



Construct a frequency distribution table from the following cumulative frequency distribution

Class-Interval	Cumulative Frequency
28 - 35	11
36 - 43	17
44 - 51	31
52 - 59	42
60 - 67	57
68 - 75	73
76 - 83	88
84 - 91	93

1.

(i)

Class-Interval	28 - 35	36 - 43	44 - 51	52 - 59	60 - 67	68 - 75	76 - 83	84 - 91
Frequency	11	5	14	11	15	16	15	6

(ii)

Class-Interval	28 - 35	36 - 43	44 - 51	52 - 59	60 - 67	68 - 75	76 - 83	84 - 91
Frequency	11	6	17	11	15	16	15	5

(iii)

Class-Interval	28 - 35	36 - 43	44 - 51	52 - 59	60 - 67	68 - 75	76 - 83	84 - 91
Frequency	11	6	14	11	13	16	15	5

(iv)

Class-Interval	28 - 35	36 - 43	44 - 51	52 - 59	60 - 67	68 - 75	76 - 83	84 - 91
Frequency	11	6	11	14	15	16	15	5

(v)

Class-Interval	28 - 35	36 - 43	44 - 51	52 - 59	60 - 67	68 - 75	76 - 83	84 - 91
Frequency	11	6	14	11	15	16	15	5

Construct a frequency distribution table from the following cumulative frequency distribution

2.

Class-Interval	Cumulative Frequency
14 - 18	16
18 - 22	32
22 - 26	41
26 - 30	53
30 - 34	60
34 - 38	72
38 - 42	88
42 - 46	96

(i)

Class-Interval	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34	34 - 38	38 - 42	42 - 46
Frequency	16	16	9	12	9	12	16	8

(ii)

Class-Interval	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34	34 - 38	38 - 42	42 - 46
Frequency	16	16	9	12	7	12	16	8

(iii)

Class-Interval	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34	34 - 38	38 - 42	42 - 46
Frequency	16	16	12	9	7	12	16	8

(iv)

Class-Interval	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34	34 - 38	38 - 42	42 - 46
Frequency	16	16	5	12	7	12	16	8

(v)

Class-Interval	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34	34 - 38	38 - 42	42 - 46
Frequency	16	8	9	12	7	12	16	16

Following are the ages (in years) of patients getting medical treatment in a hospital. Identify the cumulative frequency of the given grouped data.

3.

Age (in years)	20 - 30	31 - 41	42 - 52	53 - 63
No. of Patients	77	53	61	72

(i)

Age (in years)	Cumulative Frequency
20 - 30	77
31 - 41	130
42 - 52	193
53 - 63	265

(ii)

Age (in years)	Cumulative Frequency
20 - 30	72
31 - 41	125
42 - 52	186
53 - 63	263

(iii)

Age (in years)	Cumulative Frequency
20 - 30	77
31 - 41	138
42 - 52	191
53 - 63	263

(iv)

Age (in years)	Cumulative Frequency
20 - 30	77
31 - 41	130
42 - 52	191
53 - 63	263

(v)

Age (in years)	Cumulative Frequency
20 - 30	77
31 - 41	132
42 - 52	193
53 - 63	265

Following are the ages (in years) of patients getting medical treatment in a hospital. Identify the cumulative frequency of the given grouped data.

4.

Age (in years)	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70
No. of Patients	87	24	66	26	49

(i)

Age (in years)	Cumulative Frequency
20 - 30	87
30 - 40	111
40 - 50	177
50 - 60	203
60 - 70	252

(ii)

Age (in years)	Cumulative Frequency
20 - 30	87
30 - 40	136
40 - 50	202
50 - 60	228
60 - 70	252

(iii)

Age (in years)	Cumulative Frequency
20 - 30	87
30 - 40	115
40 - 50	181
50 - 60	207
60 - 70	256

(iv)

Age (in years)	Cumulative Frequency
20 - 30	87
30 - 40	111
40 - 50	174
50 - 60	200
60 - 70	249

(v)

Age (in years)	Cumulative Frequency
20 - 30	87
30 - 40	153
40 - 50	177
50 - 60	203
60 - 70	252

Following are the daily wages (in rupees) of labourers working in a factory. Identify the cumulative frequency of the given grouped data.

5.

Wages (in rupees)	200 - 220	221 - 241	242 - 262	263 - 283	284 - 304	305 - 325
Labourers	4	16	11	7	16	10

(i)

Wages (in rupees)	Cumulative Frequency
200 - 220	4
221 - 241	15
242 - 262	31
263 - 283	38
284 - 304	54
305 - 325	64

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 220	4
221 - 241	20
242 - 262	28
263 - 283	35
284 - 304	51
305 - 325	61

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 220	4
221 - 241	20
242 - 262	31
263 - 283	38
284 - 304	54
305 - 325	64

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 220	4
221 - 241	14
242 - 262	25
263 - 283	32
284 - 304	48
305 - 325	64

(v)

Wages (in rupees)	Cumulative Frequency
200 - 220	4
221 - 241	20
242 - 262	31
263 - 283	42
284 - 304	58
305 - 325	68

Following are the daily wages (in rupees) of labourers working in a factory. Identify the cumulative frequency of the given grouped data.

6.

Wages (in rupees)	200 - 220	220 - 240	240 - 260	260 - 280	280 - 300	300 - 320
Labourers	7	14	20	20	3	9

(i)

Wages (in rupees)	Cumulative Frequency
200 - 220	7
220 - 240	27
240 - 260	41
260 - 280	61
280 - 300	64
300 - 320	73

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 220	7
220 - 240	21
240 - 260	46
260 - 280	66
280 - 300	69
300 - 320	78

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 220	7
220 - 240	16
240 - 260	36
260 - 280	56
280 - 300	59
300 - 320	73

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 220	7
220 - 240	21
240 - 260	41
260 - 280	61
280 - 300	64
300 - 320	73

(v)

Wages (in rupees)	Cumulative Frequency
200 - 220	7
220 - 240	21
240 - 260	41
260 - 280	57
280 - 300	60
300 - 320	69

Identify the cumulative frequency of the given grouped data.

7.	class interval	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80
	frequency	14	14	10	14	15	10

(i)	class interval	Cumulative Frequency
	21 - 30	14
	31 - 40	28
	41 - 50	38
	51 - 60	54
	61 - 70	69
	71 - 80	79

(ii)	class interval	Cumulative Frequency
	21 - 30	14
	31 - 40	28
	41 - 50	40
	51 - 60	54
	61 - 70	69
	71 - 80	79

(iii)	class interval	Cumulative Frequency
	21 - 30	14
	31 - 40	28
	41 - 50	38
	51 - 60	52
	61 - 70	67
	71 - 80	77

(iv)	class interval	Cumulative Frequency
	21 - 30	14
	31 - 40	24
	41 - 50	38
	51 - 60	52
	61 - 70	67
	71 - 80	77

(v)	class interval	Cumulative Frequency
	21 - 30	14
	31 - 40	24
	41 - 50	34
	51 - 60	48
	61 - 70	63
	71 - 80	77

Identify the cumulative frequency of the given grouped data.

8.	class interval	16 - 26	26 - 36	36 - 46	46 - 56
	frequency	25	23	23	23

(i)	class interval	Cumulative Frequency
	16 - 26	25
	26 - 36	48
	36 - 46	69
	46 - 56	92

(ii)	class interval	Cumulative Frequency
	16 - 26	23
	26 - 36	46
	36 - 46	69
	46 - 56	94

(iii)	class interval	Cumulative Frequency
	16 - 26	25
	26 - 36	46
	36 - 46	69
	46 - 56	92

(iv)	class interval	Cumulative Frequency
	16 - 26	25
	26 - 36	48
	36 - 46	71
	46 - 56	94

9. Less than cumulative curves are drawn using

- (i) mid values of classes and less than cumulative frequencies
- (ii) upper boundaries of classes and less than cumulative frequencies
- (iii) lower boundaries of classes and less than cumulative frequencies
- (iv) lower boundaries of classes and greater than cumulative frequencies

10. Greater than cumulative curves are drawn using
- (i) upper boundaries of classes and less than cumulative frequencies
 - (ii) mid values of classes and greater than cumulative frequencies
 - (iii) lower boundaries of classes and greater than cumulative frequencies
 - (iv) upper boundaries of classes and greater than cumulative frequencies

Find the cumulative frequency of class 57-66 .

11.

Class-Interval	27 - 36	37 - 46	47 - 56	57 - 66	67 - 76	77 - 86
Frequency	24	10	15	7	19	22

- (i) 55 (ii) 57 (iii) 56 (iv) 58 (v) 53

Find the cumulative frequency of class 35-41 .

12.

Class-Interval	23 - 29	29 - 35	35 - 41	41 - 47	47 - 53
Frequency	20	8	18	21	5

- (i) 46 (ii) 45 (iii) 44 (iv) 49 (v) 47

The following cumulative frequency table represents which of the following frequency distribution

13.

Class-Interval	Cumulative Frequency
26 - 34	11
34 - 42	26
42 - 50	36
50 - 58	50
58 - 66	64
66 - 74	70

(i)

Class-Interval	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66	66 - 74
Frequency	11	15	15	14	14	6

(ii)

Class-Interval	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66	66 - 74
Frequency	11	15	10	9	14	6

(iii)

Class-Interval	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66	66 - 74
Frequency	11	15	10	14	14	6

(iv)

Class-Interval	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66	66 - 74
Frequency	11	10	15	14	14	6

(v)

Class-Interval	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66	66 - 74
Frequency	11	6	10	14	14	15

The following cumulative frequency table represents which of the following frequency distribution

14.

Class-Interval	Cumulative Frequency
14 - 19	89
19 - 24	77
24 - 29	72
29 - 34	63
34 - 39	49
39 - 44	37
44 - 49	31
49 - 54	16

(i)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49	49 - 54
Frequency	12	5	14	9	12	6	15	16

(ii)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49	49 - 54
Frequency	12	5	9	14	12	6	15	16

(iii)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49	49 - 54
Frequency	12	5	4	14	12	6	15	16

(iv)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49	49 - 54
Frequency	12	5	9	14	14	6	15	16

(v)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49	49 - 54
Frequency	12	16	9	14	12	6	15	5

During the medical check-up of 65 students of a class, their weights in kgs are recorded as follows. Identify the number of students whose weight is more than 73 kg

15.

Class-Interval	38 - 45	45 - 52	52 - 59	59 - 66	66 - 73	73 - 80	80 - 87	87 - 94
Frequency	6	12	5	10	11	5	11	5

(i) 19 (ii) 24 (iii) 22 (iv) 21 (v) 20

Assignment Key

1) (v)	2) (ii)	3) (iv)	4) (i)	5) (iii)	6) (iv)
7) (iii)	8) (iv)	9) (ii)	10) (iii)	11) (iii)	12) (i)
13) (iii)	14) (ii)	15) (iv)			