Given the data, answer the questions below:

21, 14, 83, 27, 18, 44, 45, 46, 30, 34, 27, 44, 28, 27, 30

1. What is the mode?
2. What is the median?
3. What is the mean?
4. What is the range of data?
5. Is there an outlier? If so name it.
6. How would the removal of the outlier affect the data’s mean?
7. Which measure of central tendency best describes this set of data?

Given the data, answer the questions below:

21, 14, 83, 27, 18, 44, 45, 46, 30, 34, 27, 44, 28, 27, 30

1. Make a frequency table, use your own intervals.
2. Make a cumulative frequency table.
3. Make a histogram.

Given the data, answer the questions below:

21, 14, 83, 27, 18, 44, 45, 46, 30, 34, 27, 44, 28, 27, 30

1. Find the minimum, Q1, median, Q3 and maximum of the data.
2. Construct a box and whisker plot.
3. What percentage of the data is less than or equal to the 3rd Quartile?
4. What is the interquartile range?
5. What percentage of the data lies between the 1st and 3rd Quartiles?

There were 45 students at the Biology Club meeting. 23 of them have already taken Chemistry. 10 boys in the group had not taken Chemistry. There were 21 girls at the meeting.

1. Construct a two-way table.
2. How many boys have taken Chemistry?
3. Construct a relative two-way frequency table.
4. What is the relative frequency of girls who have taken Chemistry?
5. What is the percentage of girls who have not taken Chemistry?
6. The average temperature in June and the latitudes of several cities are shown in the table.

|  |  |  |
| --- | --- | --- |
| City | Latitude  | Temperature |
| Bismarck | 46.8 | 64.3 |
| Sioux Falls | 43.5 | 68.4 |
| Omaha | 41.2 | 73.0 |
| Kansas City | 39.1 | 76.1 |
| Wichita | 37.7 | 73.5 |
| Oklahoma City | 35.5 | 77.0 |
| Houston | 29.8 | 82.0 |

1. What is the line of best fit ?
2. What does the slope of the line of best fit represent?
3. What does the y-intercept in the line of best fit represent?
4. Predict the temp with a latitude of 40 °.
5. What is the latitude where the temperature is 75°?
6. Write the equation passing through these point (1,4) and (3,8) in slope-intercept form.
7. Solve and graph -4 < -2x – 2 < 10
8. Explain how are parallel and perpendicular lines different.