1. **Solution**
The sample size, n, is 72. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 72 \rceil$	18	92.55
Q2	$\lceil 0.5 \times 72 \rceil$	36	107.62
Q3	$\lceil 0.75 \times 72 \rceil$	54	120.44

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 120.44 - 92.55 \\ &= 27.89 \end{aligned}$$

We determine the outlier boundaries.

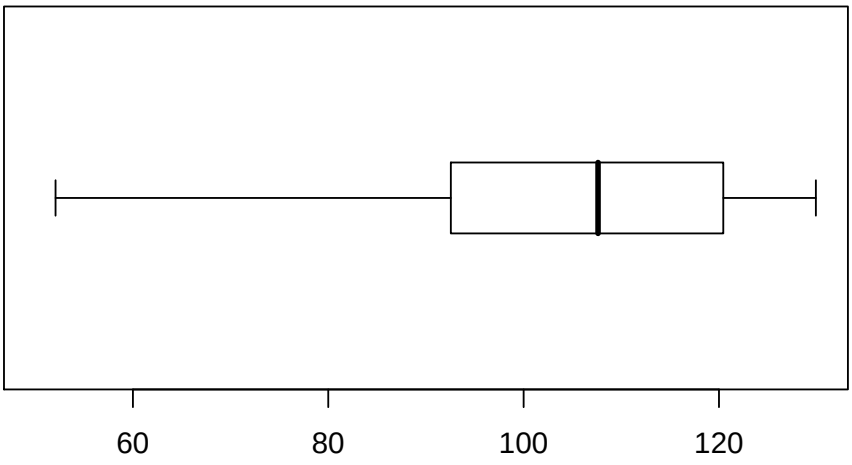
$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 92.55 - 1.5 \times 27.89 \\ &= 50.715 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 120.44 + 1.5 \times 27.89 \\ &= 162.275 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{\}$$

We identify the ends of the whiskers: 52.08 and 129.92. We plot the boxplot.



2. **Solution**
The sample size, n, is 56. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 56 \rceil$	14	11.94
Q2	$\lceil 0.5 \times 56 \rceil$	28	12.41
Q3	$\lceil 0.75 \times 56 \rceil$	42	12.74

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 12.74 - 11.94 \\ &= 0.8 \end{aligned}$$

We determine the outlier boundaries.

$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 11.94 - 1.5 \times 0.8 \\ &= 10.74 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 12.74 + 1.5 \times 0.8 \\ &= 13.94 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{10.51, 10.56\}$$

We identify the ends of the whiskers: 10.75 and 12.99. We plot the boxplot.