1. **Solution**
The sample size, n, is 15. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 15 \rceil$	4	76.4
Q2	$\lceil 0.5 \times 15 \rceil$	8	77.99
Q3	$\lceil 0.75 \times 15 \rceil$	12	79.05

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 79.05 - 76.4 \\ &= 2.65 \end{aligned}$$

We determine the outlier boundaries.

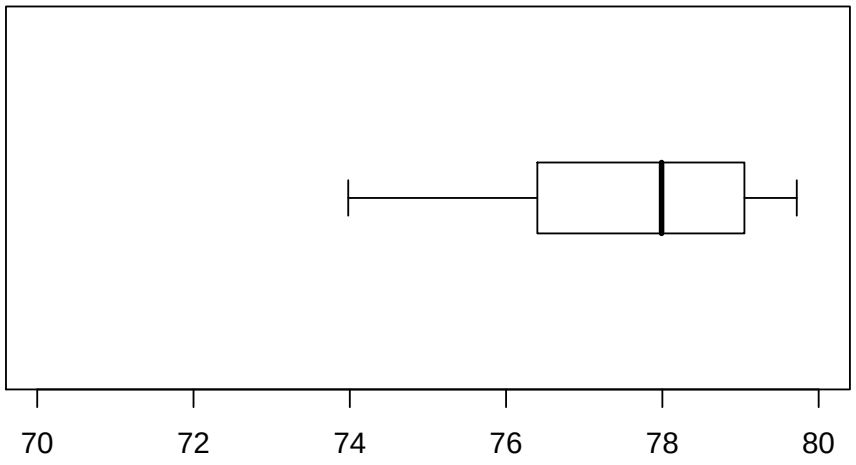
$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 76.4 - 1.5 \times 2.65 \\ &= 72.425 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 79.05 + 1.5 \times 2.65 \\ &= 83.025 \end{aligned}$$

We determine the outliers.

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

We identify the ends of the whiskers: 73.98 and 79.72. We plot the boxplot.



2. **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	51.24
Q2	$\lceil 0.5 \times 32 \rceil$	16	52.49
Q3	$\lceil 0.75 \times 32 \rceil$	24	53.77

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 53.77 - 51.24 \\ &= 2.53 \end{aligned}$$

We determine the outlier boundaries.

$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 51.24 - 1.5 \times 2.53 \\ &= 47.445 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 53.77 + 1.5 \times 2.53 \\ &= 57.565 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{57.69\}$$

We identify the ends of the whiskers: 50.24 and 55.76. We plot the boxplot.