

**Seminar 6**

1. The following is the distribution of the total finance charges which 200 customers paid on their budget accounts at a department store:

Amount (dollars)	Frequency
0-19	18
20-39	62
40-59	63
60-79	43
80-99	14

Draw a bar chart of this distribution.

2. The following table shows how workers get work:

Means of Transportation	Percentage
Ride alone	81
Ride Bus	3
Car Pool	14
Varies or work at home	2

Construct a pie chart of this percentage distribution.

3. In the forty lectures of a Business Statistics class, 2, 1, 5, 0, 0, 3, 2, 1, 1, 4, 3, 1, 0, 1, 2, 1, 3, 6, 2, 2, 1, 0, 2, 1, 1, 3, 4, 1, 0, 2, 1, 0, 1, 2, 4, 1, 3, 1, 2, and 3 students were absent. Construct a distribution showing how many times 0, 1, 2, 3, 4, 5, or 6 students was absent.
4. A survey made at a resort city showed that 50 tourists arrived by the following means of transportation: car, train, plane, plane, bus, train, car, car, car, plane, car, plane, train, car, car, bus, car, plane, plane, train, train, plane, plane, car, car, train, car, car, plane, car, car, plane, bus, plane, bus, car, plane, car, car, train, train, car, train, bus, plane, car, car, train, bus and bus. Construct a categorical distribution showing the frequencies corresponding to the different means of transportation.
5. One bar of a percentage bar chart showed the distribution of tool sales revenue for a year between three divisions of a company. Division V' s sales revenue was three times that of division W. Division W' s sales revenue was twice that of division X. If the total height of the bar was 15 cm, how high was the segment corresponding to division W' s sales?
- A. 2.50 cm  
B. 3.33 cm  
C. 3.75 cm  
D. 5.00 cm

**Seminar 6 (cont.)**

6. A market research survey of 280 people's opinions of three products, F, G and H, produced the following results:

15 people liked none of the products

120 people liked product F

160 people liked product G

100 people liked product H

50 people liked product F only

20 people liked product F and H only

28 people liked all three products

*(Hint: use appropriate graphical presentation to present those figures)*

How many people liked product G only?

- A. 35  
B. 93  
C. 110  
D. 128
7. A component bar chart showed the numbers of employees at each grade in a company on 31 December each year. The data were as follows:

Grade	Number of Employees	
	1998	1999
1	20	25
2	57	65
3	180	220
4	1200	1450
5	663	670
	2120	2430

The bar for 1998 was 10.6 cm high. How high was the segment for grade 4 employees for 1999?

- A. 7.23 cm  
B. 7.24 cm  
C. 7.25 cm  
D. 7.26 cm

**Seminar 6 (cont.)**

8. Given the data set:

No. of Salesladies	Sales (in thousands)
4	150
5	180
7	200
8	250
6	220
5	190
8	230
9	260
10	270
12	300
15	350

- a. Plot a scatter diagram for the data set.
  - b. Comment on the result in part (a).
9. The monthly expense of Mr. ABC are given as followings:

Categories	Transportation	Food	Entertainment	Clothes	Saving
Amount (‘00)	15	30	25	10	80

- a. Present the monthly expenses among the categories graphically.
  - b. Present the percentages of monthly expense among the categories graphically.
10. Given the data set:

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993
Sales (in millions)	12	15	16	20	27	13	31	34	41

- a. Present the data graphically.
- b. Comment the result in part (a).