|  |  |  |
| --- | --- | --- |
| **Define**A boxplot is a simple way of graphing data based on its quartiles. We find a five figure summary to create one. | **Research**Try and create a box plot in Microsoft Excel. | **Memorise**Quartiles break the data into four equal groups.Interquartile range = Q3 – Q1Semi-interquartile range = (Q3 – Q1) ÷2 |
| **Practise and Apply**1. A group of men and a group of women, in a local gym, decided to hold a competition. They counted how many pull-ups each person could do in a two minute period.

Men: 7 9 9 11 13 13 15 18 18 20 25Women: 5 5 6 7 7 10 12 12 14 14 15 171. Calculate the median and quartiles for both groups.
2. Draw a neat labelled composite box plot diagram to represent the two groups.
3. Which group performed better?

 Give two reasons for your answer?1. Determine a five figure summary for the following data:
2. 13, 13, 15, 16, 21, 23, 24, 28, 29
3. 3.2, 3.5, 3.6, 3.6, 3.7, 3.8, 4.0, 4.1, 4.1, 5.2, 5.3, 5.6
4. 92, 92, 93, 94, 92, 95, 97, 99, 90, 92, 94, 92, 91
5. Draw a boxplot to represent each set of data in question 1.
6. A shoe shop assistant took note of the sizes of a popular make of trainers that were sold in her shop last week.

4 4 4.5 5 5 5 5.5 5.5 6 6 6 6.5 6.5 10Calculate the range and the semi-interquartile range and say why SIQR would be a better indicator of the true spread of the shoe sizes sold last week. |