Week 2 Problem Sets

2.            a   9

                b  31

                c  119

4.            54-59

50-55

45-49

40-44

35-39

30-34

25-29

20-24

15-19

10-14

6.  When we generate a large volume of data, we are unlikely to be able to make sense of it by looking at all the data. The largest amount of data and the greatest amount of detail may not convey the information useful for decision making. Therefore, we use a grouped frequency distribution.

14  a                x          f

7          1  
5          1  
4           3

3           5

2           7

1           3

c. Describe the distribution using the following characteristics.

1. What is the shape of the distribution?
2. What score best identifies the center (average) for the distribution?
3. Are the scores clustered together or are they spread out across the scale?

22.

The following frequency distribution presents a set of exam scores for a class of N = 20 students.

X f cf c%

90-99 4 20 100

80 -89 7 16 80

70-79 4 9 45

60-69 3 5 25

50-59 2 2 10

a) Find the 30th percentile.

b) Find the 88th percentile.

c) What is the percentile rank for X = 77?

d) What is the percentile rank for X = 90?