1. **Solution**
The sample size, n, is 30. We determine the indeces and values of Q1, Q2, and Q3.

Quartile	Formula for i	i	x
Q1	$\lceil 0.25 \times 30 \rceil$	8	34.65
Q2	$\lceil 0.5 \times 30 \rceil$	15	35.29
Q3	$\lceil 0.75 \times 30 \rceil$	23	35.62

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 35.62 - 34.65 \\ &= 0.97 \end{aligned}$$

We determine the outlier boundaries.

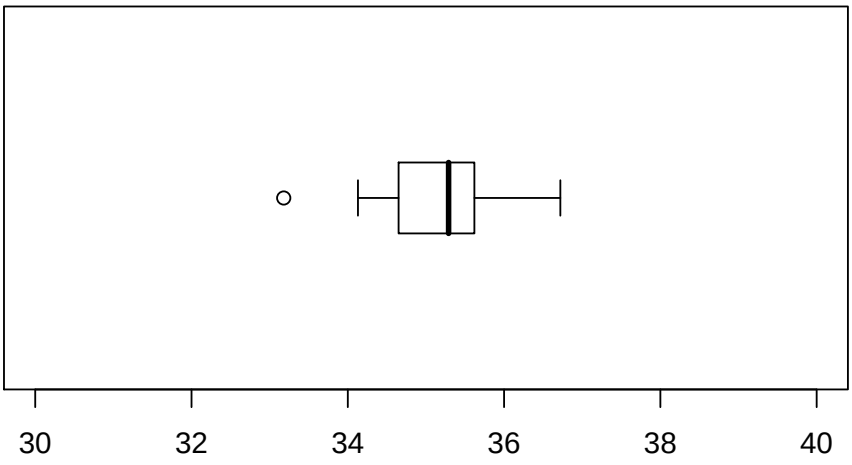
$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 34.65 - 1.5 \times 0.97 \\ &= 33.195 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 35.62 + 1.5 \times 0.97 \\ &= 37.075 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{33.18\}$$

We identify the ends of the whiskers: 34.13 and 36.72. We plot the boxplot.



2. **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	63.2
Q2	$\lceil 0.5 \times 72 \rceil$	36	64.03
Q3	$\lceil 0.75 \times 72 \rceil$	54	64.59

We determine the IQR.

$$\begin{aligned} \text{IQR} &= \text{Q3} - \text{Q1} \\ &= 64.59 - 63.2 \\ &= 1.39 \end{aligned}$$

We determine the outlier boundaries.

$$\begin{aligned} \text{lower boundary} &= \text{Q1} - 1.5 \times \text{IQR} \\ &= 63.2 - 1.5 \times 1.39 \\ &= 61.115 \end{aligned}$$

$$\begin{aligned} \text{upper boundary} &= \text{Q3} + 1.5 \times \text{IQR} \\ &= 64.59 + 1.5 \times 1.39 \\ &= 66.675 \end{aligned}$$

We determine the outliers.

$$\text{outliers} = \{60.54, 60.67\}$$

We identify the ends of the whiskers: 61.12 and 64.99. We plot the boxplot.