

Q: Classify each variable as Qualitative or Quantitative:

1. Grades of students.
2. Time needed to finish the exam.
3. Weight of people.
4. Colors of cars.
5. Degree of student exam.
6. Type of car tires.
7. Height of people.
8. Length of roads in the city.
9. Distance between countries.
10. Types of pens.
11. ID of students in the exam.
12. Age of chickens in a farm.

Q: Classify each variable as Continuous or Discrete:

1. Heights of buildings.
2. Numbers of trees in forests.
3. Age of children.
4. Blood group of people.
5. Weight of books in library.
6. Number of children in schools.
7. Colors of flowers.
8. Numbers of integer numbers in intervals of real numbers.

Q: Answer with true or false to the following sentences:

1. Mode is defined for qualitative data.
2. The mode is sensitive to extreme values.
3. For skewed distribution of data we have: Mode = Median = Mean.
4. Histogram with more than two peaks is bimodal.
5. Mean is defined for qualitative data.

Q: Put the right word or symbol in its proper position:

subset	table	sample	numerical	mean	statistic	mode
highest	lowest	parameter	continuous	$x_s - x_l$	$x_l - x_s$	data

1. The subset of population which used to collect information and make inferences about the entire population is a -----
2. A ----- is a function of a sample.
3. A numerical characteristic of a population that summarize the data for entire population is a -----
4. The central tendency measure, which has highest frequency for row data is called a -----

5. The ----- of population which used to collect information and make inferences about the entire population is a sample.
6. A statistic is a function of a -----.
7. The central tendency measure, which has ----- frequency for row data is called a mode.
8. The range of row data x_1, x_2, \dots, x_n is -----
9. A collection of information collected by means experiments or real life events and stored in a proper format is called as -----

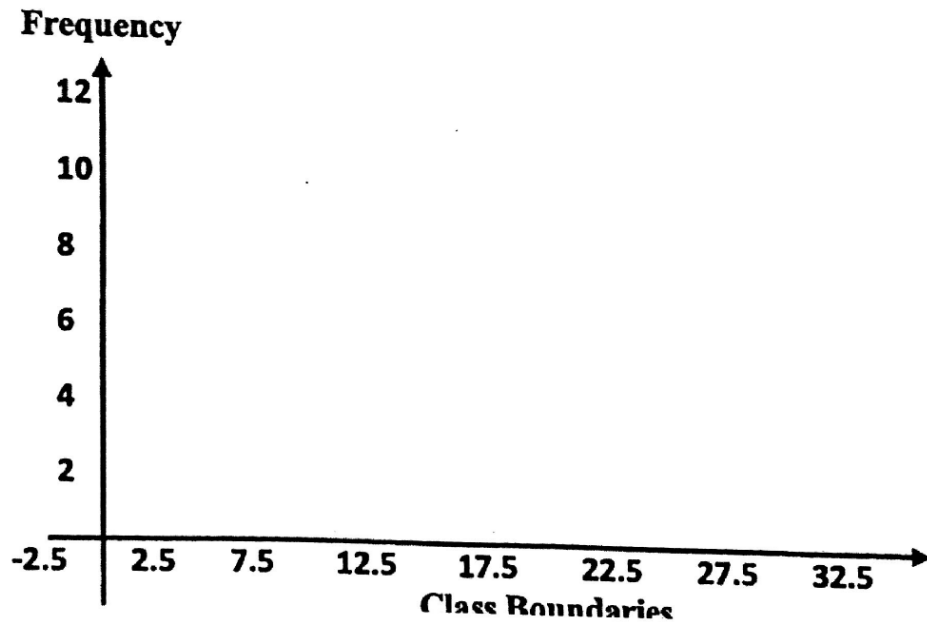
Q: We consider the following data:

5.5 8 9.75 9 10 4.25 7 3 10.01 11
 6.4 9 7.45 14 23.25 15 27.45 14 15.05 16
 16.25 17.49 15.5 16 16.5 17 17.4 18 19.25 19
 20.5 17 18.75 20 23.5 24 25.75 21.5 22 26.99

a) Complete the following frequency distribution table of given data:

Class Boundaries	Midpoint	Frequency	Relative Frequency	Percentage %	A.C.F
2.5 → 7.5					
7.5 → 12.5					
12.5 → 17.5					
17.5 → 22.5					
22.5 → 27.5					
Total					

b) Draw the histogram for the data of above frequency distribution table.



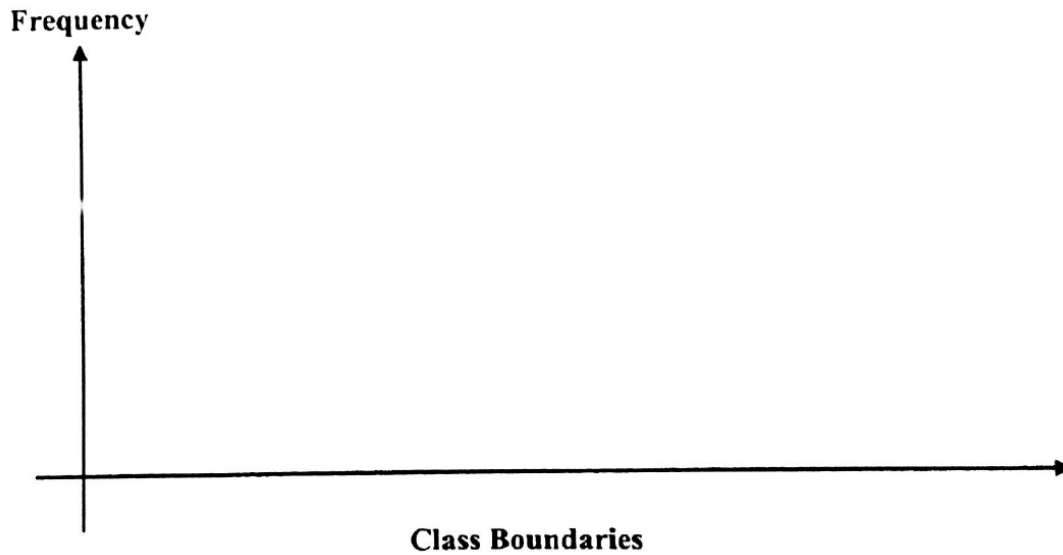
Q: We consider the following data:

16	17	15	16	16	17	17	18	19	19
5	8	9	9	10	4	7	3	10	11
12	14	14	15	15	12	14	14	15	16
20	17	18	20	23	24	25	21	22	26

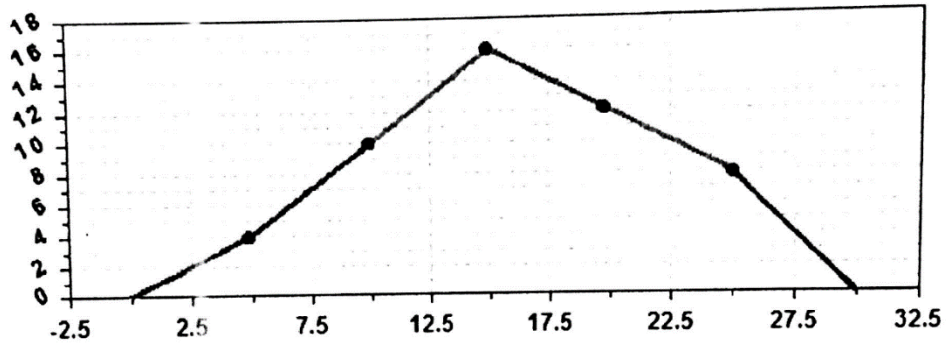
a) Complete the following frequency distribution table of given data:

Class Limit	Class Boundaries	Midpoint	Frequency	Relative Frequency	Percentage %	A.C.F
2 → 7						
8 → 12						
13 → 17						
18 → 22						
23 → 27						
Total						

b) Draw the (ACFP) (ogive) for the data of above frequency distribution table.



Q: Consider data given by the following frequency polygon:



a) Complete the following frequency distribution table for the above polygon:

Class Limit	Class Boundaries	Midpoint	Frequency	Relative Frequency	A.C.F
Sum					

b) Calculate the mean for the data of above frequency distribution table.

c) Calculate the range of data for the above frequency distribution table.

d) Draw the (ACFP) (ogive) for the data of above frequency distribution table.

Q: Consider the data: 7, 9, 8, 6, 2, 7, 15, 7, 3, 6, 5, 3. Then:

a) Calculate the mean for the given data.

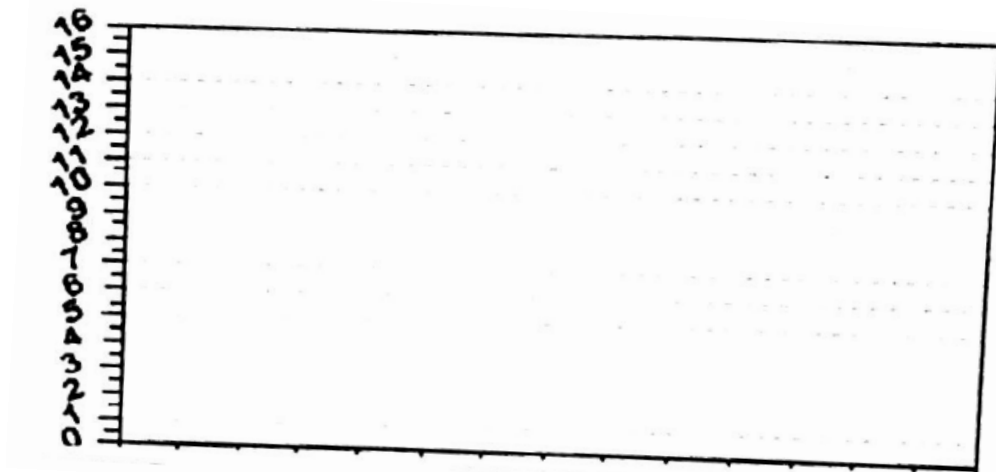
b) Calculate the median for the given data.

c) Find the mode of given data.

Q: The following data represent the grades of students:

D	B	A	D	B	A	C	A	D	C
A	C	C	B	A	A	A	C	C	A
D	B	A	B	A	D	C	B	B	C
B	A	B	A	A	A	B	B	C	B
B	D	B	B	C	B				

Write the frequencies of those grades and represent them graphical.



Q: Consider the data: 7, 5, 3, 1, 5, 4, 5, 9, 6, 26, 9, 3, 8 Then:

a) Calculate the mean for the given data.

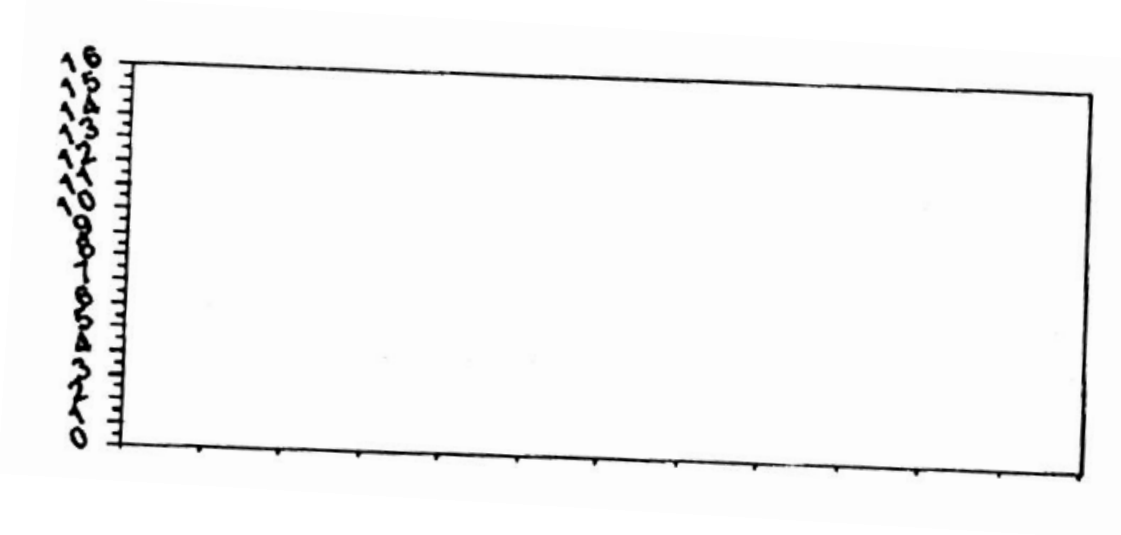
b) Calculate the median for the given data.

c) How much of modes we have in the given data, and then determine them.

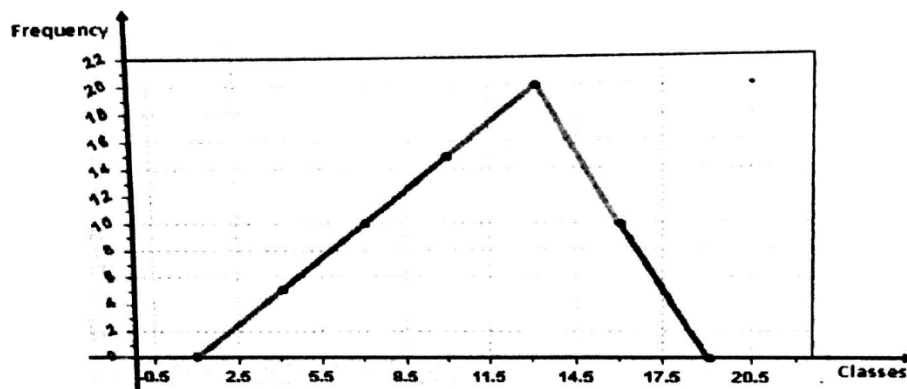
Q: The following data represent the grades of students:

D	B	A	D	B	A	C	A	D	C
B	B	A	A	A	C	C	B	A	A
A	C	C	A	B	C	B	A	D	B
A	B	A	D	C	B	B	C	D	B
A	B								

Draw the bar graph for given data.



Q: If we have data with the following polygon:



a) Complete the following frequency distribution table for the given data in the previous figure:

Class Limit	Class Boundaries	Midpoint	Frequency	Relative Frequency	Percentage %	A.C.F
Sum						

b) Calculate the mode for the given data.

.....

.....

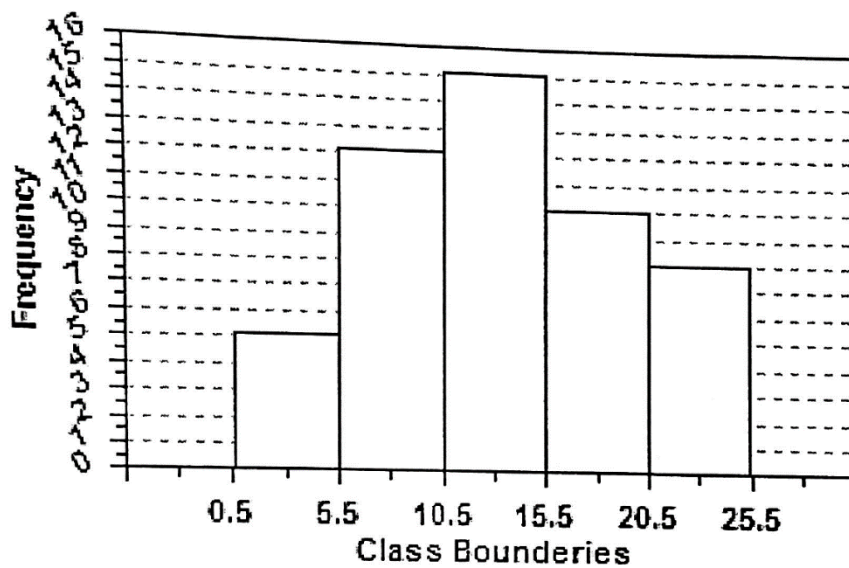
.....

c) Calculate the range for given data.

.....

.....

Q: If we have data with the following histogram:



a) Complete the following frequency distribution table for the given data in the previous figure:

Class Limit	Class Boundaries	Midpoint	Frequency	Relative Frequency	Percentage %	A.C.F
Sum						

b) Calculate the median for the given data.

c) Calculate the range for given data.

Q: We consider the following data:

7 16 7 12 13 2 12 21 17 4
 2 16 11 16 7 11 10 8 9 6
 22 17 7 14 22 12 6 6 1 15
 17 11 11 25 1 12 13 16 12 18
 23 17 8 13 22 21 12 15 18

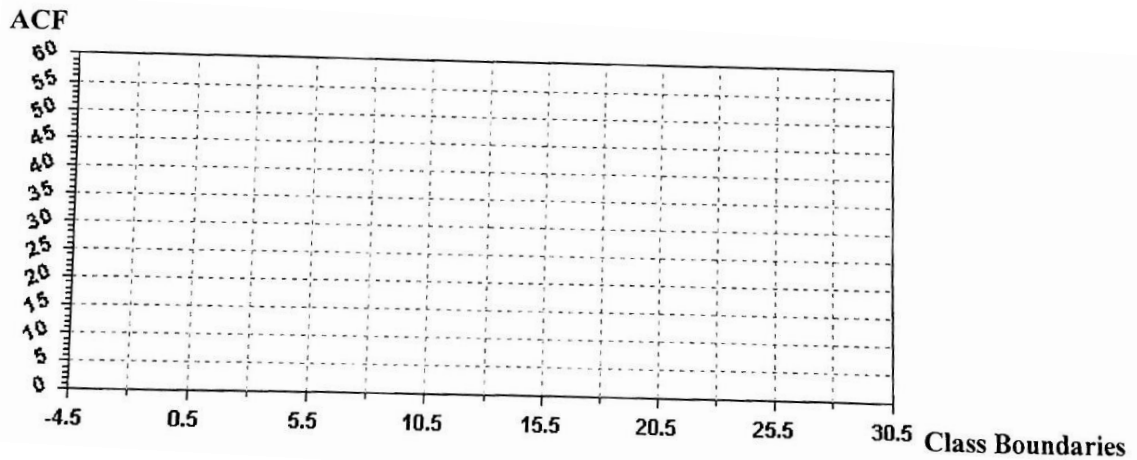
a) Complete the following frequency distribution table of given data:

Class Limit	Class Boundaries	Midpoint	Frequency	A.C.F
	0.5 → 5.5			
	5.5 → 10.5			
	10.5 → 15.5			
	15.5 → 20.5			
	20.5 → 25.5			
Total				

b) Calculate the median for the data of above frequency distribution table..

c) Calculate the range of data for the above frequency distribution table..

d) Draw the ACFP of the above frequency distribution table.



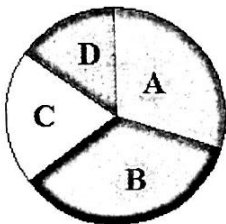
Q: The following data represent the grades of students:

A C C A B C B A D B
D B C D B A C A D C
A B A D C B B C D B
B B B A A B C B A A

a) Complete the frequency table for the above data.

Grade	Frequency	Relative Frequency	Percentage
A			
B			
C			
D			
Sum			

b) For the above data, calculate the measure angles of categories of the pie chart.



For category (A) the measure angle = ()() =

For category (B) the measure angle = ()() =

For category (C) the measure angle = ()() =

For category (D) the measure angle = ()() =