## Statistics Review

- 1. Katrina must take five exams in a math class. If her scores on the first four exams are 71, 69, 85, and 83, what score does she need on the fifth exam for her overall mean to be at least 90?
- 2. Todd Booth, an avid jogger, kept detailed records of the number of miles he ran per week during the past year. The frequency distribution below summarized his records. Find the mean, median, and mode of the number of miles per week that Todd ran.

Miles Run	Number
per Week	of Weeks
0	5
1	4
2	10
3	9
4	10
5	7
6	3
7	4

3. The mean salary of 12 men is \$52,000, and the mean salary of 4 women is \$84,000. Find the mean salary of all 16 people.

4. The frequency distribution below lists the results of a quiz given in Professor Gilbert's statistics class.

Score	Number
	of
	Students
10	5
9	10
8	6
7	8
6	3
5	2

- a. Find the mean and standard deviation of the scores.
- b. What percent of the data lies within one standard deviation of the mean?
- c. What percent of the data lies within two standard deviations of the mean?
- d. What percent of the data lies within three standard deviations of the mean?
- e. Draw a histogram to illustrate the data.
- 5. To examine the effects of a new registration system, a campus newspaper asked freshmen how long they had to wait in a registration line. The frequency distribution is given below. Complete the frequency distribution and draw a histogram to illustrate the data.

x = time in	number
minutes	of
	freshmen
$0 \le x < 10$	101
10 ≤ <i>x</i> < 20	237
20 ≤ <i>x</i> < 30	169
$30 \le x < 40$	79
$40 \le x < 50$	51
50 ≤ <i>x</i> < 60	63
	n =

6. The frequency distribution below summaries the hourly wages of the workers at ASU food service. Complete the frequency distribution and draw a histogram to illustrate the data.

x = hourly wage	number
	of
	employees
$$4.00 \le x < $5.50$	21
$$5.50 \le x < $7.00$	35
\$7.00 ≤ <i>x</i> < \$8.50	42
$$8.50 \le x < $10.00$	27
$$10.00 \le x < $11.50$	18
$$11.50 \le x < $13.00$	9
	n=