1. **Solution**
The sample size, n, is 49. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 49 \rceil$	13	61.96
Q2	$\lceil 0.5 \times 49 \rceil$	25	62.48
Q3	$\lceil 0.75 \times 49 \rceil$	37	62.79

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 62.79 - 61.96 \\ &= 0.83 \end{aligned}$$

We determine the outlier boundaries.

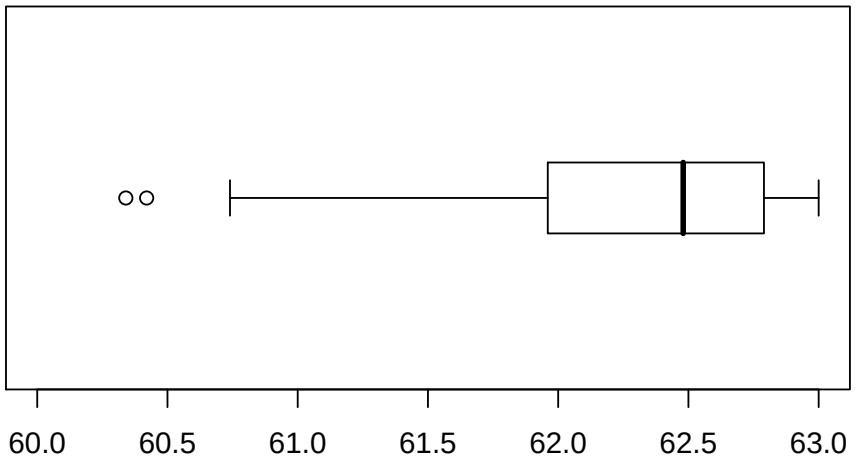
$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 61.96 - 1.5 \times 0.83 \\ &= 60.715 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 62.79 + 1.5 \times 0.83 \\ &= 64.035 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{60.34, 60.42\}$$

We identify the ends of the whiskers: 60.74 and 63. We plot the boxplot.



2. **Solution**
The sample size, n, is 45. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 45 \rceil$	12	12.06
Q2	$\lceil 0.5 \times 45 \rceil$	23	13.91
Q3	$\lceil 0.75 \times 45 \rceil$	34	16.04

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 16.04 - 12.06 \\ &= 3.98 \end{aligned}$$

We determine the outlier boundaries.

$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 12.06 - 1.5 \times 3.98 \\ &= 6.09 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 16.04 + 1.5 \times 3.98 \\ &= 22.01 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{24.33\}$$

We identify the ends of the whiskers: 10.51 and 21.15. We plot the boxplot.