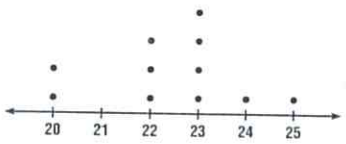
Alg 2 Sem 2 Final Review 2015 Statistics

DO PROBLEMS 1-3 BY HAND

Use the *Round-Off Rule* (round to one decimal place past your data) on this study guide unless otherwise indicated.

1. Find the mean, median and mode of the following data: 21, 27, 20, 29, 23, 21, 21, 27, 26, 25

2. Find the mean, median, and mode of the data shown in the dot plot below:



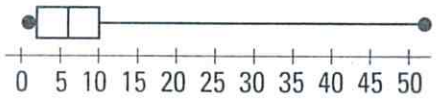
3. The number of stamps in the collections of stamp club members are:

36 39 41 42 48 50 52 54 56 57 59 60 62 62 68 75 77 77 78 78 80 81 81 84 100

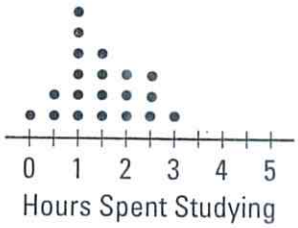
a) Find the range b) Find the median, Q_2 c) Find Q_1 d) Find Q_3 e) Find the IQR f) Draw a box plot

4. Tell whether the data in the data displays shown below is *symmetric, right-skewed,* or *left-skewed.*

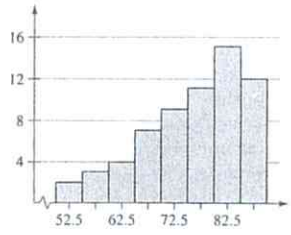
a)



b)



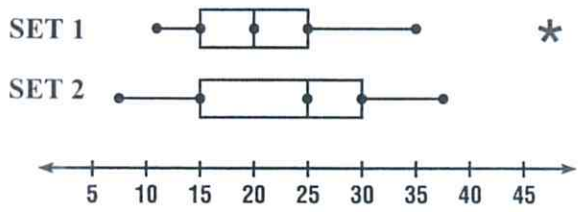
c)



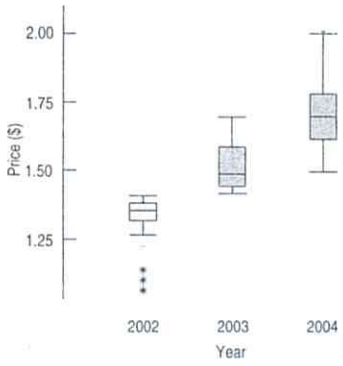
5. Use the box plot shown at the right.

Write 5 comparisons between the 2 data sets.

Be VERY specific, using numbers, percentages, etc.



Use the box plot at the right to answer questions 7 – 12.



7. In which year were the gas prices the highest? Lowest?

8. For which 2 years was the max price equal to the min price?

9. For which 2 years was the max price equal to the median?

10. What percentage of gas prices were under $1.75 in 2002? In 2003? In 2004?

11. What was the mean gas price in 2003?

12. In which year were gas prices least stable? Explain.

13. Find the standard deviation of this sample of data: 15 16 37 47 2 19 22 7 5

14. For the histogram in 4c, which measure of center best describes the data? Measure of spread? Why?