

STA 2215
Spring 2002
Olsh

Show all your work

1. Given the following distribution:

	f
1 - 3	1
4 - 6	5
7 - 9	9
10 - 12	9
13 - 15	5
16 - 18	1

- Develop a cumulative "_____ or more" distribution.
- Find the mean.
- Find the median.
- Find the standard deviation.
- Find the Pearsonian coefficient of skewness. What does the result tell you?
- Find the third decile.

2. Given the following sample data: 1,9,10,8,6,7,5,3,4,2,1

a) Find the mean.

b) Find the median.

c) Find the mode.

d) Find Q_z .

e) Find Q_1 .

f) Find the standard deviation.

3. Last week Claycombe played golf everyday: over seven days he averaged 81 with a standard deviation of 5 strokes—his best score a 71. Over the same seven-day period, Phillips averaged 101 with a standard deviation of 10 strokes—his best score a 93. Which of the golfers was more consistent over the seven-day period?

4. Wayne's scoring average is 80 with a standard deviation of 5. Between what values lie at least 75 percent of his scores?

5. Fill in blanks:

- a) If you replace each number in a set of data with _____, the sum of this altered set of data is equal to the sum of the original set of data.
- b) If you subtract the mean of a set of data from each number in the set of data, the sum of this altered set of data is equal to _____.
- c) If the Pearsonian coefficient of skewness equals 3, then the difference between the mean and median (for the distribution in question) is _____.
- d) If you know $\binom{n}{r}$, you can find the number of permutations by _____.

Please sign the following: I have neither given, nor received unauthorized aid on this piece of work, nor have I knowingly tolerated any violation of the Honor Code.
