

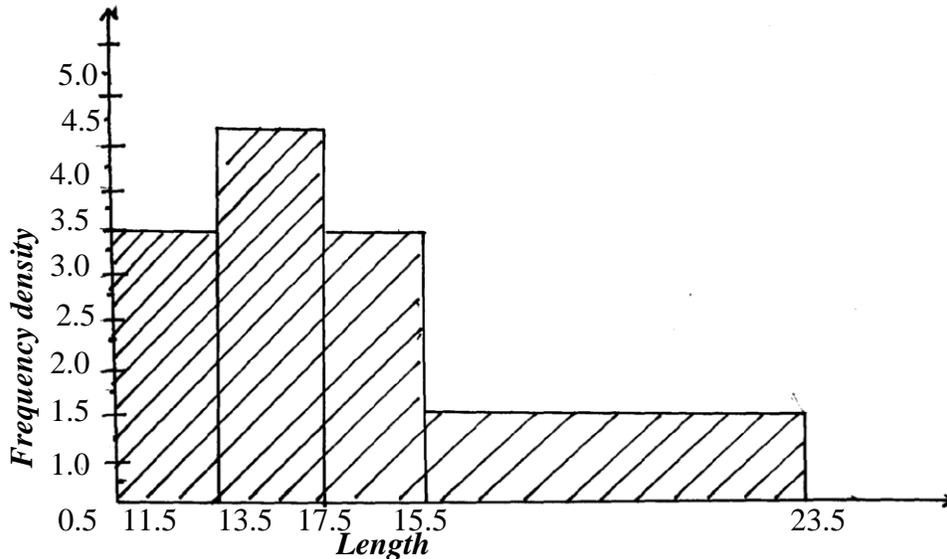
1. Representation of data

1. The height of 36 students in a class was recorded to the nearest centimeters as follows.

148 159 163 158 166 155 155 179 158 155 171 172 156 161
 160 165 157 165 175 173 172 178 159 168 160 167 147 168
 172 157 165 154 170 157 162 173

(a) Make a grouped table with 145.5 as lower class limit and class width of 5. (4mks)

2. Below is a histogram, draw.



Use the histogram above to complete the frequency table below:

Length	Frequency
$11.5 \leq x \leq 13.5$	
$13.5 \leq x \leq 15.5$	
$15.5 \leq x \leq 17.5$	
$17.5 \leq x \leq 23.5$	

3. Wambui spent her salary as follows:

Food	40%
Transport	10%
Education	20%
Clothing	20%
Rent	10%

Draw a pie chart to represent the above information

4. The examination marks in a mathematics test for 60 students were as follows:-

60	54	34	83	52	74	61	27	65	22
70	71	47	60	63	59	58	46	39	35
69	42	53	74	92	27	39	41	49	54
25	51	71	59	68	73	90	88	93	85
46	82	58	85	61	69	24	40	88	34
30	26	17	15	80	90	65	55	69	89

Class	Tally	Frequency	Upper class limit
10-29			
30-39			
40-69			
70-74			
75-89			
90-99			

From the table;

(a) State the modal class

(b) On the grid provided, draw a histogram to represent the above information

5. The marks scored by 200 from 4 students of a school were recorded as in the table below.

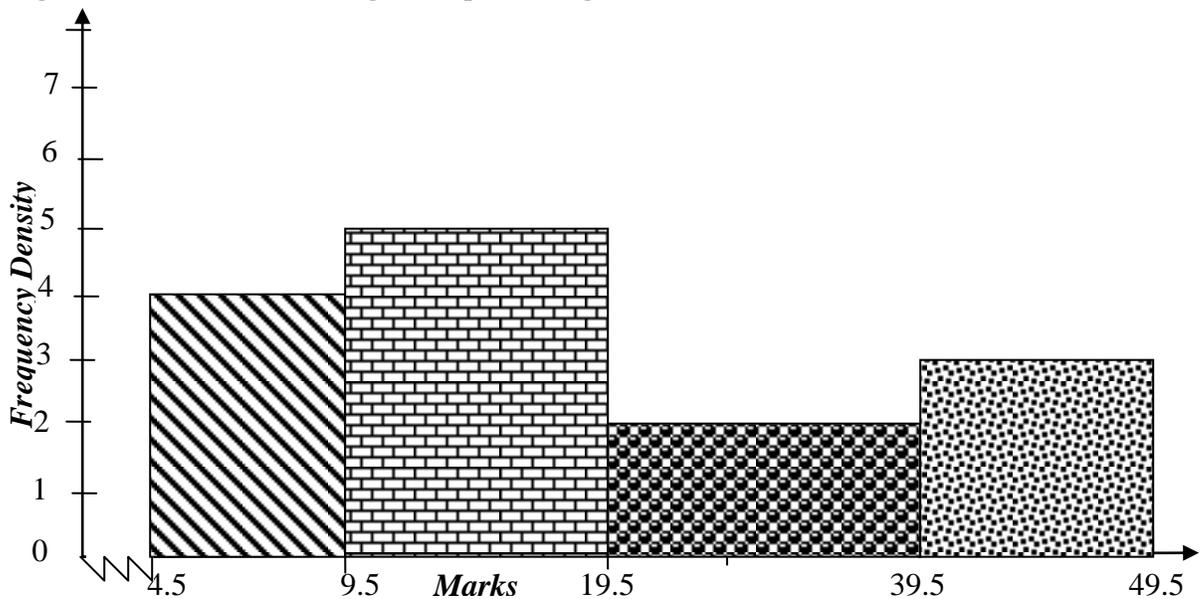
Marks	41 – 50	51 – 55	56 – 65	66 – 70	71 – 85
Frequency	21	62	55	50	12

(a) On the graph paper provided, draw a histogram to represent this information.

(b) On the same diagram, construct a frequency polygon.

(c) Use your histogram to estimate the modal mark.

6. The diagram below shows a histogram representing the marks obtained in a certain test:-



(a) If the frequency of the first class is 20, prepare a frequency distribution table for the data

(b) State the modal class

(c) Estimate:

(i) The mean mark

(ii) The median mark

7. The data below shows the number of sessions different subjects are taught in a week.

Draw a pie chart to show the data:

Subject	Eng	Maths	Chemistry	C.R.E
No. of sessions	8	7	4	3

8. The height of 50 athletes in Moi University team were shown below:

Height (cm)	150-159	160-169	170-179	180-189	190-199	200-209
Frequency	2	9	12	16	7	4

i) State the modal class

ii) Calculate the median height of the athletes

9. The table below shows the length of 40 mango tree leaves;

Length (mm)	Frequency	Cumulative frequency
118-126	3	3
127-135	4	7
136-144	10	17
145-153	12	29
154-162	5	34
163-171	4	38
172-180	2	40

(a) Determine the;

(i) Modal class

(ii) Median class

(b) Calculate;

(i) the mean of the leaves

(ii) the median of the leaves