Practice Problems 1

1.16 For each of the following, indicate whether the appropriate variable would be qualitative or quantitative. If you identify the variable as quantitative, indicate
whether it would be discrete or continuous.
a. Whether you own a Panasonic television set
b. Your status as either a full-time or a part-time student
c. The number of people who attended your school's graduation last year

d. The price of your most recent haircut
e. Sam's travel time from his dorm to the student union
f. The number of students on campus who belong to a social fraternity or sorority

1.18 For each of the following, indicate the scale of measurement that best describes the information.
a. In 2008, Dell Corporation had approximately 78,000 employees. Source: Fortune, May 4, 2009, p. F-48.

b. *USA Today* reports that the previous day's highest temperature in the United States was 105 degrees in Death Valley, California. Source: *USA Today,* June 19, 2009, p. 12A.

c. An individual respondent answers "yes" when asked if TV contributes to violence in the United States.

d. In a comparison test of family sedans, a magazine rates the Toyota Camry higher than the VW Passat

2.3 The National Safety Council reports the following age breakdown for licensed drivers in the United States. Source: Bureau of the Census, *Statistical Abstract of the United States 2009,* p. 682.

Age (Years)	Licensed Drivers (Millions)

under 20	10.72
20–under 25	16.84
25–under 35	40.78
35–under 45	45.59
45–under 55	36.70
55–under 65	23.32
65 or over	28.76

Identify the following for the 35–under 45 class:

(a) frequency, (b) upper and lower limits, (c) width, and (d) midpoint

2.5 The National Center for Health Statistics reports the following age breakdown of deaths in the United States during 2006. Source: *The New York Times Almanac 2009,* p. 392.

Age (Years)	Number of Deaths (Thousands)
under 15	39.80
15–under 25	34.23
25–under 35	41.93
35–under 45	84.79
45–under 55	183.53
55–under 65	275.30
65–under 75	398.36
75 or over	1389.83

Identify the following for the 45–under 55 class:

(a) frequency, (b) upper and lower limits, (c) width, and (d) midpoint

2.8 For commercial banks in each state, the U.S. Federal Deposit Insurance Corporation has listed their total deposits (billions of dollars) as follows. Source: Bureau of the Census, *Statistical Abstract of the United States 2009,* p. 722.

Deposits	Deposits	Deposits

AL	74.3	LA	73.0	OH	209.1
AK	6.9	ME	20.0	OK	57.4
AZ	80.0	MD	95.0	OR	47.9
AR	47.4	MA	180.8	PA	259.4
CA	751.0	MI	154.7	RI	25.5
CO	81.3	MN	106.2	SC	64.1
CT	81.0	MS	41.6	SD	63.3
DE	160.2	MO	102.6	TN	107.2
FL	373.9	MT	14.6	TX	450.0
GA	177.9	NE	36.0	UT	181.7
HI	26.8	NV	188.1	VT	9.9
ID	17.7	NH	21.5	VA	182.2
IL	338.9	NJ	222.5	WA	105.7
IN	88.6	NM	21.9	WV	25.9
IA	56.6	NY	722.8	WI	109.7
KS	54.0	NC	206.3	WY	10.6
KY	63.2	ND	13.9		

Construct a frequency distribution and a histogram for these data.

2.13 Convert the distribution in Exercise 2.3 to a
a. Relative frequency distribution.
b. Cumulative frequency distribution。

2.15 Using the frequency distribution obtained in Exercise 2.8, convert the information to a "less-than" ogive.