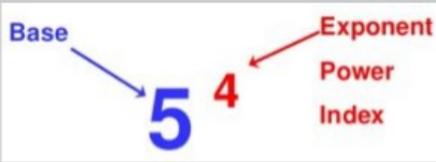
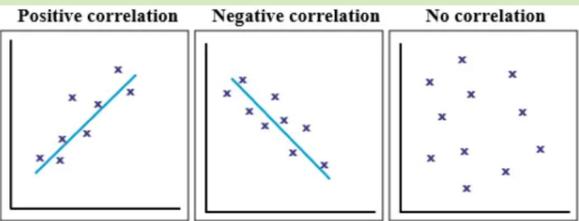


Indices	
<b>Base</b>	The number or value that has the <b>index</b> on it.
<b>Index</b>	<p>This tells you how many of a value have been multiplied together.</p>  <p>This means <math>5 \times 5 \times 5 \times 5</math>                      We say “five to the power of four”                      Another word for the index number is the <b>power</b> or the <b>exponent</b>.</p>
<b>Indices</b>	More than one <b>index</b> .
<b>Squared</b>	<p>Squaring a number is when you multiply two of the same value together.</p> <p>E.g. <math>4 \times 4 = 4^2</math></p> <p>We can say “four squared” or “four to the power of two”</p>
<b>Cubed</b>	<p>Cubing a number is when you multiply three of the same value together.</p> <p>E.g. <math>a \times a \times a = a^3</math></p> <p>We can say “a cubed” or “a to the power of three”</p>

Representing Data	
<b>Frequency</b>	The number of times an event occurs
<b>Data</b>	Information that can be collected.
<b>Continuous Data</b>	<p>Data that can take any value and can be measured</p> <p>E.g. height, weight</p>
<b>Discrete Data</b>	<p>Data that can only take specific values and can be counted</p> <p>E.g. number of people</p>
<b>Qualitative Data</b>	<p>Data that is non-numerical and refers to a quality</p> <p>E.g. colours, shapes, types of things</p>
<b>Quantitative Data</b>	<p>Refers to an amount of something</p> <p>E.g. number of people, height, shoe size</p>
<b>Variable</b>	One type of data that is measured or collected.
<b>Range</b>	<p>The difference between the largest and smallest values in the data.</p> <p>To calculate the range we do:</p> <p><b>Biggest - Smallest</b></p>
<b>Correlation</b>	 <p><b>Positive correlation</b> shows that as one variable increases the other also increases.</p> <p><b>Negative correlation</b> shows that as one variable decreases, the other also decreases.</p> <p><b>No correlation</b> shows there is no link between the variables.</p>
<b>Outlier</b>	A piece of data that is very different to the rest of the data gathered.
<b>Line of best fit</b>	A line drawn on a scatter graph that shows the relationship between the variables.

Sequences	
<b>Sequence</b>	A list of <b>terms</b> made by following a rule.
<b>Term</b>	Numbers or diagrams that form a <b>sequence</b> .
<b>Position</b>	<p>The place in which a <b>term</b> sits within a <b>sequence</b>.</p> <p>E.g. 1, 4, 7, 10 - the <b>term</b> 4 sits in position 2 because it's the second <b>term</b> in the <b>sequence</b>.</p>
<b>Term to Term Rule</b>	A rule that allows you to find the next <b>term</b> in a <b>sequence</b> if you know the previous <b>term</b> .
<b>Difference</b>	<p>The gap between two numbers found by subtracting.</p> <p>E.g. the difference between 8 and 5 is <math>8 - 5 = 3</math></p>
<b>Linear Sequence</b>	<p>A linear sequence increases or decreases by the same amount using addition or subtraction.</p> <p>E.g. 4, 7, 10, 13... is linear because we <b>add 3</b> to each term to find the next one.</p>
<b>Non-linear Sequence</b>	<p>A non-linear sequence does not have a common <b>difference</b> between terms so the difference between terms changes.</p> <p>E.g. 6, 8, 11, 15....</p>
<b>Geometric Sequence</b>	<p>A geometric sequence has <b>terms</b> that are multiplied or divided by the same number.</p> <p>E.g. 3, 6, 12, 24, 48.... The rule here is <b>multiply by 2</b></p>
<b>Fibonacci Sequence</b>	<p>A <b>sequence</b> where the next number is found by adding up the two numbers before it .</p> 
<b>Ascending</b>	A <b>sequence</b> where the terms increase in value. E.g. 4, 10, 16, 22
<b>Descending</b>	A <b>sequence</b> where the terms decrease in value. E.g. 10, 6, 2, -2, -6



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