

Pg#1

Unit #06

Maths Class 10th
Basic Statistics.

Ex: 6.1

Q1. The following data shows the number of members in various families. Construct frequency distribution. Also find cumulative frequencies.

9, 11, 4, 5, 6, 8, 4, 3, 7, 8, 5, 5, 8, 3, 4, 9, 12, 8, 9, 10, 6, 7, 7, 11, 4, 4, 8, 4, 3, 2, 7, 9, 10, 9, 7, 6, 9, 5, 7.

Sol Min. Value: 2

Max. Value: 12

Frequency distribution of number of family members

No. of members	tally marks	f	C.F
2		1	1
3		3	1+3 = 4
4	1	6	4+6 = 10
5		4	10+4 = 14
6		3	14+3 = 17
7	1	6	17+6 = 23
8		5	23+5 = 28
9	1	6	28+6 = 34
10		2	34+2 = 36
11		2	36+2 = 38
12		1	38+1 = 39
Total		39	

Q2.

$h = 5$

Sol

Min. Value: 21

Max. Value = 41

Frequency Distribution

Class limits	Tally marks	frequency
20-24	1	6
25-29		10
30-34		12
35-39		9
40-44		3
	Total	40

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Sol

weights	class limit
20-24	20-24
25-29	25-29
30-34	30-34
35-39	35-39
40-44	40-44
45-49	45-49
50-54	50-54

class boundaries	f	C.F	less than class boundaries	C.F
19.5 - 24.5	6	6	less than 24.5	6
24.5 - 29.5	10	6+10=16	less than 29.5	16
29.5 - 34.5	12	16+12=28	less than 34.5	28
34.5 - 39.5	9	28+9=37	less than 39.5	37
39.5 - 44.5	3	37+3=40	less than 44.5	40

Q5 Construct a histogram and frequency polygon for the following data showing weights of students in kg.

weights	frequency / No. of students.
20-24	5
25-29	8
30-34	13
35-39	22
40-44	15
45-49	10
50-54	8

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17-11-2007

Set

Ex/6.1

weights class limit	weights 215-24	class boundaries	mid point class mark (x)	f
20-24		19.5-24.5	$\frac{20+24}{2} = 22$	5
25-29		24.5-29.5	$\frac{25+29}{2} = 27$	8
30-34		29.5-34.5	$\frac{30+34}{2} = 32$	13
35-39		34.5-39.5	37	22
40-44		39.5-44.5	42	15
45-49		44.5-49.5	47	10
50-54		49.5-54.5	52	5

MODERN LANGUAGE SCHOOL IS COLLEGE
11th Period for Con...

