Interpreting box whisker plots worksheet

Box-and-whisker plot sheets have the skills to find a resume of five numbers, make plots, read and interpret boxes and moustache plots to find quartile, range, interquartile range and outliers. The word problem is also included. These printed exercises meet the requirements for teaching Grade 6 students through school. Take some of these sheets for free! Five-digit Summary - Level 1 Analyze single,2-digit, 2-digit, and 3-digit data sets, and write down five key values: 1st, 2nd and 3rd quartile, and minimum and maximum, which make up a 5-digit resume. A five-digit summary - Level 2, identifying the top and bottom quarts, the maximum and minimum values, and the medians needed to make box and mustache diagrams from data sets that include decimal values. Making Boxes and Usker Plots: Standard Level 2 Climb up the stairs in making box plots with these sheets! Watch the datasets, which include more than 10 data values, as well as decimal points, figure out the elements of the box area, and create it. Read and Interpret: Level 1 Dig in Practice with these innings for 6th grade and 7th grade students. Read the scripts and interpret the box-and-whisker charts to answer the problem with a word based on a five-number summary. Read and Interpret: Level 2 These pdf sheets for Class 7 and Class 8 have exclusive word challenges to find five resume number, range and interquartil range. Make and interpret for data data, make a box and mustache plot. Interpret the data to find values for the 1st, 2nd, 3rd quarter, the maximum, and the minimum values. Finding Emissions Each printed sheet has eight problems in store for 8th graders and high school students. Find outliers by calculating quartile and interquartil range. Thank you for using our services. We are a non-profit group that manages this document-sharing service. We need your help to maintain and improve this site. To keep our site running, we need your help to cover our server costs (about $500/m), a small donation will help us a lot. Please help us share our service with your friends. FreeReport ProblemIt is a resource designed for UK teachers. See the U.S. version. Here's an example of a plot of box for data collected on the size of people's shoes. You should be able to interpret sections of the box as well as build them out of the data. First, we will go through what all the bits mean. Range - The smallest shoe size was 1.5 and the largest was 13, of which we can calculate the range. Text Range the most important value - text the smallest value 13 - 1.5 11.5 Range is one way to measure the spread of data, for more information head here (Medium mode and re-examine the range). Another indicator of data distribution is the interquartile range (or ICR). To do this, we need quartile. To find the interquartil range, we subtract the lower quartile (Q_1) from the upper quartile (Q_3). Thus, reading from the box of the plot we get: the text Interquartil range Q_3 Q_3 Q_1 No. 10 - 4 No. 6 Interquartile range is a good measure of proliferation because it is not dependent on any emissions - data points that sit far away from all others. Note: Searching I'R is a very common question, so learn how to do it; this is the preferred measure of proliferation. Median: - Mediana (Q_2) is always displayed on the middle line of the box. Here 8 Build a box plot for the next data set. 3, 5, 8, 8, 9, 11, 12, 12, 13, 16 (3 mark) Given that the lower quartile is a quarter of the way to the end, and the top quartile is 3 quarters of the way to the end, we get: Lower quartile and Dfrak n 1{4}-term - Upper quartile - 3 (n 1) {4} term. This dataset contains 11 numbers, so we get the following. The median is the term dfrac11 and 1 {2}, so textmedian No. 11. The lower quartile is the term dfrac11 and 1 {4}, so Q_1 8. The upper quartile is the term dfrac3(11), {4} the 9th text, so Q_3 13. Now we have all the information we have to draw the site window. Remember where everything goes from the picture above, and the result looks like this: The following sections of the box show how many hours of TV is watched in the year 11th grade (orange) and year 9 class (grey) in a given month. Compare the parts of the box. (2 tags) When comparing the box plots you want to look at the middle and interquartile range as the first two comparisons. The average time is longer for a year 9 class. The Year 9 class also has a larger interquartile range. For the range, we have to subtract the slightest value from the largest. In the graph, we see that the smallest value is 10, and the largest - 15.8, so: text Range - 15.8 - 10 - 5.8 text seconds. For the interquartil range, we need to subtract the lower quartile from the upper quartile. In the graph we can see that the lower quartile is 10.5, and the top quartile is 12.4, so: Text Interquartil range - 12.4 - 10.5 - 1.9 text seconds. Although we have a lot of information, we are still missing a few key values in order to draw a completed section of the box. In particular, we lack the top quartile and the lowest value. The range is the smallest value, subtract from the highest value, so if we subtract the range from the biggest value, we can work out the slightest value: Less value text 92 - 21 and 71 Interquartil range is the lower quartile subtracted from the top quartile, so if we add the intercyllaic range to the lower quartile, we will be able to work from the top quartile : Text Top quartile No. 11 and 84 Now we have all the information we need to build the plot box. Your completed section of the box should be similar to the bottom: To build a section of the box, we need the smallest value, the highest value, the median, and the lower and upper quarts. We have the smallest value and the highest value (400), so we'll have to work out the remaining values. The median is a dfrac 7-1 {2} the 4th term, which is 312. Lower Lower is the 2nd term, which is 252 {4} 7.1 euros. The upper quartile is dfrac3 (7)1 and {4} the 6th term, which is 332. Now we have all the necessary details to draw a field plot that should be similar to this: Comparing the two parcels of the box, we see that the second has a higher median, meaning that 30-year-olds were on average slower to react than 20-year-olds. In addition, we see that the interquartile range is greater for 30-year-olds than for 20-year-olds (because they are on the same scale, looking at each other, we can see it without even calculating it), which means that reaction times for 30-year-olds are more common than for 20-year-olds. In order to draw our box plot, we need the following values: The lowest weight Lowest weight Average Weight Lower quartile weight Upper quartile weight The lowest weight was given as 61 kg and the highest weight of 135 kilograms, so these weights will be at both ends of the box plot. We know that there are 100 values in total, so the median is the 50th value. On the cumulative frequency chart we need to find 50 on the cumulative frequency axis and find the appropriate weight in kilograms. The 50s weigh 92 kilograms, so the line in the middle of the box in the box of the plot will drop by 92. Since there are 100 values in total, the lower quartile is the 25th value. On the cumulative frequency chart we need to find 25 on the cumulative frequency axis and find the appropriate weight in the kilograms. The weight of the 25th value is 84 kilograms. On the graph we need to find 75 on the cumulative frequency axis and find the appropriate weight in kilograms. The 75th value is weighing 101 kilograms. As a result, the completed section of the box must be similar to the one below: a) In order to draw our box plots, we need the following values for each bank: The lowest salary The highest salary The Lower salary Lower quartile salary To find the lowest wages, we must find what 0 on the cumulative axis of frequency corresponds. For the Welsh Bank and the Bank of Finland, it is 21,000 euros. To find the highest salaries, you need to find something that corresponds to 100 on the cumulative frequency axis. For the Welsh Bank and for the Bank of Finland, it is 80,000 euros. We know that there are 100 values in total, so the median 50th value (from 50 is half of 100). On the cumulative frequency chart we need to find 50 on the cumulative frequency axis and find the appropriate salary. The 50th value for the Welsh bank corresponds to a salary of 52,000 euros, and the 50th value for the Bank of Finland corresponds to a salary of 62,000 euros. Since there are only 100 values, the lower quartile is the 25th (from 25 {1}{4} 100. on the cumulative frequency chart we need to find 25 on the cumulative frequency axis and find an appropriate salary. 44,000 euros, and the 25th for the Bank of Finland corresponds to a salary of 50,000 euros. Since there are 100 values in total, the top quartile is the 75th value (since 75 {3}{4} 100. On the cumulative frequency chart, we need to find 75 on the cumulative axis of frequency and find an appropriate salary. The completed sections of the box should be similar to the two below: b) Comparing the two sections of the box, we see that: the average salary is higher in the Bank of Finland (62,000 pounds compared to 52,000 euros). Thus, people earn on average more in the Bank of Finland than in a Welsh bank. Wages at the Welsh Bank and the Bank of Finland are equally consistent (since the interquartile range, 18,000 euros, is the same for both. interpreting box and whisker plots worksheet. interpreting box and whisker plots worksheet answers. interpreting box and whisker plots worksheet pdf. interpreting box and whisker plots worksheet bw2