Box Plots (Visualization of data)

5, 40, 42, 46, 48, 49, 50, 50, 52, 53, 55, 56, 58, 75, 102

Q1 = 46, Q2 = 50, Q3 = 56, n = 15

Lower whisker = $Q_1 - (1.5 * IQR)$

Upper whisker = $Q_3 + (1.5 * IQR)$

Box Plot → to detect the outliers

$IQR = Q_3 - Q_1$

Q_1 → 25th Percentile

Q_3 → 75th Percentile

Median = Q_2 → 50th Percentile

$Q_1 = 46$

$Q_2 = 50$

$Q_3 = 56$

$IQR = Q_3 - Q_1$

$= 56 - 46$

$= 10$

Lower whisker $= 46 - (1.5 * 10)$

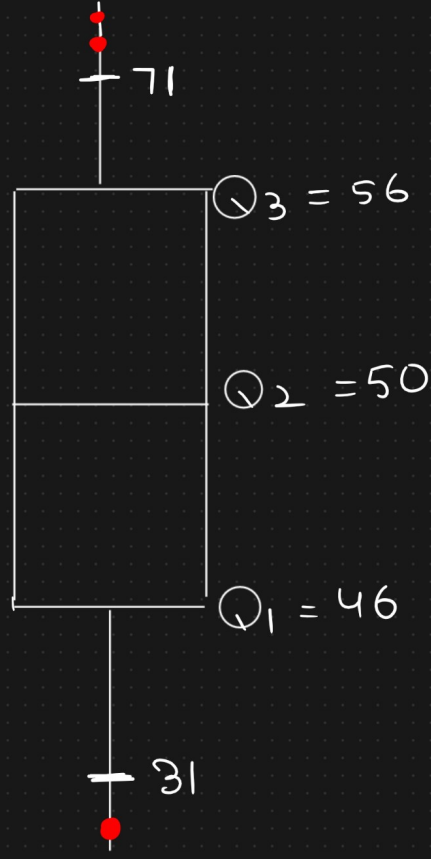
$= 46 - 15$

$= 31$

Upper whisker $= 56 + (1.5 * 10)$

$= 56 + 15$

$= 71$


71
$Q_3 = 56$
$Q_2 = 50$
$Q_1 = 46$
31