

## Level 2 Functional Skills Maths Self Quizzing Questions

## Module 18 – Manipulating Data

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Here are 8 numbers.

Which Number is the mode?

2 5 2 7 2 4 1 2

Most popular item of data is 2

Mode is 2

Find the mean of these numbers.

$$5+6+4+10+3+4+5+2=40$$
  
 $40 \div 8=5$ 

Mean is 5

The table below shows information about shoes sizes for some children. Find the mean shoe size.

Shoe Size	Frequency
5	12
6	10
7	9
8	8

	Shoe Size	Frequency	shoe size $\times$ frequency
	5	12	60
	6	11	66
	7	9	63
	8	8	64
l	Totals	40	253

 $253 \div 40 = 6.325$ 

Mean Shoe size = 6.325

The table shows the mean and range for an English exam and a Maths exam that were both sat by the same students.

	Mean	Range
Maths	46%	23%
English	61%	14%

Find the Median of these numbers.

5 4 1 7 8 6 9 1 3

1 1 3 4 (5) 6 7 8

Median is 5

Felicity owns a market stall. The table shows information about the total number of sales she made on 21 different days. Find an estimate for the mean number of sales she made per day?

Number of Customers	Frequency
1 – 15	7
16 - 30	4
31 - 45	6
46 - 60	4

## 4 7 8 9 12 6 10

Find the Median of these numbers.

4 6 7 8 9 10 11 12

Median is 8.5

Find the Range of these numbers.

2 5 2 7 2 4 1 2

7 - 1 = 6

Range = 6

Number of Customers	Frequency	Midpoints	Midpoints × frequency
1-15	7	8	56
16 - 30	4	23	92
31 - 45	6	38	228
46 - 60	4	53	212
Totals:	21		588

 $588 \div 21 = 28$ 

Mean number of sales is 28

Compare the performances on the two exams.

The students averaged 46% in their maths exam and 61% in the English exam, so on average the students performed better in their English exam.

The range in the Maths exam is 23%, and the range in the English exam is 14% so the results were more spread out in the maths exam.