

First Homework for 101 stat

1) Give an example for each of the following:

- i) Discrete variable.
- ii) Continuous variable.
- iii) Qualitative variable.
- iv) Quantitative variable.

2) Classify each variable as qualitative or quantitative.

- i) The variable that measure the height of students in the Common First Year.
- ii) The variable that recording the Ages of people.
- iii) The variable that recording skin color of people in Asia.
- iv) The variable that recording colors of spectrum of light.
- v) The variable that measure the temperatures inside classrooms.
- vi) The variable that recording nationalities of the workers in SA.

3) Classify each variable as discrete or continuous:

- i) The variable that measure the lifetime of lamps.
- ii) The variable that recording number of cars rented each week.
- iii) The variable that recording number of cups sold each day by coffee shop.
- iv) The variable that measure the weights of boys in a school.
- v) The variable that recording capacity of ten jugs of oil.

4) The following data give the results of a sample survey. The letters A, B and C represent the three categories:

A	C	B	A	C	B	C	C	C	B
C	B	C	B	C	C	B	C	C	C
A	B	C	C	B	C	B	A	C	C

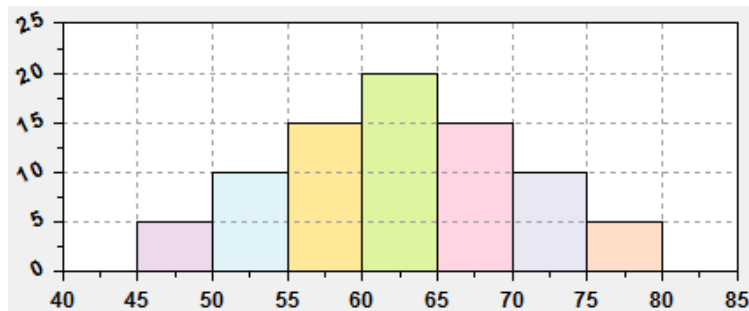
- a. Prepare a frequency table of this data.
- b. Calculate the relative frequencies and percentages for all symbols.
- c. What percentage of the elements belongs to category B?
- d. Draw a bar chart and pie chart for the frequency table.

5) Forty children were asked about the number of hours they watched TV programs in the previous week. The results were found as follows:

8	10	12	14	12	10	8	6	4	2
10	3	4	12	2	8	15	1	17	6
1	6	2	3	5	12	5	8	4	8
3	2	8	5	9	6	8	7	14	12

- a. Construct a frequency distribution table for this data.
- b. Draw the histogram, polygon and ogive for the frequency distribution table.

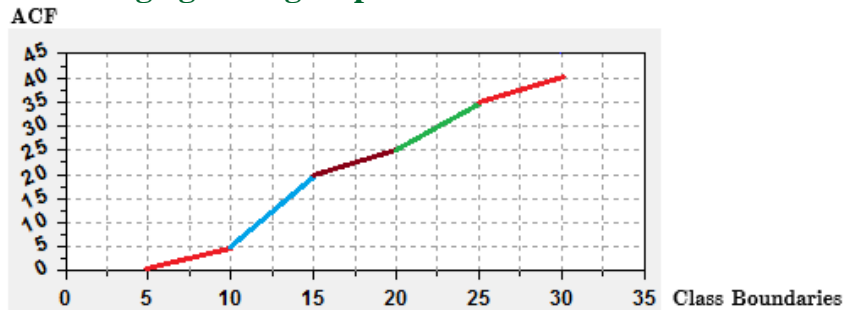
6) Consider the following histogram of grouped data:



Then:

- a. Prepare the frequency distribution table of this data.
- b. Draw the polygon and ogive for this table.

7) Consider the following ogive of grouped data:



- c. Prepare the frequency distribution table of this data.
- d. Draw the histogram and polygon for this table.