

Algebra 1B

Unit 7-11 Review #3

Find the mean, median, mode, and range for each data set.

1. Number of speeding tickets each person has received:

1, 5, 3, 7, 2, 3, 4, 6, 1, 1, 2, 1, 4, 1

Mean : 2.9
 median : 2.5
 mode : 1
 range : $7 - 1 = 6$

2. Percentage on math test:

74, 56, 99, 83, 86, 77, 94, 97, 81, 71, 80, 95, 92

Mean : 83.5
 median : 83
 mode : No mode
 range : $99 - 56 = 43$

Find the five-number summary and the interquartile range of the following data sets.

3. Attendance at the movie theater in previous nine days:

68, 99, 65, 73, 62, 67, 80, 81, 83

minX=62
 Q1=66
 Med=73
 Q3=82
 maxX=99

IQR : $Q3 - Q1$
 $82 - 66$
 16

4. Prices of dog food at local stores.

37, 24, 13, 26, 22, 24, 22, 21, 36, 31

minX=13
 Q1=22
 Med=24
 Q3=31
 maxX=37

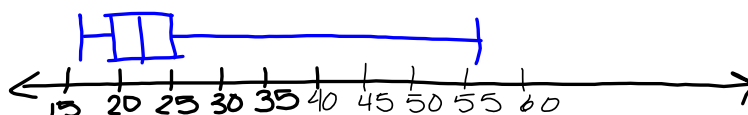
IQR : $Q3 - Q1$
 $31 - 22$
 9

Find the five-number summary of the following data set. Then, construct a box and whisker plot.

5. Ages of store employees:

17, 16, 22, 25, 19, 20, 56, 21, 32, 37, 19, 21, 24, 20, 28, 22, 23, 19

$\min X = 16$
 $Q_1 = 19$
 $\text{Med} = 21.5$
 $Q_3 = 25$
 $\max X = 56$



6. Are there any outliers in the data set? Explain.

yes, the outlier is 56. The box plot is skewed to the right

Find the mean and standard deviations for the following data set.

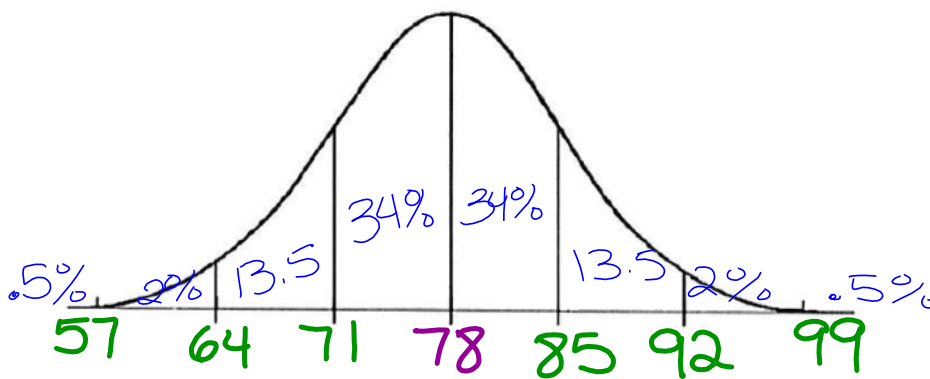
7. Number of laps each student jogged: 12, 15, 22, 13, 19, 7

mean: 14.7
 stand. dev.: 4.9

1-Var Stats
 $\bar{x} = 14.66666667$
 $\Sigma x = 88$
 $\Sigma x^2 = 1432$
 $Sx = 5.316640543$
 $\sigma x = 4.853406593$
 $n = 6$

8.

After a recent math test, the scores were normally distributed and had a mean of 78 and a standard deviation of 7. Label the bell curve.



Use the bell curve to answer the following questions about the test scores.

What percent of the scores fall between a 71 and an 85?

68%

What percent of the scores fall between a 64 and a 99?

97%