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| Year | Mathematics Practice Test –  Graphs and Plots | **Non Calculator Practice Test** |
|  | Name |  |

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|  | Questions 1 to 4 refer to the graph below which shows the numbers of fiction books according to their genre in Kirkton Library.   |  |  | | --- | --- | | Genre | ***Number of Books in Kirkton Library*** | | Thriller |  | | Romance |  | | Fantasy & SF |  | | Comedy |  | | Historical Drama |  | | Crime |  | | Childrens |  | | Young Adult |  | | ***= 50 books*** | | |
| 1. | How many books in the library were Thrillers?  5 50 250 500 |
| 2. | Which Genre had 400 books in the library?  Young Adult Crime Romance Fantasy &SF |
| 3. | How many more Historical Drama books were there compared to Comedy books?  more books |
| 4. | How many fiction books were in the library?  books |
|  | Questions 5 to 9 refer to the graph below which shows the number of students in each year in Kirkton High School.  Students at Kirkton High  Number of Students |
| 5. | How many students were in Year 7?  200 180 150 153 |
| 6. | Which year had 120 students?  Year 7 Year 8 Year 9 Year 10 |
| 7. | How many more students were in the largest year compared to the smallest year?  more students |
| 8. | How many students were in Kirkton High School?  students |
| 9. | Which year had  of all the students at Kirkton High School?  Year 7 Year 8 Year 9 Year 10 |
|  | Questions 10 to 14 refer to the graph of the temperature over 24 hours at Kirkton.  Temperature oC  Time of day |
| 10. | What was the temperature at 8:00?  7oC 6oC 5oC 4oC |
| 11. | At what time was the temperature 25oC?  13:00 14:00 15:00 16:00 |
| 12. | What is the difference between the highest and lowest temperatures (the temperature range)?  oC |
| 13. | At one point in the day, the same temperature was recorded for 3 consecutive hours. What was this temperature?  oC |
| 14. | When did the temperature fall most quickly?  Between 16:00 and 17:00 Between 17:00 and 18:00  Between 18:00 and 19:00 Between 19:00 and 20:00 |
|  | Question 15 – 19 refer to the dot plot below which was drawn when a sample of people were asked their family size (parents and siblings).  Family Size of a Sample of People   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  | Ο |  |  |  |  |  |  | |  |  | Ο |  |  |  |  |  |  | |  |  | Ο | Ο |  |  |  |  |  | |  | Ο | Ο | Ο |  |  |  |  |  | |  | Ο | Ο | Ο | Ο |  |  |  |  | | Ο | Ο | Ο | Ο | Ο |  |  | Ο | Ο | | Ο | Ο | Ο | Ο | Ο | Ο |  | Ο | Ο | | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |     Number in Family |
| 15. | What was the largest family size in the sample?  7 8 9 10 |
| 16. | How many people had a family with 5 members?  3 4 5 60 |
| 17. | What sized family was represented by only one person in the sample?  A family size of |
| 18. | How many people were asked about their family size?  people |
| 19. | Which is correct?  Half of the families in the sample were:  smaller than 3 in size. smaller than 4 in size.  larger than 3 in size. larger than 4 in size. |
|  | Questions 20 – 25 refer to the stem and leaf plot below, which was drawn when a sample of people were asked their height in centimetres.   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | Stem | Leaf | | | | | | | | 12 | 4 | 5 | 7 |  |  |  |  | | 13 | 2 | 4 | 5 | 6 | 8 |  |  | | 14 | 3 | 4 | 5 | 7 | 7 | 7 |  | | 15 | 2 | 3 | 3 | 5 | 7 | 8 | 9 | | 16 | 6 | 8 | 9 | 9 |  |  |  | | 17 | 0 | 0 | 2 | 8 |  |  |  | | 18 | 2 | 4 | 5 |  |  |  |  | |
| 20. | How many people had a height of 170 cm?  people. |
| 21. | What height was most common?  cm. |
| 22. | What was the shortest height recorded?  cm. |
| 23. | Marko’s height is circled. His friend Joey is 6 cm taller than Marko. What is Joey’s height?  165 cm 171 cm 159 cm 233 cm |
| 24. | What is the difference between the tallest and shortest heights?  62 cm 61 cm 6.2 cm 6.1 cm |
| 25. | What fraction of the people surveyed had their height less than 140 cm? |