



Timester Challenge

Averages and Range



3, 10, 9, 5, 4, 5

- Write down the mode
- Find the median
- Work out the mean
- Work out the range

Bronze ★

Here are the test marks of 8 boys and 5 girls

Boys	4	7	2	6	4	5	4	2
Girls	3	6	8	4	9			

- Whose results are more consistent? Give a reason for your answer.
- Work out the median mark of the boys results.
- Work out the mode of the girls results

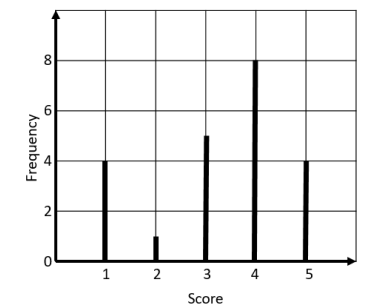
Silver ★

The diagram shows information about the scores of class A and class B in a mental maths test.

Class A



Class B



A student is chosen at random from Class A. Work out the probability that the student's score was the mode for the class.

Show that Class A had more consistent scores than Class B.

Gold ★

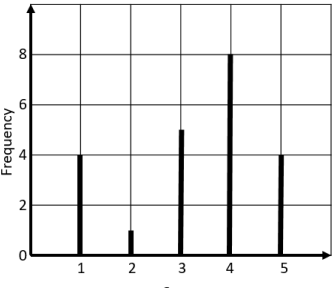
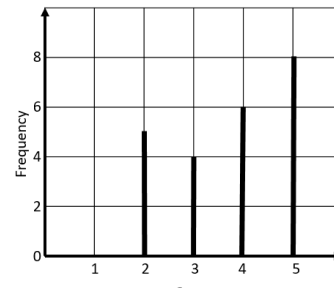


Timester Challenge

Averages and Range

Answers



<p>3, 10, 9, 5, 4, 5 3, 4, 5, 5, 9, 10</p> <p>a) Write down the mode 5</p> <p>b) Find the median 5</p> <p>c) Work out the mean $\frac{36}{6} = 6$</p> <p>d) Work out the range $10 - 3 = 7$</p> <p style="text-align: right;">Bronze ★</p>	<p>Here are the test marks of 8 boys and 5 girls</p> <table border="0"> <tr> <td>Boys</td> <td>4</td> <td>7</td> <td>2</td> <td>6</td> <td>4</td> <td>5</td> <td>4</td> <td>2</td> </tr> <tr> <td>Girls</td> <td>3</td> <td>6</td> <td>8</td> <td>4</td> <td>9</td> <td></td> <td></td> <td></td> </tr> </table> <p>a) Whose results are more consistent? Give a reason for your answer. Boys Range $7 - 2 = 5$ Girls Range $9 - 3 = 6$ Boys are more consistent - lower range.</p> <p>b) Work out the median mark of the boys results. 2, 2, 4, 4, 4, 5, 6, 7 Boys median is 4</p> <p>c) Work out the mode of the girls results 2, 2, 3, 4, 4, 4, 4, 5, 6, 6, 7, 8, 9 Mode is 4</p> <p style="text-align: right;">Silver ★</p>	Boys	4	7	2	6	4	5	4	2	Girls	3	6	8	4	9				<p>The diagram shows information about the scores of class A and class B in a mental maths test.</p> <table border="0"> <tr> <td style="text-align: center;">Class A</td> <td style="text-align: center;">Class B</td> </tr> </table> <div style="display: flex; justify-content: space-around;">   </div> <p>A student is chosen at random from Class A. Work out the probability that the student's score was the mode for the class.</p> $\frac{8}{22} = \frac{4}{11}$ <p>Show that Class B had more consistent scores than Class A. Range A: $5 - 1 = 4$ Range B: $5 - 2 = 3$ Class B has more consistent results lower range</p> <p style="text-align: right;">Gold ★</p>	Class A	Class B
Boys	4	7	2	6	4	5	4	2														
Girls	3	6	8	4	9																	
Class A	Class B																					