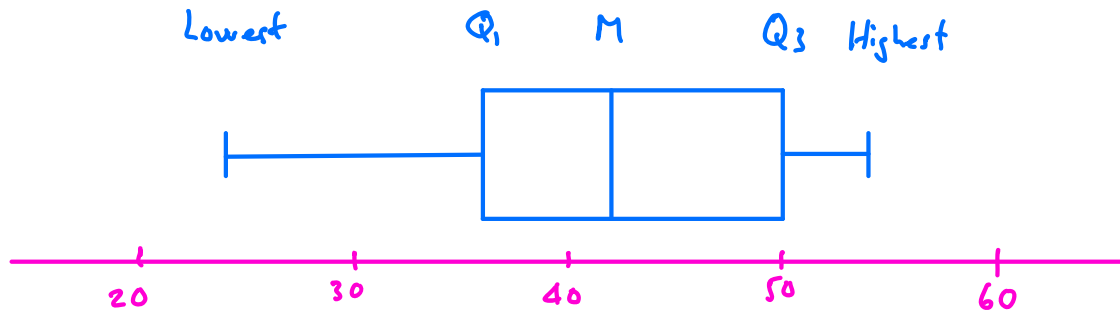


Box Plots or Box and Whisker Diagrams

These are diagrams for presenting data showing:

The least value, the lower quartile, the median

the upper quartile and greatest value

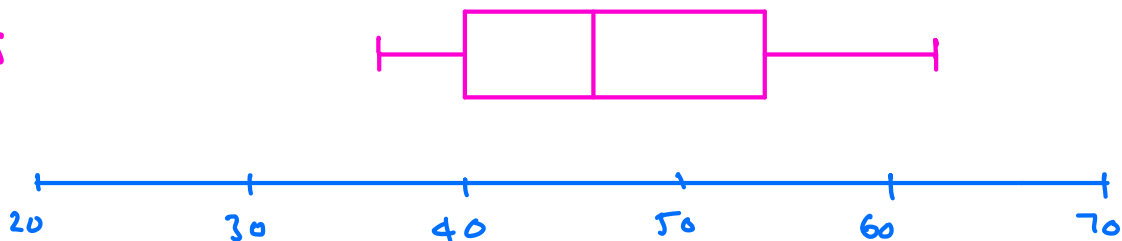


Lowest value		24
LQ	Q_1	36
Median	Q_2	42
UQ	Q_3	50
Highest value		54

Comparing Data Samples With Box plots

Maths Test Results

Girls



Boys



On average the girls performed slightly better

than the boys. They had a median score of 46 compared to the boys median of 44

The girls' results were more varied than the boys'
They had an IQR of 14 compared to the boys' IQR of 8.

Always compare the medians as a measure of location and the IQRs as a measure of spread.

Drawing a Box plot from a Stem Leaf Diagram

43 37 59 45 56
62 45 65 51 50
32 58 45 62 43

```
3 | 7 2
4 | 3 5 5 5 3
5 | 9 6 1 0 8
6 | 2 5 2
```

```
3 | 2 7
4 | 3 3 5 5 5
5 | 0 1 6 8 9
6 | 2 2 5
```

Lowest 32
Q₁ 43
M 50
Q₃ 59
Highest 65

