Name **MAT 340-Statistics**
Date **Assignment #4**

1. Use the following table of data to answer questions (a)-(b):

The annual salaries of six employees of a company are as follows:

$22,000	**$35,000**	**$22,000**	**$46,000**	**$57,000**	**$51,000**

a. The mean salary of these employees is:

b. The median salary of these employees is:

c. The mode of the salaries of these employees is:

2. The mean score of 15 male students taking a test is 76 and the mean score of 12 female students taking the same test is 73. What is the combined mean score of the 27 male and female students?

3. Use the following table of data to answer questions (a)-(c):

The temperatures (in degrees Fahrenheit) observed during seven days of summer in Los Angeles are:

78	99	68	91	105	75	85

a. The range of these temperatures is:
b. The variance of these temperatures, rounded to three decimals, is:
c. The standard deviation, rounded to three decimals, of these temperatures is:

4. Use the following table of data to answer questions (a)-(e):

You have just recorded the waiting times for a random sample of 50 customers who visited Elmo's Pizza Shop. The following table gives the frequency distribution of waiting times (in minutes) for these customers.

Waiting Time	**f**
10 to less than 16	6
16 to less than 22	10
22 to less than 28	18
28 to less than 34	8
34 to less than 40	7
40 to less than 46	1

a. The value of $\sum mf$ is:

b. The value of $\sum m^2 f$ is:

c. The mean waiting time, rounded to two decimal places, is:

d. The variance of waiting times, rounded to two decimal places, is:

e. The standard deviation of waiting times, rounded to two decimal places, is:

5. The mean age of five members of a family is 40 years. The ages of four of the five members are 61, 60, 27, and 23. What is the age of the fifth member?

6. The average of eight rational numbers is 12. If one of them is erased, the average of the remaining seven numbers is 9. What number was erased?

7. Angela, Brian, and Carl work in the same office, Angela's age is 8 years more than twice Carl's age. Brian is 5 years younger than Carl. The average age is 51. Find age of each person.

MULTIPLE CHOICE

1. What is the mean for the following sample of scores? Scores: 2, 4, 5, 9
   a. 20
   b. 4.5
   c. 4
   d. 5

2. A person's phone bills for the last three months were $20, $75, and $55, respectively. What was the mean average amount for the three phone bills?
   a. $60
   b. $50
   c. $55
   d. $65

3. What is the mean average for the following set of quiz scores? Scores: 4, 5, 9, 2, 3, 7
   a. 10
   b. 4
   c. 5
   d. 6

4. A population of $N = 6$ scores has $\Sigma X = 42$. What is the population mean?
   a. $\mu = 8$
   b. $\mu = 4$
   c. $\mu = 6$
   d. $\mu = 7$

5. What is the mean for the population of scores presented in the frequency distribution table below?

X	*f*
8	3
7	3
6	0
5	2
4	1
3	2
2	2
1	3

a. $\mu = 3.50$
b. $\mu = 4.50$
c. $\mu = 5.00$
d. $\mu = 4.25$