

Calculating the range

Introduction

This material was drawn from materials developed by Property Services NTO and Milton Keynes Chamber as part of their Key Skills Support Programme development projects.

What is the range?

When you work with a group of numbers – for example, answers to questions in a survey – you are likely to have a ‘range’ of figures from the lowest to the highest. To work out your range, you simply take away the smallest number from the highest.

This table shows the results of a survey into how many trainees own different types of game consuls.

Type of game consul	Number of trainees (frequency)
Playstation	7
Dreamcast	1
N64	3
Gameboy	8
PC games	6
None	5
Total	30

The range in this example is between the Dreamcast (owned by 1 trainee) and the Gameboy (owned by 8 trainees). So the range is $8 - 1 = 7$.

When would I use range?

Use range when you want to know the lowest to the highest of your set of figures. It is helpful, for example, when you want to set out data in order.

Dealing with anomalies

You need to be aware of anomalies or one-offs that will skew your figures. You may need to take out such examples, as they will give you a false overall picture if left in. One way of doing this is the ‘interquartile range’ – to calculate this you ignore the lowest quarter and the highest quarter of the your figures, and just take the range of the middle half.

