

Box and Whisker Plot

A **box and whisker plot**, or box plot, shows the five-number summary of a data set. The five-number summary includes the minimum, first quartile (Q_1), median, third quartile (Q_3), and maximum.

To make a box plot, follow these steps:

1. Order the data set from least to greatest.
2. Find the **median**.
3. Find the **first quartile** and the **third quartile**.
4. Find the **minimum** and **maximum**.
5. Use those five numbers to make your box plot!

Try it! Make a box plot for this data set: 2, 3, 7, 8, 9, 13, 13, 15, 16, 19.

First, order the data set. Here the data set is already in order.

Then, find the median, or the middle number of the data set.

For this example, the median is 11.

Next, find the first and third quartiles. Here the first quartile is 7, and the third quartile is 15.

Then, find the minimum and maximum. The minimum is 2, and the maximum is 19.

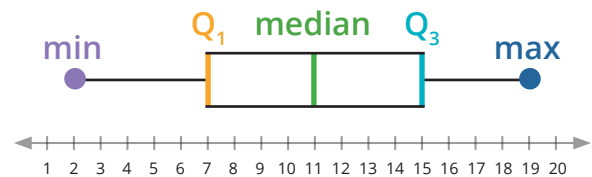
Finally, use the number line and the five-number summary to make your box plot.

2, 3, 7, 8, 9, | 13, 13, 15, 16, 19

$$\frac{9 + 13}{2} = 11$$

2, 3, 7, 8, 9, | 13, 13, 15, 16, 19

2, 3, 7, 8, 9, 13, 13, 15, 16, 19



Fill in the five-number summary and make a box plot for each data set.

10, 19, 12, 3, 7, 18, 5, 16

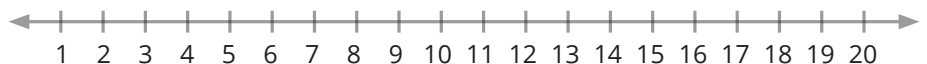
Minimum _____

Q_1 _____

Median _____

Q_3 _____

Maximum _____



Box and Whisker Plot

Fill in the five-number summary and make a box plot for each data set.

16, 10, 7, 13, 23, 10, 8, 24, 19

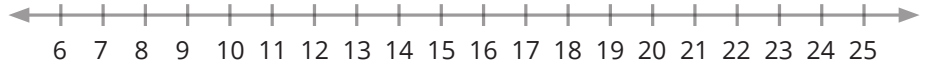
Minimum _____

Q_1 _____

Median _____

Q_3 _____

Maximum _____



33, 27, 25, 38, 30, 32, 25, 37

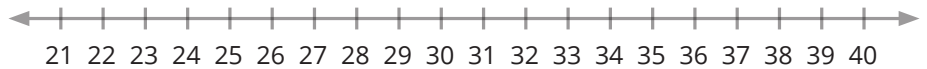
Minimum _____

Q_1 _____

Median _____

Q_3 _____

Maximum _____



28, 26, 15, 30, 17, 18, 14, 22, 28

Minimum _____

Q_1 _____

Median _____

Q_3 _____

Maximum _____

