, circle the shape of the distribution.

Boxplot 1: Number of Text Messages Sent in One Day

Minimum	Q1	Median	Q3	Maximum
0	5	12	25	60

Draw a boxplot of the data:



Left whisker length = Q1 – Minimum = _____ – _____ = _____

Right whisker length = Maximum – Q3 = _____ – _____ = _____

The longer whisker is on the **LEFT SIDE** / **RIGHT SIDE** of the boxplot. (Circle one.)

Left side of box length = Median – Q1 = _____ – _____ = _____

Right side of box length = Q3 – Median = _____ – _____ = _____

The median is **CLOSER to Q1** (left edge) / **ABOUT in the MIDDLE** / **CLOSER to Q3** (right edge).

Boxplot Shape (circle one):

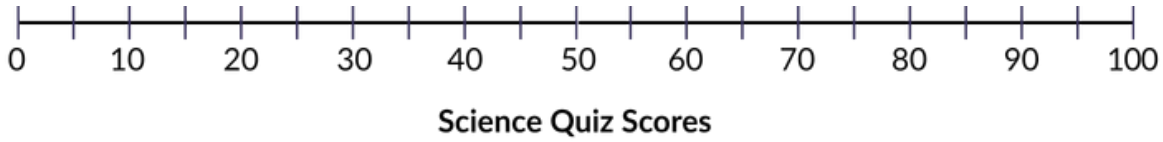
SKEWED LEFT **SYMMETRIC** **SKEWED RIGHT**

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Boxplot 2: Science Quiz Scores (out of 100)

Minimum	Q1	Median	Q3	Maximum
30	70	82	88	96

Draw a boxplot of the data:



Science Quiz Scores

Left whisker length = Q1 – Minimum = _____ – _____ = _____

Right whisker length = Maximum – Q3 = _____ – _____ = _____

The longer whisker is on the **LEFT SIDE** / **RIGHT SIDE** of the boxplot. (Circle one.)

Left side of box length = Median – Q1 = _____ – _____ = _____

Right side of box length = Q3 – Median = _____ – _____ = _____

The median is **CLOSER to Q1** (left edge) / **ABOUT in the MIDDLE** / **CLOSER to Q3** (right edge).

Boxplot Shape (circle one):

SKEWED LEFT **SYMMETRIC** **SKEWED RIGHT**

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