

Mean, Median, Mode & Range Revision Exercise

- 1) Ten people were asked to guess the number of coffee beans in a jar.
Their guesses were:

310 260 198 250 275
300 245 225 310 200

- a) What is the range of this data?
b) Find the median.



1
2

- 2) At the World Athletic Championships the mean time for the first semi-final of the 100 metres was 9.98 seconds. For the second semi-final the times, in seconds, were:

10.21 10.04 9.92 9.98 10.04 9.94 9.9 9.73

Was the mean time for the second semi-final better than the mean time for the first semi-final?



4

- 3) A grass lawn is treated with weedkiller. The lawn is split into twenty squares each of the same area. Ten of the squares are treated with Weedclear. Three weeks later the number of weeds in each of these squares is as follows:

3, 4, 6, 2, 1, 7, 2, 1, 1, 3.

- a) Find the median.
b) Find the range.

2
1

The other ten squares are treated with Noweed. For these squares the median is 2 and the range is 10.

- c) Make **two** comments comparing the number of weeds in squares treated with Weedclear and Noweed.

2

- 4) A group of 40 visitors to the Edinburgh Festival Fringe were asked how many performances they had attended. The results are shown in the frequency table below.

Number of performances	Frequency
5	2
6	9
7	11
8	9
9	4
10	4
11	1
Total = 40	

- a) Write down the modal number of performances.
b) Find the range of the number of performances.

1
1

- 5) Brian checks the five-day weather forecast for Paris.

PARIS FORECAST			
	Maximum (°C)	Minimum (°C)	
Saturday	3	-3	Cloudy
Sunday	2	0	Sunny
Monday	7	4	Cloudy
Tuesday	7	2	Sunny
Wednesday	5	-2	Sunny

Calculate the mean minimum temperature for the five-day weather forecast.

3

- 6) Two classes of fourteen pupils at Oakland Academy collected money for a local charity. Listed below are the amounts (in £) collected by the pupils in class 5C.

27 26 17 27 18 21 23 19 18 27 24 20 31 28

- a) Find the median. 2
 b) Find the range. 1
 c) For class 5M the median was £10 and the range was £17.
 Make **two** comments comparing the amounts collected by the pupils in class 5C and class 5M. 2

- 7) Sean draws a stem and leaf diagram to display charity donations.



Using the above diagram, find:

- a) the mode 1
 b) the median 2
 c) the range of the donations. 1

ANSWERS

1) a) Range = Highest – Lowest = 310 – 198 = 112

1) b) Median = $\frac{250+260}{2} = 255$

2) Mean = $\frac{\text{total}}{\text{no.of values}} = \frac{79.76}{8} = 9.97$

3) 1, 1, 1, 2, 2, 3, 3, 4, 6, 7

a) Median = 2.5

b) Range = 7 – 1 = 6

c) On average there are more weeds in the squares treated by Weedclear.
There is a lower range, therefore less varied spread in the squares treated by Weedclear.

4) a) Modal number of performances = 7

b) Range = 11 – 5 = 6

5) Mean = $\frac{\text{total}}{\text{no.of values}} = \frac{1}{5} = 0.2^{\circ}\text{C}$

6) 17 18 18 19 20 21 23 24 26 27 27 27 28 31

a) Median = 23.5

b) Range = 31 – 17 = 14

c) On average class 5C collected more.
There is a lower range, therefore less variation in the amount collected by pupils in class 5C.

7) a) Mode = £10

b) Median = $\frac{24+28}{2} = £26$

c) Range = Highest – Lowest = 45 – 3 = £42