# Learner Resource 28

## Summary table for descriptive statistics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Mean – What is it and how to calculate? | Work out the mean for these data sets | Mode What is it and how to calculate? | Work out the mode for these data sets | Median - What is it and how to calculate? | Work out the median for these data sets | Range- What is it and how to calculate? | Work out the range for these data sets |
| Sum of all the data in a set divided by the amount of values in a data set.  Put all the numbers in numerical order.If there are an odd number of results, it is the middle number.  If there are an even number of results, it will be the mean of the two central numbers | 11,15,20,22,26,28,30  Mean =  2, 3,4,6,7,8,9,1,15  Mean = |  | 5, 6, 6, 7, 5, 6, 3, 9, 9,5 ,7  Mode =  11, 4, 5, 9. 9. 8, 9, 11, 12, 11  Mode = |  | 13,15,20,22,29,5,36  Median =  7, 11,4,6,12,8,14,1, 9  Median = |  | 4,8,6,15,3,11, 9  Range =  3.5.4.9.10.1.5  Range = |
| Ratio – What is it and how to calculate? | Percentages - What are they and how to calculate? | Calculate the following percentages | Fractions - What are they and how to calculate? | Convert these percentages in to fractions | Standard form – when used? | Decimal form – when used? | Examples of standard and decimal form |
|  |  | 16% of 30  52% of 90  13% of 73 |  | 25% =  50% =  67% =  89% = |  |  | Standard form  5,000,000 would be 5 × 106  65,000 would be 6.5 × 104  Decimal form  0.9 = 9/10  0.09 = 9/100  0.009 = 9/1000 |
| Significant figures – why used and how to round off? | Examples of significant figures | Decimal places – converting decimal in to % | Decimal places – converting decimal in to fractions | Making estimations from data collected – when used? | Examples of making estimations | Definition of normal distribution | Example drawing |
|  | 1 significant figure: 423249 = 400000 (rounded down)  2 significant figure: 0.00379 = 0.004 (rounded up)  3 significant figures: 0.0040352 = 0.0040  (rounded down)  4 significant figures: 345,678 = 345,700 (rounded up) | Move the decimal 2 places to the RIGHT  Add % sign | For 2 decimal places divide by 100  For 3 decimal places divide by 1000  Find the lowest common denominator |  | With the figure 234 × 39.78 you might want to know “very roughly” what sort of value you are expecting rather than knowing the precise answer.  So we do an “order of magnitude” calculation which means rounding the numbers to 1 digit (1 significant figure), so we get: 200 x 40 = 8000 |  |  |

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