

BoxPlot Exploration(C)

A.P. Statistics

Name _____

Date _____ Per. _____

Consider the following set of data, test scores from an AP Stat test during the 2006 school year.

66	74	68	76	71	82	68	90	70	75
72	69	80	67	91	70	79	71	98	87

1. Calculate the five-number summary and record below.

Min _____ Q_1 _____ Med _____ Q_3 _____ Max. _____

2. Are there any outliers in the data set? Show the calculations to confirm.

3. Draw a boxplot on your calculator and copy it to this worksheet. Label the scale and mark in the 5-number values on the plot.

[illegible]

4. Describe the center, shape, and spread of the distribution.

5. Construct another plot that would be appropriate for your data

6. What information is new from the plot that was not obvious or shown on the boxplot?

7. Using the boxplot, what values make up the middle 50% of the data?

8. It is easy to find the middle 50% of the values on your new plot? Why or why not?
9. Without using the graphing calculator, estimate where the mean is on both graphs? Mark this value using a vertical line (on both graphs) using a pen or colored pencil.
10. Now, calculate the mean and record _____ Compare this with the estimate from your graphs and compare.
11. What do the values of Q_1 and Q_3 tell you about the distribution of the data?