(1) Here is some random data that I made up: $23,13,18,12,27,16,16,16$. Find the mean, and the standard deviation.

Ans: mean, 17.63 stand. Lev, 5.04
How far away from the mean is 23 ?
How far away from the mean is 13 ?
How far away from the mean is any number in this data set, on average?
(2)

Here is what I predict some of your test scores will be: $100,100,100,100,98,96,90,98,92$. Find the mean and the standard deviation.

Ans: mean, 97.11, standard deviation, 3.76
(3) Create a stem and leaf plot for the data in number 1.
$\mid$

Find:
Mean- 1st quartile-
Median- 3rd quartile-
Mode-Range-
(5) Draw a box and whisker plot for the information above.

Use the following box and whisker plot to answer questions 6-10.

(6) What is the range?
(7) What is the median?
(8) What is the 1 st quartile?
(9) What is the 3rd quartile?
(10) Describe in words how you draw a box and whisker plot as if you we're explaining to a fellow classmate who missed that part of the notes.
(11) A set of normally distributed data has a mean of 90 and a standard deviation of 3 . Sketch a normal curve for this data. Remember that the percents were $34.1 \%, 13.6 \%, 2.2 \%$, and $0.1 \%$.

Use the sketch from above.
(12) What percent of the data is below 93?
(13) What percent of the data is within one standard deviation of the mean?
(14) What percent of the data is between 84 and 93 ?

Describe in words the best that you can now to draw a normal curve based on a given mean and standard deviation.

