

# GCSE Maths

## ASSIGNMENT

### Preparatory Sheet

Required preparation for the session on.....

Calculating Averages and Range of a set of data

Aims of this session: Review your abilities in each of these areas, Green (feel confident..G), Amber (need to work more on..A), Red (Feel weaker at this..R)

1. Calculate the MEAN (average) of a set of data, using lists and tables
2. Calculate the MODE of a set of data, using lists and tables
3. Calculate the MEDIAN of a set of data, using lists and tables
4. Calculate the RANGE of a set of data, using lists and tables
5. Calculate the MEAN value in grouped distribution
6. Calculate the MEDIAN value in grouped distribution

G	A	R
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MOSTLY GREEN

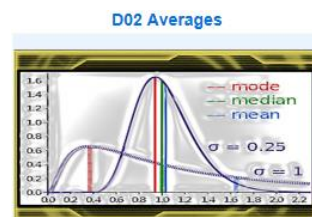
MOSTLY ORANGE

MOSTLY RED

<https://padlet.com/mathsman230774/qfho4bkj7u49>

START D02 . Watch the video/s, read and practice

using the online materials. Read your GCSE maths AQA book



Write a comment about what you learned from the videos / materials below

**MEAN**  
**MODE**  
**RANGE**  
**MEDIAN**





1.

**Calculate the MEAN (average) of a set of data**

Q... When there are a lot of pieces of information it can be easier and more useful to only quote one figure that is representative of all of them. One way to do this is called the MEAN. Can you find the mean value of the set of numbers below?

£14

£18

£6

£20

*HINT...this form of average takes into account all the numbers. You need to collect back in all the values (add them together) and then divide them back by how many figures you started with (in this case there are four figures).*

2.

**Calculate the MODE of a set of data**

Q... There are times when it is much quicker to simply quote the MODE value as it could be very easy to see that one value (of a number of values) stand out as the most common in a data set. Write the MODE for this value set (include both men's and women's)

Men's: 65, 68, 70, 72, 73, 75

Women's: 69, 71, 73, 74, 77, 80



*HINT... Just find a number in the set of results that occurs more times than the rest! There could be one, none or multiply modes !*

3.

**Calculate the MEDIAN of a set of data**



Q... When there are some numbers that are quite different from the rest they can make an average appear much higher or lower than what it should be. The MEDIAN is used to ignore these values and find the middle of a data set. Find the MEDIAN value of this data set.



*Hint... you need to put the numbers in order first and then look for the middle number. If there is no middle number, you will need to find the average of the two values next to the middle.*

4.

**Calculate the RANGE of a set of data**



Q... When you want to state how far away the most and least values are from each other and therefore quote who spread out the information is, you can use the RANGE. Find the range of these numbers.



1C

5.4C

-2.7C

0.1C

-4.3C

*HINT... you can find the RANGE value by taking away the lowest value from the highest. In this case however the lowest value is a negative number so remember your rules for negatives, a neg minus a neg is a plus !*

## END OF PREPATORY ASSIGNMENT

What to do now....

1. Ensure you have marked in each box if you feel confident in each topic or not (this will inform you and your tutor which activities you should do in the session)
2. Bring this yellow assignment with you to your next session and check with your tutor answers given
3. Add this to your folder of work IN ORDER YELLOW...GREEN...ORANGE... (and any BLUE you achieve)!

