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| Year  9 | | **Data Comparison Practice Test** | | Calculator |
| Short Answer Section | Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |
|  | Write all working and answers in the spaces provided on this Practice Test paper. | | | |
|  | **Questions 1 – 4 refer to the two sets of scores below.**  The data shows the times (in minutes) for training runs over the same course by two friends.  Damien 20, 22, 30, 21, 28 and 22  Brett 22, 19, 25, 24, 18 and 32 | | | |
| 1. | Who had the higher median time, and by how much was it higher?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 2. | Who had the higher mean time, and by how much was it higher?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 3. | What can be said about the mode of each runner’s times?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 4. | Compare the ranges of the times for the two runners.  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |
| 5. | Did either runner have an outlier in their times, and if so, what was it?  ..........................................................................................................................................................    .......................................................................................................................................................... | | | |

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|  | **Questions 6 - 8 refer to the dot plots below which show the scores (out of 10) on a firing range by the Army and Navy teams.**   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Army | | | |  |  |  |  |  | Navy | | |  | |  |  |  |  |  |  | O |  |  |  |  |  |  | O |  | |  |  |  |  |  |  | O | O |  |  |  |  | O | O | O | |  |  |  |  | O |  | O | O |  |  |  |  | O | O | O | |  | O |  | O | O | O | O | O |  |  | O | O | O | O | O | |  | 4 | 5 | 6 | 7 | 8 | 9 | 10 |  |  | 5 | 6 | 7 | 8 | 9 | |
| 6. | Which team had the highest mean and what was it?  ..........................................................................................................................................................    .......................................................................................................................................................... |
| 7. | Compare the mode and median of the two teams.  ..........................................................................................................................................................    .......................................................................................................................................................... |
| 8. | Use statistical measures and terminology to explain which team was more consistent?  ..........................................................................................................................................................    .......................................................................................................................................................... |
|  | **Questions 9 to 11 refer to the back to Points for Season 2010**  **back stem and leaf plot. Bulls Giants**  The Bulls and Giants both played the same  number of games in a football competition.  The points that they scored in each game are shown in the stem and leaf plot. |
| 9. | Compare the medians of the two team’s scores.  ..........................................................................................................................................................    .......................................................................................................................................................... |
| 10. | Compare the mode of the two team’s scores.    ..........................................................................................................................................................    .......................................................................................................................................................... |
| 11. | Which team’s scores had the greater range and what was the difference?  ..........................................................................................................................................................    .......................................................................................................................................................... |

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| Year  9 | | **Data Comparison 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 information below.**  The stem and leaf plot shows the number of sales per week for two employees, Jones and Smith, over a 14 week period.     |  |  |  | | --- | --- | --- | | Jones |  | Smith | | 42 | 0 |  | | 7654 | 1 | 455556 | | 842 | 2 | 34667 | | 65 | 3 | 56 | | 655 | 4 |  | |  | 5 | 7 | | | | |
| 1. | What is the median number of sales, for Jones and Smith respectively?  A. 23 and 23.5. B. 22 and 23  C. 26 and 26.5 D. 24 and 26 | | | |
| 2. | What is the modal number of sales, for Jones and Smith respectively?  A. 23 and 23.5. B. 22 and 23  C. 45 and 26 D. 45 and 15 | | | |
| 3. | Which employee had an outlier in their sales, and what was it?  A. Jones with 2 B. Jones with 42  C. Smith with 45 D Smith with 57. | | | |
| 4. | What is the range of the sales of Jones and Smith respectively?  A. 41 for both. B. 44 and 43  C. 43 for both D. 45 and 41 | | | |
|  | **Questions 5 – 7 refer to the graphs below.**    The two histograms show the ages of the members of two martial arts gyms.  Gym A Gym B | | | |
| 5. | Which is a good description of the data for each gym?  A. Gym A is symmetrical data while Gym B is skewed data with an outlier.  B. Gym B is symmetrical data while Gym A is skewed data with an outlier.  C. Gym A is symmetrical data with an outlier while Gym B is skewed data.  D. Gym B is symmetrical data with an outlier while Gym A is skewed data. | | | |
| 6. | Which is **not** true?  A. The ages at Gym A have a range of 9 years.  B. The ages at Gym B have a range of 9 years.  C. The ages at Gym A have a median of 15 years.  D. The ages at Gym B have a median of 15 years. | | | |
| 7. | Which is **not** true?  A. The ages at Gym A have a mode of 15 years.  B. The ages at Gym B have a mode of 15 years.  C. The ages at Gym A have a mean of 15 years.  D. The ages at Gym B have a mean of 15 years. | | | |
|  | **Questions 8 -10 refer to the graph below.**  The back to back histogram compares Sydney and Perth temperatures for a month.    Sydney Perth | | | |
| 8. | By how much was Perth’s median temperature higher than Sydney’s?  A. 1o C B. 2o C C. 3o C D. 4o C | | | |
| 9. | How many days were in the month displayed?  A. 28 days B. 29 days C. 30 days D. 31 days | | | |
| 10. | What can be said about Perth’s mean temperature for the month?  A. It is about the same as Sydney’s.  B. It is about 1.5oC cooler than as Sydney’s.  C. It is about 1.5oC warmer than as Sydney’s  D. It is about 3.5oC warmer than as Sydney’s | | | |

**Data Comparison 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