



Construct a frequency distribution table from the following cumulative frequency distribution

Class-Interval	Cumulative Frequency
13 - 17	10
18 - 22	25
23 - 27	41
28 - 32	57
33 - 37	69
38 - 42	83
43 - 47	99
48 - 52	108

(i)	Class-Interval	13 - 17	18 - 22	23 - 27	28 - 32	33 - 37	38 - 42	43 - 47	48 - 52
	Frequency	10	9	16	16	12	14	16	15

(ii)	Class-Interval	13 - 17	18 - 22	23 - 27	28 - 32	33 - 37	38 - 42	43 - 47	48 - 52
	Frequency	10	15	14	16	12	14	16	9

(iii)	Class-Interval	13 - 17	18 - 22	23 - 27	28 - 32	33 - 37	38 - 42	43 - 47	48 - 52
	Frequency	10	15	16	16	12	14	16	9

(iv)	Class-Interval	13 - 17	18 - 22	23 - 27	28 - 32	33 - 37	38 - 42	43 - 47	48 - 52
	Frequency	10	15	16	16	7	14	16	9

Construct a frequency distribution table from the following cumulative frequency distribution

Class-Interval	Cumulative Frequency
10 - 14	16
14 - 18	30
18 - 22	35
22 - 26	46
26 - 30	60
30 - 34	72

(i)	Class-Interval	10 - 14	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34
	Frequency	16	14	5	11	14	12

(ii)	Class-Interval	10 - 14	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34
	Frequency	16	5	14	11	14	12

(iii)	Class-Interval	10 - 14	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34
	Frequency	16	14	5	15	14	12

(iv)	Class-Interval	10 - 14	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34
	Frequency	16	12	5	11	14	14

(v)	Class-Interval	10 - 14	14 - 18	18 - 22	22 - 26	26 - 30	30 - 34
	Frequency	16	14	1	11	14	12

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 - 25	26 - 31	32 - 37	38 - 43	44 - 49	50 - 55	56 - 61	62 - 67
No. of Patients	66	58	36	24	31	70	54	19

(i)

Age (in years)	Cumulative Frequency
20 - 25	66
26 - 31	124
32 - 37	160
38 - 43	184
44 - 49	218
50 - 55	288
56 - 61	342
62 - 67	361

(ii)

Age (in years)	Cumulative Frequency
20 - 25	66
26 - 31	124
32 - 37	148
38 - 43	184
44 - 49	215
50 - 55	285
56 - 61	339
62 - 67	358

(iii)

Age (in years)	Cumulative Frequency
20 - 25	66
26 - 31	124
32 - 37	160
38 - 43	184
44 - 49	215
50 - 55	285
56 - 61	339
62 - 67	358

(iv)

Age (in years)	Cumulative Frequency
20 - 25	66
26 - 31	85
32 - 37	121
38 - 43	145
44 - 49	176
50 - 55	246
56 - 61	300
62 - 67	358

(v)

Age (in years)	Cumulative Frequency
20 - 25	66
26 - 31	124
32 - 37	164
38 - 43	188
44 - 49	219
50 - 55	289
56 - 61	343
62 - 67	362

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)	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50
No. of Patients	36	35	14	69	25	77	69	49

(i)

Age (in years)	Cumulative Frequency
10 - 15	36
15 - 20	85
20 - 25	99
25 - 30	168
30 - 35	193
35 - 40	270
40 - 45	339
45 - 50	374

(ii)

Age (in years)	Cumulative Frequency
10 - 15	36
15 - 20	71
20 - 25	82
25 - 30	151
30 - 35	176
35 - 40	253
40 - 45	322
45 - 50	371

(iii)

Age (in years)	Cumulative Frequency
10 - 15	36
15 - 20	71
20 - 25	140
25 - 30	154
30 - 35	179
35 - 40	256
40 - 45	325
45 - 50	374

(iv)

Age (in years)	Cumulative Frequency
10 - 15	36
15 - 20	71
20 - 25	85
25 - 30	154
30 - 35	179
35 - 40	256
40 - 45	325
45 - 50	374

(v)

Age (in years)	Cumulative Frequency
10 - 15	36
15 - 20	71
20 - 25	85
25 - 30	154
30 - 35	177
35 - 40	254
40 - 45	323
45 - 50	372

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 - 230	231 - 261	262 - 292	293 - 323	324 - 354	355 - 385
Labourers	20	10	8	3	19	17

(i)

Wages (in rupees)	Cumulative Frequency
200 - 230	20
231 - 261	28
262 - 292	38
293 - 323	41
324 - 354	60
355 - 385	77

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 230	20
231 - 261	30
262 - 292	38
293 - 323	44
324 - 354	63
355 - 385	80

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 230	20
231 - 261	30
262 - 292	40
293 - 323	43
324 - 354	62
355 - 385	79

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 230	20
231 - 261	30
262 - 292	38
293 - 323	41
324 - 354	60
355 - 385	77

(v)

Wages (in rupees)	Cumulative Frequency
200 - 230	20
231 - 261	37
262 - 292	45
293 - 323	48
324 - 354	67
355 - 385	77

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)	300 - 330	330 - 360	360 - 390	390 - 420	420 - 450	450 - 480
Labourers	2	12	18	10	20	15

(i)

Wages (in rupees)	Cumulative Frequency
300 - 330	2
330 - 360	14
360 - 390	32
390 - 420	42
420 - 450	62
450 - 480	77

(ii)

Wages (in rupees)	Cumulative Frequency
300 - 330	2
330 - 360	14
360 - 390	34
390 - 420	44
420 - 450	64
450 - 480	79

(iii)

Wages (in rupees)	Cumulative Frequency
300 - 330	2
330 - 360	17
360 - 390	35
390 - 420	45
420 - 450	65
450 - 480	77

(iv)

Wages (in rupees)	Cumulative Frequency
300 - 330	2
330 - 360	20
360 - 390	32
390 - 420	42
420 - 450	62
450 - 480	77

(v)

Wages (in rupees)	Cumulative Frequency
300 - 330	2
330 - 360	14
360 - 390	32
390 - 420	45
420 - 450	65
450 - 480	80

Identify the cumulative frequency of the given grouped data.

class interval	50 - 59	60 - 69	70 - 79	80 - 89	90 - 99	100 - 109	110 - 119
frequency	12	18	19	15	8	14	14

class interval	Cumulative Frequency
50 - 59	12
60 - 69	30
70 - 79	49
80 - 89	59
90 - 99	67
100 - 109	81
110 - 119	95

class interval	Cumulative Frequency
50 - 59	12
60 - 69	26
70 - 79	45
80 - 89	60
90 - 99	68
100 - 109	82
110 - 119	100

class interval	Cumulative Frequency
50 - 59	12
60 - 69	31
70 - 79	49
80 - 89	64
90 - 99	72
100 - 109	86
110 - 119	100

class interval	Cumulative Frequency
50 - 59	12
60 - 69	30
70 - 79	52
80 - 89	67
90 - 99	75
100 - 109	89
110 - 119	103

class interval	Cumulative Frequency
50 - 59	12
60 - 69	30
70 - 79	49
80 - 89	64
90 - 99	72
100 - 109	86
110 - 119	100

Identify the cumulative frequency of the given grouped data.

class interval	37 - 43	43 - 49	49 - 55	55 - 61	61 - 67	67 - 73	73 - 79
frequency	18	25	23	19	21	8	21

class interval	Cumulative Frequency
37 - 43	18
43 - 49	39
49 - 55	62
55 - 61	81
61 - 67	102
67 - 73	110
73 - 79	135

class interval	Cumulative Frequency
37 - 43	18
43 - 49	41
49 - 55	66
55 - 61	85
61 - 67	106
67 - 73	114
73 - 79	135

class interval	Cumulative Frequency
37 - 43	18
43 - 49	43
49 - 55	69
55 - 61	88
61 - 67	109
67 - 73	117
73 - 79	138

class interval	Cumulative Frequency
37 - 43	18
43 - 49	43
49 - 55	66
55 - 61	81
61 - 67	102
67 - 73	110
73 - 79	131

class interval	Cumulative Frequency
37 - 43	18
43 - 49	43
49 - 55	66
55 - 61	85
61 - 67	106
67 - 73	114
73 - 79	135

9. Less than cumulative curves are drawn using

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

10. Greater than cumulative curves are drawn using

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

Find the cumulative frequency of class 52-62.

Class-Interval	19 - 29	30 - 40	41 - 51	52 - 62
Frequency	9	20	6	21

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

Find the cumulative frequency of class 59-66.

Class-Interval	38 - 45	45 - 52	52 - 59	59 - 66	66 - 73
Frequency	9	18	13	16	7

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

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

Class-Interval	Cumulative Frequency						
26 - 31	8						
31 - 36		23					
36 - 41			34				
41 - 46				43			
46 - 51					55		
51 - 56						70	
56 - 61							76

- (i)

Class-Interval	26 - 31	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56	56 - 61
Frequency	8	11	15	9	12	15	6
- (ii)

Class-Interval	26 - 31	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56	56 - 61
Frequency	8	6	11	9	12	15	15
- (iii)

Class-Interval	26 - 31	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56	56 - 61
Frequency	8	15	8	9	12	15	6
- (iv)

Class-Interval	26 - 31	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56	56 - 61
Frequency	8	15	11	9	12	15	6
- (v)

Class-Interval	26 - 31	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56	56 - 61
Frequency	8	15	11	7	12	15	6

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

Class-Interval	Cumulative Frequency						
33 - 39	70						
39 - 45		59					
45 - 51			44				
51 - 57				39			
57 - 63					25		
63 - 69						15	

- (i)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69
Frequency	11	15	5	10	10	15
- (ii)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69
Frequency	11	15	2	14	10	15
- (iii)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69
Frequency	11	15	5	14	10	15
- (iv)

Class-Interval	33 - 39	39 - 45	45 - 51	51 - 57	57 - 63	63 - 69
Frequency	11	5	15	14	10	15

During the medical check-up of 64 students of a class, their weights in kgs are recorded as follows.

Identify the number of students whose weight is more than 82 kg

Class-Interval	32 - 42	42 - 52	52 - 62	62 - 72	72 - 82	82 - 92	92 - 102	102 - 112
Frequency	9	7	7	7	10	5	10	9

- (i) 25 (ii) 26 (iii) 23 (iv) 24 (v) 21

15.

Assignment Key

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