14-1

Practice

The Frequency Distribution

Determine which class intervals would be appropriate for the data below. Explain your answers.

1. 25, 32, 18, 99, 43, 16, 29, 35, 36, 34, 21, 33, 26, 26, 17, 40, 22, 38, 16, 19

a. 1

b. 10

c. 2

2. 111, 115, 130, 200, 234, 98, 115, 72 305, 145, 87, 63, 245, 285, 256, 302

a. 25

b. 10

c. 30

3. ***Meteorology*** The average wind speeds recorded at various weather stations in the United States are listed below.

Station	Speed (mph)	Station	Speed (mph)	Station	Speed (mph)
Albuquerque	8.9	Anchorage	7.1	Atlanta	9.1
Baltimore	9.1	Boston	12.5	Chicago	10.4
Dallas-Ft. Worth	10.8	Honolulu	11.3	Indianapolis	9.6
Kansas City	10.7	Las Vegas	9.3	Little Rock	7.8
Los Angeles	6.2	Memphis	8.8	Miami	9.2
Minneapolis– St. Paul	10.5	New Orleans	8.1	New York City	9.4
Philadelphia	9.5	Phoenix	6.2	Seattle	9.0

Source: *National Climatic Data Center*

a. Find the range of the data.

b. Determine an appropriate class interval.

c. What are the class limits and the class marks?

d. Construct a frequency distribution of the data.

e. Draw a histogram of the data.