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| Year  9 | | Data Interpretation Practice Test | | Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper. | | | |
|  | **Questions 1 to 3 refer to the dot plot below**  The dot plot shows the scores on a ten question magazine quiz by a group of friends.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  | O |  |  | |  |  | O | O | O | O |  | |  | O | O | O | O | O |  | |  | O | O | O | O | O | O | |  | 5 | 6 | 7 | 8 | 9 | 10 |       Score out of 10 | | | |
| 1. | What is the median of the scores in the dot plot?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 2. | How many friends took the quiz?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 3. | What is the mean score for the group?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 4. | In a small business, the salaries of its eight employees are:  $ 28 000 $ 17 000 $ 21 000 $ 36 000 $ 21 000  $ 41 000 $ 53 000 $32 000  What is the median salary of the employees?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |

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| 5. | Draw a frequency histogram from the table below on the axes provided.     |  |  | | --- | --- | | Score | Frequency | | 1 | 4 | | 2 | 2 | | 3 | 4 | | 4 | 6 | |
| 6 | Complete the stem and leaf plot from the data below which are the distances jumped by athletes in a long jump practice session.     |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | 1.2 | 1.3 | 2.1 | 3.1 | 1.4 | 4.1 | | 3.2 | 2.2 | 1.4 | 3.2 | 2.2 | 3.3 | | 4.3 | 2.3 | 3.4 | 1.5 | 2.3 | 4.4 | | 4.5 | 3.4 | 2.3 | 3.4 | 1.8 | 2.4 | | 3.5 | 2.5 | 2.6 | 1.9 | 3.6 | 2.9 |      |  |  | | --- | --- | | Stem | Leaf | | 1 |  | | 2 |  | | 3 |  | | 4 |  |   Key 1|5 = 1.5 |

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|  | **Questions 6 – 8 refer to the histogram below.** |
| 6. | Complete the frequency table from the histogram.   |  |  |  | | --- | --- | --- | | Score | Frequency | Score × Frequency | | 1 |  |  | | 2 |  |  | | 3 |  |  | | 4 |  |  | | 5 |  |  | | 6 |  |  | | 7 |  |  | | 8 |  |  | |
| 7. | Find the mean for the data.  ..........................................................................................................................................................    .......................................................................................................................................................... |
| 8. | Add a frequency polygon (line graph) to the graph above. |

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|  | **Questions 9 and 10 refer to the Frequency Distribution table shown below.**     |  |  |  | | --- | --- | --- | | Score  (x) | Frequency  (f) | Cumulative Frequency | | **2** | **3** |  | | **3** | **5** |  | | **4** | **5** |  | | **5** | **7** |  | | **6** | **8** |  | | **7** | **6** |  | | **8** | **4** |  | | **9** | **2** |  | |
| 9. | Complete the Cumulative Frequency column on the table above. |
| 10. | Find the median of the scores.  ..........................................................................................................................................................    .......................................................................................................................................................... |

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| Year  9 | | Data Interpretation Practice Test | | Calculator |
| Multiple Choice Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Mark all your answers on the accompanying multiple choice answer sheet, not on this Practice Test paper. You may do any working out on this Practice Test paper. Calculators are allowed for this section. | | | |
|  | **Questions 1 – 4 refer to the following table.**  The results of a year 9 test out of 20 are summarised in the table below.     |  |  |  |  | | --- | --- | --- | --- | | **Score (*x*)** | **Frequency (*f*)** | ***fx*** | **Cumulative**  **Frequency** | | 12 | 2 | 24 | 2 | | 13 | 6 | 78 | 8 | | 14 | 8 | 112 | 16 | | 15 | 11 | 165 | 27 | | 16 | 4 | 64 | 31 | | 17 | 9 | 153 | 40 | |  | Σ *f =* | Σ *fx =* |  | | | | |
| 1. | The number of students who sat the test was:  A. 6 B. 17 C. 40 D. 153 | | | |
| 2. | The median score was:  A. 13 B. 14 C. 15 D. 16 | | | |
| 3. | The range of scores was :  A. 2 B. 5 C. 12 D. 17 | | | |
| 4. | The mean of the scores was:  A. 14.9 B. 15.0 C. 25.5 D. 40 | | | |

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|  | **Questions 5 - 7 refer to the frequency histogram shown:**  The histogram shows the results of a survey of the number of children in the family.    **Number of Children in Family** |
| 5. | The modal number of children was:  A 10 B 3 C 4 D 7 |
| 6. | The total number of families surveyed was:  A 5 B 93 C 30 D 10 |
| 7. | The mean number of children was:  A. 6 B. 5 C. 3.1 D. 3 |
|  | **Questions 8 – 10 refer to the Stem and leaf plot below.**  The stem and leaf plot shows the heights of buildings in a section of the CBD of a city.  CBD.jpg   |  |  | | --- | --- | | Stem | Leaf | | 11 | 2 3 5 5 7 9 | | 12 | 0 3 4 5 7 8 8 9 | | 13 | 0 1 1 1 2 4 6 8 | | 14 | 1 3 |   Key 11|2 = 11.2 metres |
| 8. | What is the modal height of the buildings?  A 11.5 metres B 12.7 metres C 12.8 metres D 13.1 metres |
| 9. | What is the median height of the buildings?  A 11.5 metres B 12.7 metres C 12.8 metres D 13.1 metres |
| 10. | What is the mean height of the buildings (correct to one decimal place)?  A 12.6 metres B 12.7 metres C 12.8 metres D 13.1 metres |

Data Interpretation Practice Test

Multiple Choice Section

Answer Sheet

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Completely fill the response oval representing the most correct answer.

1. A B C D

2. A B C D

3. A B C D

4. A B C D

5. A B C D

6. A B C D

7. A B C D

8. A B C D

9. A B C D

10. A B C D