

Official Homework - Statistics Level 4 Homework

Q1. A survey of 53 pupils on how many times they visited the cinema in the last month is given below.

Complete the table below and calculate:

- (i) Range
- (ii) Mean
- (iii) Mode
- (iv) Median

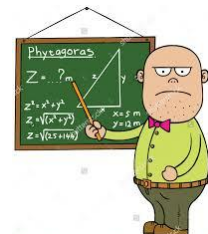


No of Visits	Frequency	Vists x Frequency
0	104	
1	56	
2	44	
3	20	
4	10	
5	1	
<b>Total</b>		

Q2. In a school, the average age of three mathematics teachers is 48.

A new mathematics teacher arrives and the new average is 51.

What is the age of the new mathematics teacher ?



Q3. Complete the table below and calculate the median.

No of books	Frequency	Cumulative Frequency
0	1	
1	2	
2	3	
3	5	
4	5	
5	6	
6	2	
7	1	

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Marking Scheme

<p>Q1</p>	<p>(i) Range = 5</p> <p>(ii) Mean = 1.06</p> <p>(iii) Mode = 0</p> <p>(ii) Median = 15</p>	<ul style="list-style-type: none"> <li>• 5</li> <li>• Totals + 3<sup>rd</sup> column correct 2 marks (2 out of 3 1 mark)</li> </ul> <table border="1" data-bbox="815 495 1401 775"> <thead> <tr> <th>No of Visits</th> <th>Frequency</th> <th>Visits x Frequency</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>104</td> <td>0</td> </tr> <tr> <td>1</td> <td>56</td> <td>56</td> </tr> <tr> <td>2</td> <td>44</td> <td>88</td> </tr> <tr> <td>3</td> <td>20</td> <td>60</td> </tr> <tr> <td>4</td> <td>10</td> <td>40</td> </tr> <tr> <td>5</td> <td>1</td> <td>5</td> </tr> <tr> <td>Total</td> <td>235</td> <td>249</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 1.06</li> <li>• 0</li> <li>• 1</li> </ul>	No of Visits	Frequency	Visits x Frequency	0	104	0	1	56	56	2	44	88	3	20	60	4	10	40	5	1	5	Total	235	249			
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2	44	88																											
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5	1	5																											
Total	235	249																											
<p>Q2</p>	<p>60</p>	<ul style="list-style-type: none"> <li>• 144</li> <li>• 204</li> <li>• 204 - 144 = 60</li> </ul>																											
<p>Q3</p>	<p>3 books</p>	<ul style="list-style-type: none"> <li>• Cumulative Frequency all correct</li> </ul> <table border="1" data-bbox="786 1420 1334 1805"> <thead> <tr> <th>No of books</th> <th>Frequency</th> <th>C. F.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1</td> <td>1</td> </tr> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>2</td> <td>3</td> <td>6</td> </tr> <tr> <td>3</td> <td>5</td> <td>11</td> </tr> <tr> <td>4</td> <td>5</td> <td>16</td> </tr> <tr> <td>5</td> <td>6</td> <td>22</td> </tr> <tr> <td>6</td> <td>2</td> <td>24</td> </tr> <tr> <td>7</td> <td>1</td> <td>25</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>• 13<sup>th</sup> number</li> <li>• Median = 3 book</li> </ul>	No of books	Frequency	C. F.	0	1	1	1	2	3	2	3	6	3	5	11	4	5	16	5	6	22	6	2	24	7	1	25
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Total 12 marks