Ch 2.1-2.2 worksheet #2

2.1 The following figures were obtained from a sample of 16 private colleges in Pennsylvania. They are the percentages of applicants accepted at the colleges for the 1987–1988 school year.

58	81	38	75	73	57	70	70
64	74	47	55	74	60	43	50

Construct a frequency distribution for the percentages. Use classes of equal width and begin with the class 30–39.

2.2 Forty employees were donors during a recent visit of a bloodmobile unit at their company. The ages of the donors are given below.

35	53	61	43	21	42	23	29	35	37
39	58	27	64	27	31	36	48	41	22
37	35	42	32	43	34	59	50	38	43
31	30	41	37	29	45	23	56	46	41

Construct a frequency distribution for the ages. Use classes of equal width and a first class of 20–29.

2.3 A frequency distribution with five classes was constructed for a set of integers. The class width is 8, and the lower limit of the first class is 20. Determine the limits of the five classes.

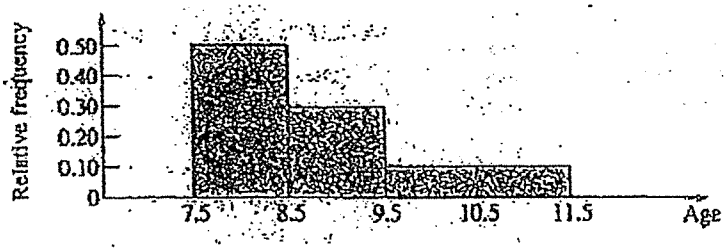
2.4 A frequency distribution for a set of integers has seven classes with a class width of 20. If the upper class limit of the first class is 49, find the limits of the seven classes.

2.5 The lower class limits of a frequency distribution for a set of integers are 100, 140, 180, 220, 260, and 300. Determine the class boundaries for the six classes.

2.6 The upper class limits of a frequency distribution of sales are \$2.70, \$2.90, \$3.10, \$3.30, \$3.50, \$3.70, and \$3.90. Use class boundaries to designate the classes.

2.7 The class marks of a frequency distribution are 74, 83, 92, 101, 110, 119, 128, and 137. Determine the class boundaries.

2.8 The figure below is a relative frequency histogram of the ages of 20 participants in a special education program. List the age of each student.



2.9 The following is a frequency distribution of the times required to complete the final examination for a class of 33 students in an introductory statistics course. The figures are in minutes.

Time	Number of Students
81–85	1
86–90	1
91–95	2
96–100	3
101–105	3
106–110	7
111–115	10
116–120	6

For this frequency distribution, determine:
a. the class width,
b. the boundaries of the third class,
c. the lower boundary of the first class,
d. the upper boundary of the last class,
e. the lower limit of the second class,
f. the upper limit of the fourth class,
g. the number of students who required 100 minutes or less to complete the exam,
h. the number of students who took more than 110 minutes to finish, and
i. the number of students who required anywhere from 86 to 105 minutes to complete the test.

2.10 The distribution of the ages of the full-time faculty at a certain college is given below.

Age	Number of Faculty
25–29	4
30–34	14
35–39	19
40–44	28
45–49	26
50–54	23
55–59	20
60–64	16
65–69	8

Determine for this distribution of ages:
a. the class width,
b. the boundaries of the fifth class,
c. the lower boundary of the first class,
d. the upper boundary of the last class,
e. the lower limit of the seventh class,
f. the upper limit of the third class,
g. the number of faculty younger than 40,
h. the number of faculty older than 59, and
i. the number of faculty older than 39 but younger than 60.

2.11

During the 1988 Summer Olympics in Seoul, South Korea, more than half the gold medals were awarded to the USSR (55), to East Germany (37), and to the United States (36). Twenty-eight other countries received gold medals. The numbers awarded to these countries are given below. 10 CLASSES

12 11 11 10 7 6 6 5 5 5 4 3 3 3
3 3 2 2 2 2 1 1 1 1 1 1 1 1