



Construct a frequency distribution table from the following cumulative frequency distribution

1.

Class-Interval	Cumulative Frequency
24 - 29	8
30 - 35	14
36 - 41	22
42 - 47	33
48 - 53	48
54 - 59	56

(i)

Class-Interval	24 - 29	30 - 35	36 - 41	42 - 47	48 - 53	54 - 59
Frequency	8	6	12	11	15	8

(ii)

Class-Interval	24 - 29	30 - 35	36 - 41	42 - 47	48 - 53	54 - 59
Frequency	8	6	8	11	15	8

(iii)

Class-Interval	24 - 29	30 - 35	36 - 41	42 - 47	48 - 53	54 - 59
Frequency	8	8	6	11	15	8

(iv)

Class-Interval	24 - 29	30 - 35	36 - 41	42 - 47	48 - 53	54 - 59
Frequency	8	6	8	6	15	8

(v)

Class-Interval	24 - 29	30 - 35	36 - 41	42 - 47	48 - 53	54 - 59
Frequency	8	8	8	11	15	6

Construct a frequency distribution table from the following cumulative frequency distribution

2.

Class-Interval	Cumulative Frequency
31 - 36	10
36 - 41	23
41 - 46	29
46 - 51	36
51 - 56	45

(i)

Class-Interval	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56
Frequency	10	13	4	7	9

(ii)

Class-Interval	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56
Frequency	10	9	6	7	13

(iii)

Class-Interval	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56
Frequency	10	17	6	7	9

(iv)

Class-Interval	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56
Frequency	10	13	6	7	9

(v)

Class-Interval	31 - 36	36 - 41	41 - 46	46 - 51	51 - 56
Frequency	10	6	13	7	9

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	80	39	63	56	65	59	37	61

(i)

Age (in years)	Cumulative Frequency
20 - 25	80
26 - 31	119
32 - 37	185
38 - 43	241
44 - 49	306
50 - 55	365
56 - 61	402
62 - 67	463

(ii)

Age (in years)	Cumulative Frequency
20 - 25	80
26 - 31	141
32 - 37	204
38 - 43	260
44 - 49	325
50 - 55	384
56 - 61	421
62 - 67	460

(iii)

Age (in years)	Cumulative Frequency
20 - 25	80
26 - 31	119
32 - 37	182
38 - 43	238
44 - 49	305
50 - 55	364
56 - 61	401
62 - 67	462

(iv)

Age (in years)	Cumulative Frequency
20 - 25	80
26 - 31	119
32 - 37	175
38 - 43	238
44 - 49	303
50 - 55	362
56 - 61	399
62 - 67	460

(v)

Age (in years)	Cumulative Frequency
20 - 25	80
26 - 31	119
32 - 37	182
38 - 43	238
44 - 49	303
50 - 55	362
56 - 61	399
62 - 67	460

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	70 - 80
No. of Patients	48	73	72	82	84	37

(i)

Age (in years)	Cumulative Frequency
20 - 30	48
30 - 40	85
40 - 50	157
50 - 60	239
60 - 70	323
70 - 80	396

(ii)

Age (in years)	Cumulative Frequency
20 - 30	48
30 - 40	121
40 - 50	193
50 - 60	275
60 - 70	359
70 - 80	396

(iii)

Age (in years)	Cumulative Frequency
20 - 30	48
30 - 40	121
40 - 50	190
50 - 60	272
60 - 70	356
70 - 80	393

(iv)

Age (in years)	Cumulative Frequency
20 - 30	48
30 - 40	120
40 - 50	193
50 - 60	275
60 - 70	359
70 - 80	396

(v)

Age (in years)	Cumulative Frequency
20 - 30	48
30 - 40	121
40 - 50	193
50 - 60	277
60 - 70	361
70 - 80	398

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	18	11	20	9	2	4

(i)

Wages (in rupees)	Cumulative Frequency
200 - 220	18
221 - 241	38
242 - 262	49
263 - 283	58
284 - 304	60
305 - 325	64

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 220	18
221 - 241	29
242 - 262	49
263 - 283	63
284 - 304	65
305 - 325	69

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 220	18
221 - 241	22
242 - 262	42
263 - 283	51
284 - 304	53
305 - 325	64

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 220	18
221 - 241	29
242 - 262	49
263 - 283	58
284 - 304	60
305 - 325	64

(v)

Wages (in rupees)	Cumulative Frequency
200 - 220	18
221 - 241	29
242 - 262	52
263 - 283	61
284 - 304	63
305 - 325	67

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	17	15	13	11	3	10

(i)

Wages (in rupees)	Cumulative Frequency
200 - 220	17
220 - 240	32
240 - 260	49
260 - 280	60
280 - 300	63
300 - 320	73

(ii)

Wages (in rupees)	Cumulative Frequency
200 - 220	17
220 - 240	30
240 - 260	45
260 - 280	56
280 - 300	59
300 - 320	69

(iii)

Wages (in rupees)	Cumulative Frequency
200 - 220	17
220 - 240	27
240 - 260	40
260 - 280	51
280 - 300	54
300 - 320	69

(iv)

Wages (in rupees)	Cumulative Frequency
200 - 220	17
220 - 240	32
240 - 260	45
260 - 280	56
280 - 300	59
300 - 320	69

(v)

Wages (in rupees)	Cumulative Frequency
200 - 220	17
220 - 240	32
240 - 260	45
260 - 280	60
280 - 300	63
300 - 320	73

Identify the cumulative frequency of the given grouped data.

7.

class interval	46 - 52	53 - 59	60 - 66	67 - 73	74 - 80
frequency	23	23	24	7	20

(i)

class interval	Cumulative Frequency
46 - 52	23
53 - 59	46
60 - 66	70
67 - 73	77
74 - 80	97

(ii)

class interval	Cumulative Frequency
46 - 52	23
53 - 59	47
60 - 66	70
67 - 73	77
74 - 80	97

(iii)

class interval	Cumulative Frequency
46 - 52	23
53 - 59	46
60 - 66	73
67 - 73	80
74 - 80	100

(iv)

class interval	Cumulative Frequency
46 - 52	23
53 - 59	44
60 - 66	68
67 - 73	75
74 - 80	95

(v)

class interval	Cumulative Frequency
46 - 52	23
53 - 59	43
60 - 66	67
67 - 73	74
74 - 80	97

Identify the cumulative frequency of the given grouped data.

8.

class interval	50 - 56	56 - 62	62 - 68	68 - 74	74 - 80	80 - 86	86 - 92
frequency	11	19	18	25	10	12	11

(i)

class interval	Cumulative Frequency
50 - 56	11
56 - 62	30
62 - 68	48
68 - 74	69
74 - 80	79
80 - 86	91
86 - 92	102

(ii)

class interval	Cumulative Frequency
50 - 56	11
56 - 62	30
62 - 68	48
68 - 74	73
74 - 80	83
80 - 86	95
86 - 92	106

(iii)

class interval	Cumulative Frequency
50 - 56	11
56 - 62	30
62 - 68	45
68 - 74	70
74 - 80	80
80 - 86	92
86 - 92	103

(iv)

class interval	Cumulative Frequency
50 - 56	11
56 - 62	22
62 - 68	40
68 - 74	65
74 - 80	75
80 - 86	87
86 - 92	106

(v)

class interval	Cumulative Frequency
50 - 56	11
56 - 62	29
62 - 68	48
68 - 74	73
74 - 80	83
80 - 86	95
86 - 92	106

9. Less than cumulative curves are drawn using

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

Find the cumulative frequency of class 26-31 .

11.

Class-Interval	14 - 19	20 - 25	26 - 31	32 - 37
Frequency	13	14	6	8

- (i) 36 (ii) 31 (iii) 32 (iv) 33 (v) 34

Find the cumulative frequency of class 44-49 .

12.

Class-Interval	29 - 34	34 - 39	39 - 44	44 - 49	49 - 54	54 - 59	59 - 64	64 - 69
Frequency	23	8	5	22	19	18	14	16

- (i) 56 (ii) 58 (iii) 59 (iv) 61 (v) 57

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

13.

Class-Interval	Cumulative Frequency
29 - 38	8
38 - 47	15
47 - 56	30
56 - 65	44
65 - 74	50

(i)

Class-Interval	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74
Frequency	8	6	15	14	7

(ii)

Class-Interval	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74
Frequency	8	7	15	14	6

(iii)

Class-Interval	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74
Frequency	8	15	7	14	6

(iv)

Class-Interval	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74
Frequency	8	7	17	14	6

(v)

Class-Interval	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74
Frequency	8	5	15	14	6

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

14.

Class-Interval	Cumulative Frequency
19 - 28	89
28 - 37	78
37 - 46	66
46 - 55	61
55 - 64	45
64 - 73	34
73 - 82	23
82 - 91	8

(i)

Class-Interval	19 - 28	28 - 37	37 - 46	46 - 55	55 - 64	64 - 73	73 - 82	82 - 91
Frequency	11	8	5	16	11	11	15	12

(ii)

Class-Interval	19 - 28	28 - 37	37 - 46	46 - 55	55 - 64	64 - 73	73 - 82	82 - 91
Frequency	11	12	9	16	11	11	15	8

(iii)

Class-Interval	19 - 28	28 - 37	37 - 46	46 - 55	55 - 64	64 - 73	73 - 82	82 - 91
Frequency	11	12	5	16	9	11	15	8

(iv)

Class-Interval	19 - 28	28 - 37	37 - 46	46 - 55	55 - 64	64 - 73	73 - 82	82 - 91
Frequency	11	12	5	16	11	11	15	8

(v)

Class-Interval	19 - 28	28 - 37	37 - 46	46 - 55	55 - 64	64 - 73	73 - 82	82 - 91
Frequency	11	12	16	5	11	11	15	8

During the medical check-up of 40 students of a class, their weights in kgs are recorded as follows.

Identify the number of students whose weight is more than 66 kg

15.

Class-Interval	30 - 39	39 - 48	48 - 57	57 - 66	66 - 75
Frequency	8	8	5	10	9

(i) 9 (ii) 6 (iii) 10 (iv) 8 (v) 11

Assignment Key

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