BRONX COMMUNITY COLLEGE
of The City University of New York
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Math 23 (nea) First Exam
June 12, 2006 45 minutes

Type Name: ________________________________

Question:	1	2	3	4	Total
Points:	200	100	400	300	1000
Score:					

1. (200 points) Find the mean, the range and the standard deviation for the following set of sample data. Round your answers to one decimal digit.

$$10 \quad 9 \quad 12 \quad 11 \quad 8 \quad 15 \quad 9 \quad 7 \quad 8 \quad 6$$

You may use the following table

x			
10			
9			
12			
11			
8			
15			
9			
7			
8			
6			

2. (100 points) The mean value of the scores in a Statistics exam was 85 with a standard deviation of 4. Find an interval that contains at least 75% of the scores in that exam.

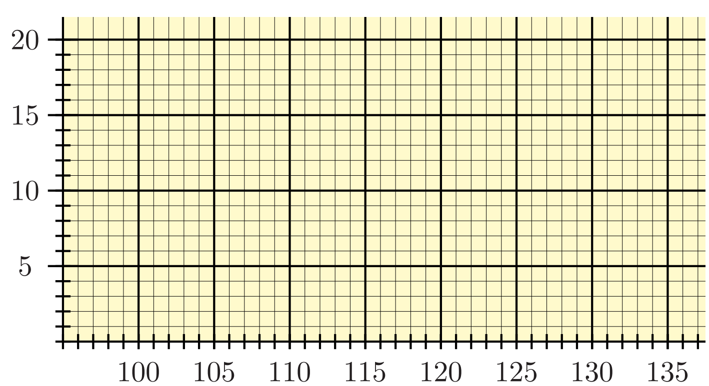
3. The following data represent the record high temperature for each of the 50 states.

112	110	107	116	120	100	118	112	108	113
127	117	114	110	120	120	116	115	121	117
134	118	118	113	105	118	122	117	120	110
105	114	118	119	118	110	114	122	111	112
109	105	106	104	114	112	109	110	111	114

(a) (300 points) Fill in the following frequency tale (use seven classes):

Classes	**Class Midpoint**	**Tally**	f
100 – 104			
105 – 109			
110 – 114			
115 – 119			
120 – 124			
125 – 129			
130 – 134			

(b) (100 points) Make a histogram from the data in the first part:



4. The following data represent the duration (in days) of U.S. space shuttle voyages for the years 1992-94.

$$8, 9, 9, 14, 8, 8, 10, 7, 6, 9, 7, 8, 10, 14, 11, 8, 14, 11$$

(a) (150 points) Find the mode, the median, and the first and the third quartile.

(b) (150 points) Make a box-and-whisker plot of the above data.