1. **Solution**
The sample size, n, is 32. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 32 \rceil$	8	42.37
Q2	$\lceil 0.5 \times 32 \rceil$	16	42.59
Q3	$\lceil 0.75 \times 32 \rceil$	24	42.68

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 42.68 - 42.37 \\ &= 0.31 \end{aligned}$$

We determine the outlier boundaries.

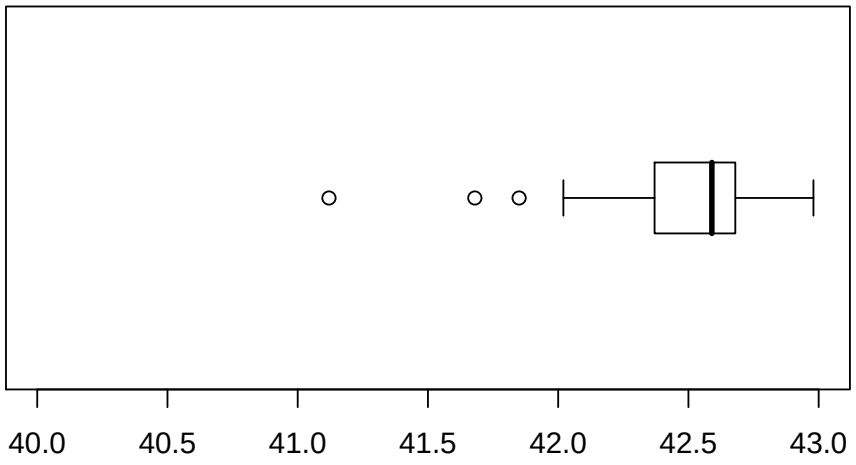
$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 42.37 - 1.5 \times 0.31 \\ &= 41.905 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 42.68 + 1.5 \times 0.31 \\ &= 43.145 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{41.12, 41.68, 41.85\}$$

We identify the ends of the whiskers: 42.02 and 42.98. We plot the boxplot.



2. **Solution**
The sample size, n, is 63. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 63 \rceil$	16	77.6
Q2	$\lceil 0.5 \times 63 \rceil$	32	82.64
Q3	$\lceil 0.75 \times 63 \rceil$	48	85.3

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 85.3 - 77.6 \\ &= 7.7 \end{aligned}$$

We determine the outlier boundaries.

$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 77.6 - 1.5 \times 7.7 \\ &= 66.05 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 85.3 + 1.5 \times 7.7 \\ &= 96.85 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{61.9, 62.75\}$$

We identify the ends of the whiskers: 70.67 and 89.88. We plot the boxplot.