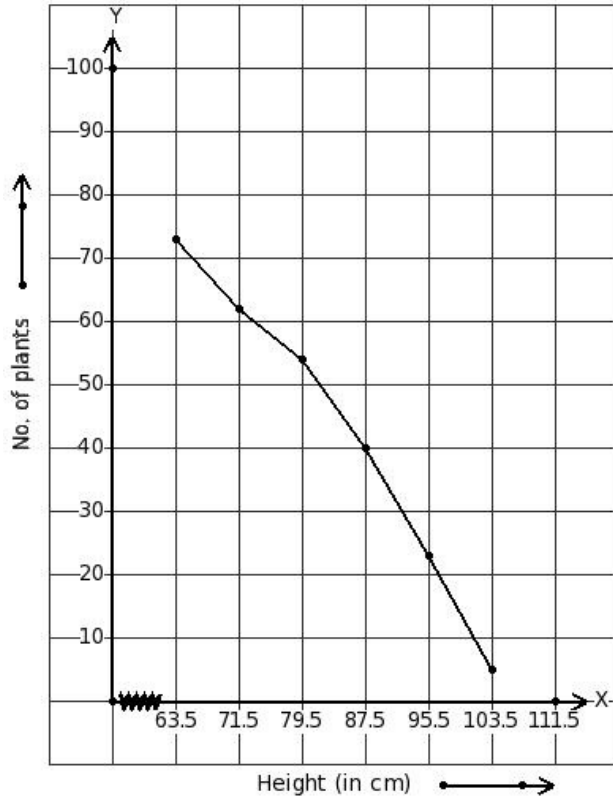




1. Heights of 73 plants (in cm) are given below. Identify the frequency distribution table for the given 'more than' ogive.



- (i)

Height (in cm)	64 - 71	72 - 79	80 - 87	88 - 95	96 - 103	104 - 111
No. of plants	11	8	14	17	18	5
- (ii)

Height (in cm)	64 - 71	72 - 79	80 - 87	88 - 95	96 - 103	104 - 111
No. of plants	11	5	14	17	18	8
- (iii)

Height (in cm)	64 - 71	72 - 79	80 - 87	88 - 95	96 - 103	104 - 111
No. of plants	11	8	14	15	18	5
- (iv)

Height (in cm)	64 - 71	72 - 79	80 - 87	88 - 95	96 - 103	104 - 111
No. of plants	11	8	10	17	18	5
- (v)

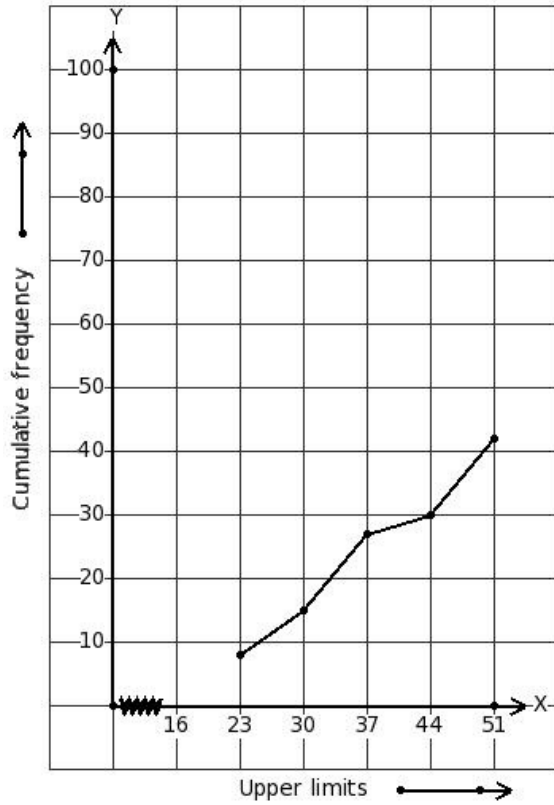
Height (in cm)	64 - 71	72 - 79	80 - 87	88 - 95	96 - 103	104 - 111
No. of plants	11	14	8	17	18	5

Find the cumulative frequency of class 80-90.

Class-Interval	36 - 46	47 - 57	58 - 68	69 - 79	80 - 90	91 - 101	102 - 112	113 - 123
Frequency	12	15	5	16	22	8	9	17

- (i) 67 (ii) 72 (iii) 71 (iv) 70 (v) 69

3. Identify the frequency distribution table for the given 'less than' ogive.



(i)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51
Frequency	13	12	9	4	18

(ii)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51
Frequency	20	20	3	16	3

(iii)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51
Frequency	9	20	7	9	17

(iv)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51
Frequency	16	3	9	17	18

(v)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51
Frequency	8	7	12	3	12

The daily wages of 122 workers in a factory are given below. Find the mean wage.

4.

Wage (in rupees)	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79
No. of workers	9	22	21	23	22	25

(i) ₹52.87 (ii) ₹53.86 (iii) ₹54.86 (iv) ₹52.86 (v) ₹52.88

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

5.

Class-Interval	Cumulative Frequency
12 - 21	15
21 - 30	31
30 - 39	45
39 - 48	61
48 - 57	66
57 - 66	72

(i)

Class-Interval	12 - 21	21 - 30	30 - 39	39 - 48	48 - 57	57 - 66
Frequency	15	14	16	16	5	6

(ii)

Class-Interval	12 - 21	21 - 30	30 - 39	39 - 48	48 - 57	57 - 66
Frequency	15	16	17	16	5	6

(iii)

Class-Interval	12 - 21	21 - 30	30 - 39	39 - 48	48 - 57	57 - 66
Frequency	15	16	14	19	5	6

(iv)

Class-Interval	12 - 21	21 - 30	30 - 39	39 - 48	48 - 57	57 - 66
Frequency	15	6	14	16	5	16

(v)

Class-Interval	12 - 21	21 - 30	30 - 39	39 - 48	48 - 57	57 - 66
Frequency	15	16	14	16	5	6

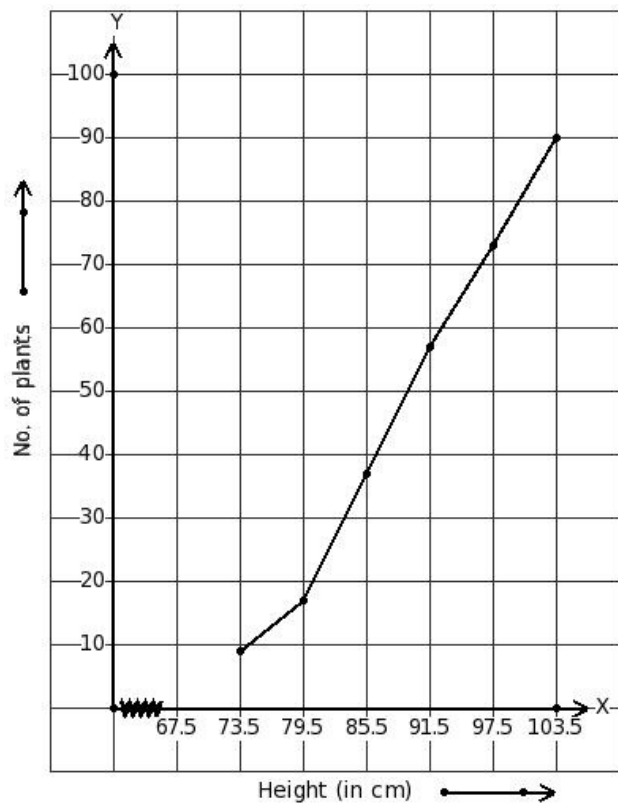
Heights of 25 students are given below. Find the median.

6.

Height (in cm)	130	137	139	140	145	147	149	153	154	164
No. of students	2	2	1	1	3	3	2	5	5	1

(i) 147cm (ii) 149cm (iii) 151cm (iv) 148cm (v) 150cm

7. Heights of 90 plants (in cm) are given below. Identify the frequency distribution table for the given 'less than' ogive.



(i)

Height (in cm)	68 - 73	74 - 79	80 - 85	86 - 91	92 - 97	98 - 103
No. of plants	9	17	20	20	16	8

(ii)

Height (in cm)	68 - 73	74 - 79	80 - 85	86 - 91	92 - 97	98 - 103
No. of plants	9	20	8	20	16	17

(iii)

Height (in cm)	68 - 73	74 - 79	80 - 85	86 - 91	92 - 97	98 - 103
No. of plants	9	8	20	20	16	17

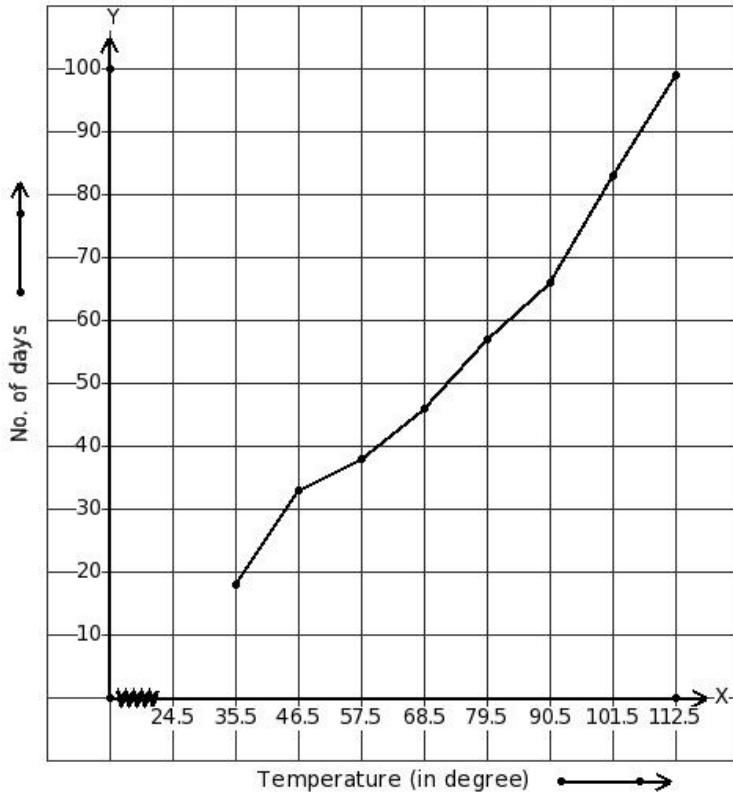
(iv)

Height (in cm)	68 - 73	74 - 79	80 - 85	86 - 91	92 - 97	98 - 103
No. of plants	9	8	20	17	16	17

(v)

Height (in cm)	68 - 73	74 - 79	80 - 85	86 - 91	92 - 97	98 - 103
No. of plants	9	8	25	20	16	17

8. Temperatures of 99 days (in °C) are given below. Identify the frequency distribution table for the given 'less than' ogive.



- (i)

Temperature (in degree)	25 - 35	36 - 46	47 - 57	58 - 68	69 - 79	80 - 90	91 - 101	102 - 112
No. of days	18	15	5	8	6	9	17	16
- (ii)

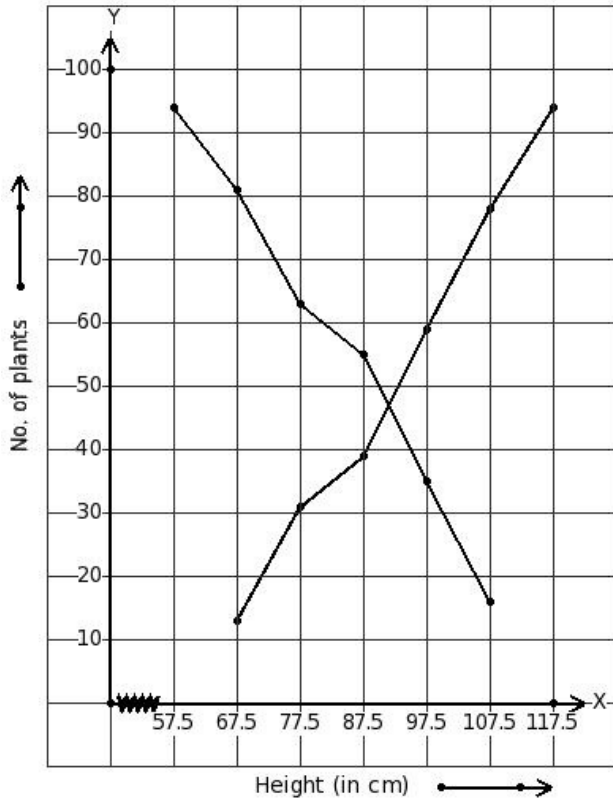
Temperature (in degree)	25 - 35	36 - 46	47 - 57	58 - 68	69 - 79	80 - 90	91 - 101	102 - 112
No. of days	18	15	5	8	11	9	17	16
- (iii)

Temperature (in degree)	25 - 35	36 - 46	47 - 57	58 - 68	69 - 79	80 - 90	91 - 101	102 - 112
No. of days	18	15	8	5	11	9	17	16
- (iv)

Temperature (in degree)	25 - 35	36 - 46	47 - 57	58 - 68	69 - 79	80 - 90	91 - 101	102 - 112
No. of days	18	15	10	8	11	9	17	16
- (v)

Temperature (in degree)	25 - 35	36 - 46	47 - 57	58 - 68	69 - 79	80 - 90	91 - 101	102 - 112
No. of days	18	16	5	8	11	9	17	15

9. Heights of 94 plants (in cm) are given below. Identify the frequency distribution table for the given 'median' ogive.



(i)

Height (in cm)	58 - 67	68 - 77	78 - 87	88 - 97	98 - 107	108 - 117
No. of plants	13	18	12	20	19	16

(ii)

Height (in cm)	58 - 67	68 - 77	78 - 87	88 - 97	98 - 107	108 - 117
No. of plants	13	16	8	20	19	18

(iii)

Height (in cm)	58 - 67	68 - 77	78 - 87	88 - 97	98 - 107	108 - 117
No. of plants	13	8	18	20	19	16

(iv)

Height (in cm)	58 - 67	68 - 77	78 - 87	88 - 97	98 - 107	108 - 117
No. of plants	13	18	8	20	19	16

(v)

Height (in cm)	58 - 67	68 - 77	78 - 87	88 - 97	98 - 107	108 - 117
No. of plants	13	18	8	25	19	16

Wages of 26 labourers are given below. Find the mode.

10.

Wage (in rupees)	336	352	379	425	437	440	488	489
No. of labourers	2	4	2	3	3	1	8	3

(i) ₹490.00 (ii) ₹486.00 (iii) ₹487.00 (iv) ₹489.00 (v) ₹488.00

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

11.

Wages (in rupees)	300 - 340	341 - 381	382 - 422	423 - 463	464 - 504	505 - 545
Labourers	19	3	11	5	15	16

(i)

Wages (in rupees)	Cumulative Frequency
300 - 340	19
341 - 381	30
382 - 422	33
423 - 463	38
464 - 504	53
505 - 545	69

(ii)

Wages (in rupees)	Cumulative Frequency
300 - 340	19
341 - 381	22
382 - 422	33
423 - 463	43
464 - 504	58
505 - 545	74

(iii)

Wages (in rupees)	Cumulative Frequency
300 - 340	19
341 - 381	35
382 - 422	46
423 - 463	51
464 - 504	66
505 - 545	69

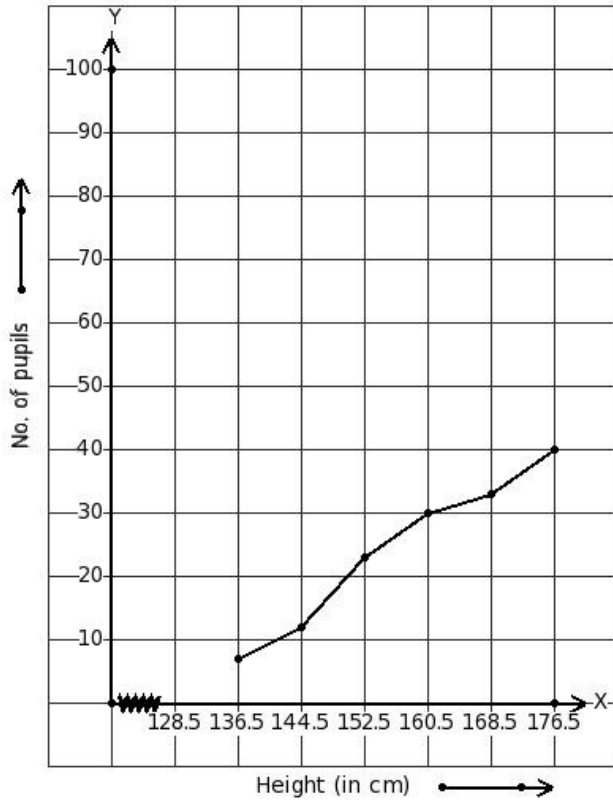
(iv)

Wages (in rupees)	Cumulative Frequency
300 - 340	19
341 - 381	22
382 - 422	30
423 - 463	35
464 - 504	50
505 - 545	66

(v)

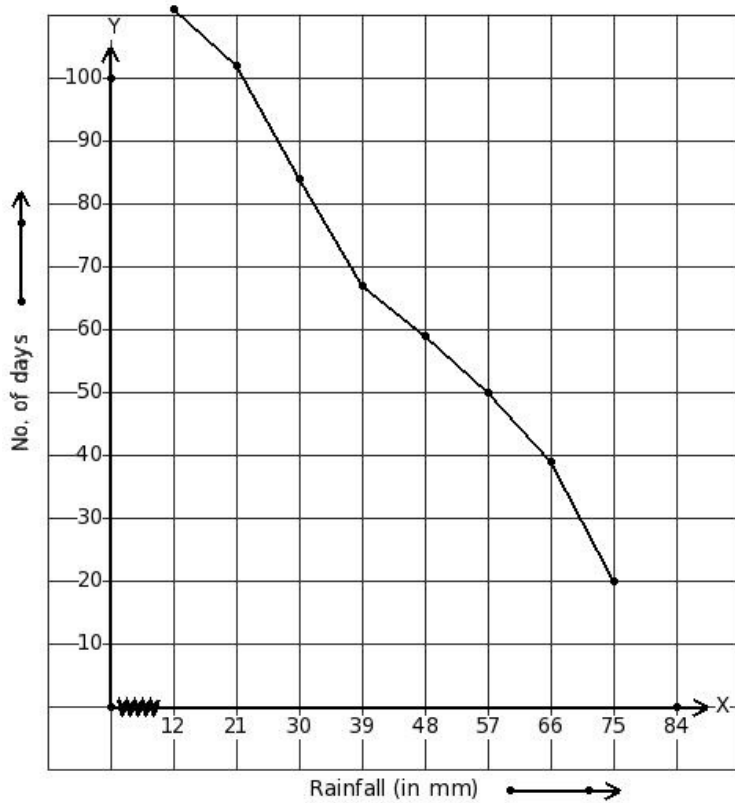
Wages (in rupees)	Cumulative Frequency
300 - 340	19
341 - 381	22
382 - 422	33
423 - 463	38
464 - 504	53
505 - 545	69

12. The heights of 40 pupils in a school are given below. Identify the frequency distribution table for the given 'less than' ogive.



- (i)
- | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Height (in cm) | 129 - 136 | 137 - 144 | 145 - 152 | 153 - 160 | 161 - 168 | 169 - 176 |
| No. of pupils | 7 | 11 | 5 | 7 | 3 | 7 |
- (ii)
- | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Height (in cm) | 129 - 136 | 137 - 144 | 145 - 152 | 153 - 160 | 161 - 168 | 169 - 176 |
| No. of pupils | 7 | 5 | 11 | 7 | 3 | 7 |
- (iii)
- | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Height (in cm) | 129 - 136 | 137 - 144 | 145 - 152 | 153 - 160 | 161 - 168 | 169 - 176 |
| No. of pupils | 7 | 5 | 6 | 7 | 3 | 7 |
- (iv)
- | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Height (in cm) | 129 - 136 | 137 - 144 | 145 - 152 | 153 - 160 | 161 - 168 | 169 - 176 |
| No. of pupils | 7 | 7 | 11 | 7 | 3 | 5 |
- (v)
- | | | | | | | |
|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Height (in cm) | 129 - 136 | 137 - 144 | 145 - 152 | 153 - 160 | 161 - 168 | 169 - 176 |
| No. of pupils | 7 | 5 | 11 | 5 | 3 | 7 |

13. Rainfall of 111 days (in mm) are given below. Identify the frequency distribution table for the given 'more than' ogive.



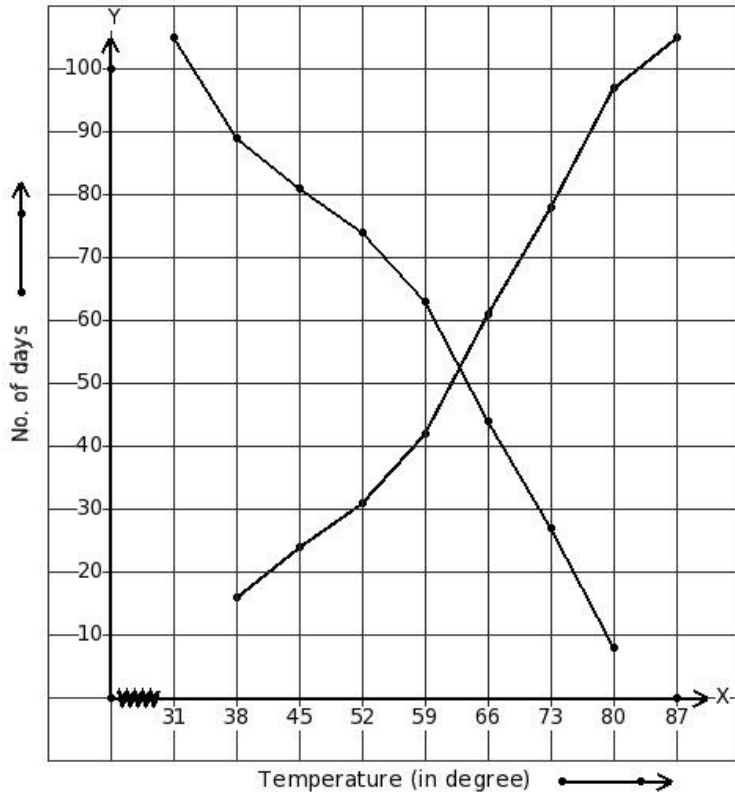
- (i)
- | | | | | | | | | |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rainfall (in mm) | 12 - 21 | 21 - 30 | 30 - 39 | 39 - 48 | 48 - 57 | 57 - 66 | 66 - 75 | 75 - 84 |
| No. of days | 9 | 18 | 13 | 8 | 9 | 11 | 19 | 20 |
- (ii)
- | | | | | | | | | |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rainfall (in mm) | 12 - 21 | 21 - 30 | 30 - 39 | 39 - 48 | 48 - 57 | 57 - 66 | 66 - 75 | 75 - 84 |
| No. of days | 9 | 18 | 17 | 8 | 4 | 11 | 19 | 20 |
- (iii)
- | | | | | | | | | |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rainfall (in mm) | 12 - 21 | 21 - 30 | 30 - 39 | 39 - 48 | 48 - 57 | 57 - 66 | 66 - 75 | 75 - 84 |
| No. of days | 9 | 18 | 8 | 17 | 9 | 11 | 19 | 20 |
- (iv)
- | | | | | | | | | |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rainfall (in mm) | 12 - 21 | 21 - 30 | 30 - 39 | 39 - 48 | 48 - 57 | 57 - 66 | 66 - 75 | 75 - 84 |
| No. of days | 9 | 20 | 17 | 8 | 9 | 11 | 19 | 18 |
- (v)
- | | | | | | | | | |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Rainfall (in mm) | 12 - 21 | 21 - 30 | 30 - 39 | 39 - 48 | 48 - 57 | 57 - 66 | 66 - 75 | 75 - 84 |
| No. of days | 9 | 18 | 17 | 8 | 9 | 11 | 19 | 20 |

Weights of 25 students are given below. Find the mean.

- 14.
- | | | | | | | | | |
|------------------------|----|----|----|----|----|----|----|----|
| Weight (in kg) | 42 | 44 | 47 | 48 | 50 | 51 | 57 | 60 |
| No. of students | 4 | 5 | 4 | 3 | 1 | 2 | 2 | 4 |

- (i) $\frac{1227}{25}$ kg (ii) $\frac{1276}{25}$ kg (iii) $\frac{1226}{25}$ kg (iv) $\frac{1251}{25}$ kg (v) $\frac{1228}{25}$ kg

15. Temperatures of 105 days (in °C) are given below. Identify the frequency distribution table for the given 'ogive'.



- (i)

Temperature (in degree)	31 - 38	38 - 45	45 - 52	52 - 59	59 - 66	66 - 73	73 - 80	80 - 87
No. of days	16	8	7	11	19	17	19	8
- (ii)

Temperature (in degree)	31 - 38	38 - 45	45 - 52	52 - 59	59 - 66	66 - 73	73 - 80	80 - 87
No. of days	16	8	11	11	19	17	19	8
- (iii)

Temperature (in degree)	31 - 38	38 - 45	45 - 52	52 - 59	59 - 66	66 - 73	73 - 80	80 - 87
No. of days	16	8	7	11	21	17	19	8
- (iv)

Temperature (in degree)	31 - 38	38 - 45	45 - 52	52 - 59	59 - 66	66 - 73	73 - 80	80 - 87
No. of days	16	8	11	7	19	17	19	8

16. The mean and median of a uni-modal grouped data are 74 and 68 respectively. Find the mode of the data.
 (i) 84 (ii) 85 (iii) 87 (iv) 88 (v) 86

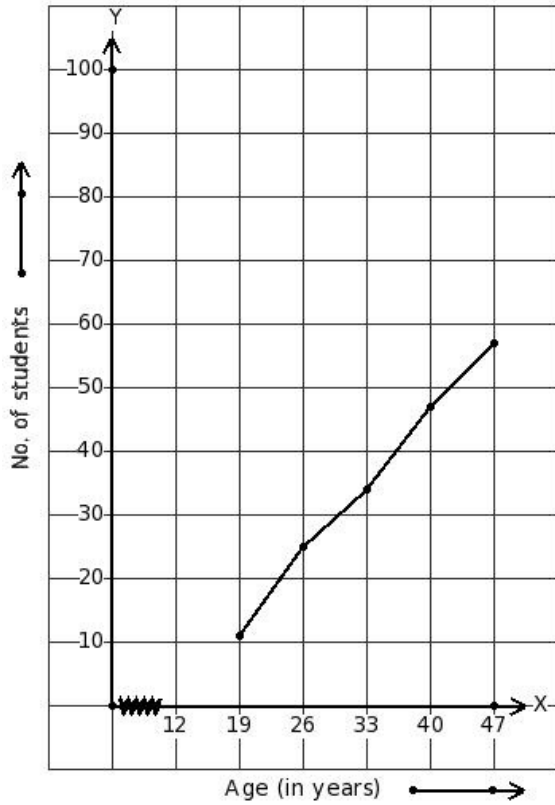
The daily wages of 124 workers in a factory are given below. Find the mode wage.

17.

Wage (in rupees)	30 - 37	37 - 44	44 - 51	51 - 58	58 - 65	65 - 72	72 - 79	79 - 86
No. of workers	16	17	21	5	8	15	27	15

- (i) ₹77.50 (ii) ₹75.50 (iii) ₹76.00 (iv) ₹76.50

18. Ages of 57 students (in years) are given below. Identify the frequency distribution table for the given 'less than' ogive.



(i)

Age (in years)	12 - 19	19 - 26	26 - 33	33 - 40	40 - 47
No. of students	11	14	11	13	10

(ii)

Age (in years)	12 - 19	19 - 26	26 - 33	33 - 40	40 - 47
No. of students	11	18	9	13	10

(iii)

Age (in years)	12 - 19	19 - 26	26 - 33	33 - 40	40 - 47
No. of students	11	14	9	13	10

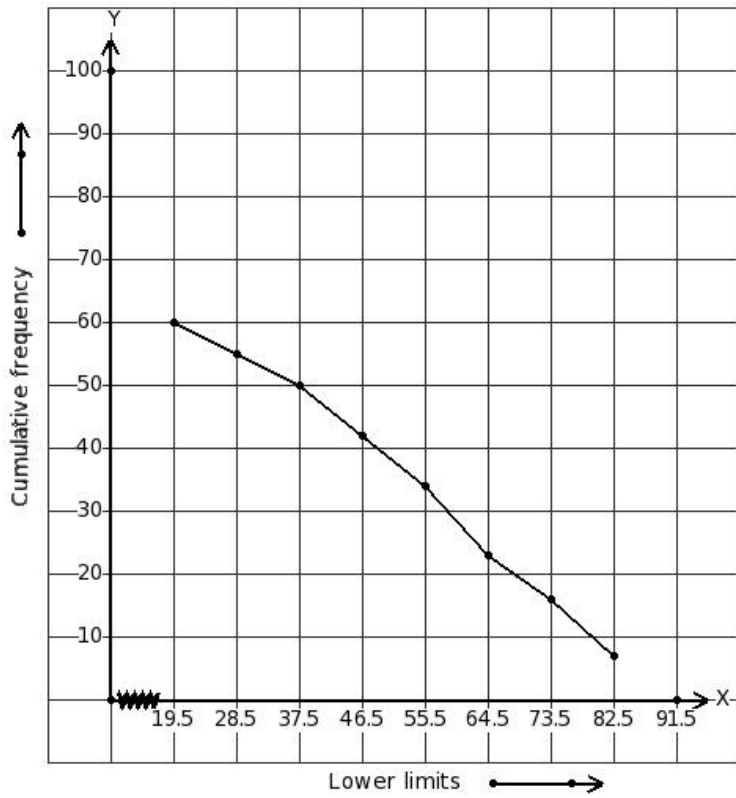
(iv)

Age (in years)	12 - 19	19 - 26	26 - 33	33 - 40	40 - 47
No. of students	11	10	9	13	14

(v)

Age (in years)	12 - 19	19 - 26	26 - 33	33 - 40	40 - 47
No. of students	11	9	14	13	10

19. Identify the frequency distribution table for the given 'more than' ogive.



(i)

Class-Interval	20 - 28	29 - 37	38 - 46	47 - 55	56 - 64	65 - 73	74 - 82	83 - 91
Frequency	7	15	10	19	19	8	19	5

(ii)

Class-Interval	20 - 28	29 - 37	38 - 46	47 - 55	56 - 64	65 - 73	74 - 82	83 - 91
Frequency	19	20	17	17	20	13	16	15

(iii)

Class-Interval	20 - 28	29 - 37	38 - 46	47 - 55	56 - 64	65 - 73	74 - 82	83 - 91
Frequency	8	13	7	16	5	20	19	3

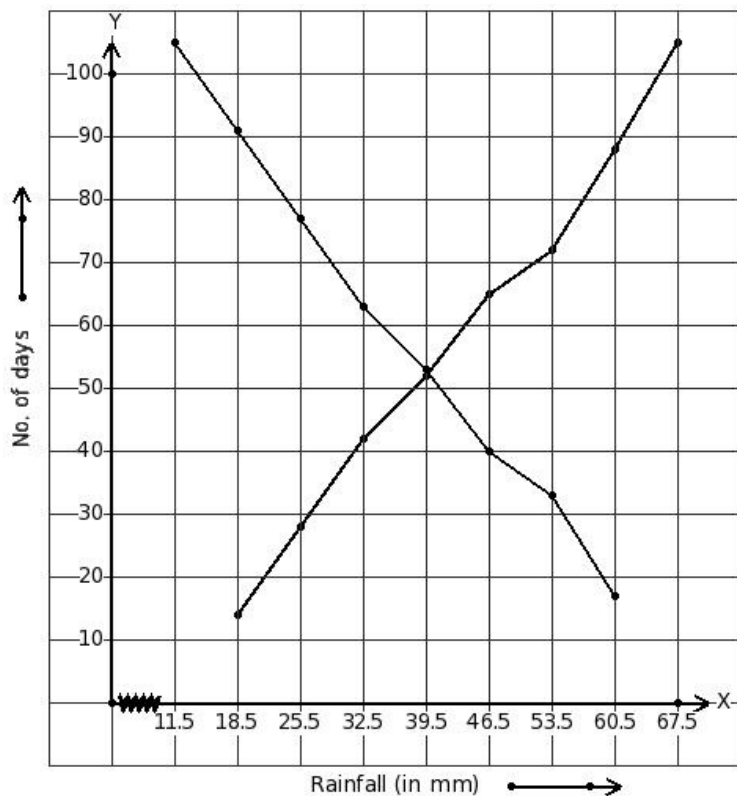
(iv)

Class-Interval	20 - 28	29 - 37	38 - 46	47 - 55	56 - 64	65 - 73	74 - 82	83 - 91
Frequency	7	11	20	5	15	18	9	13

(v)

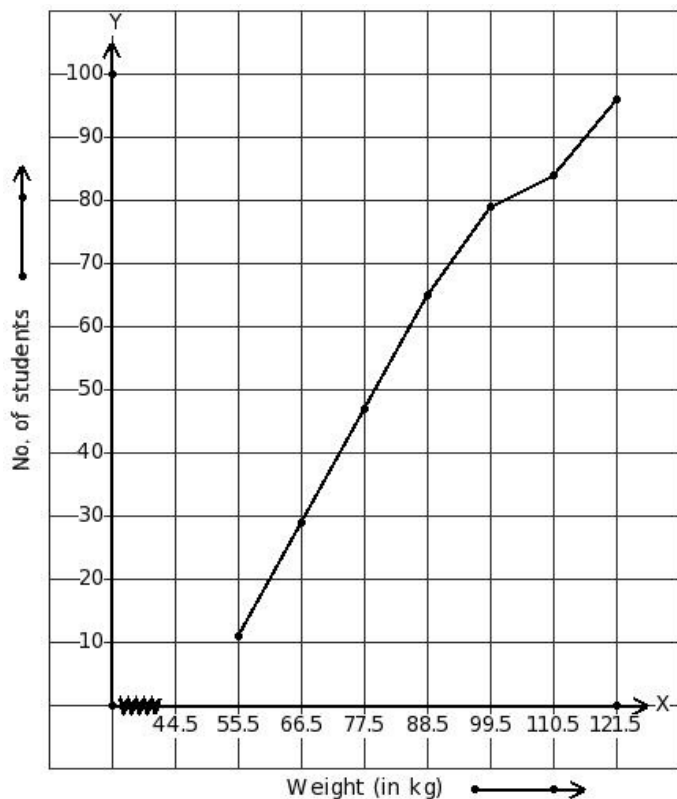
Class-Interval	20 - 28	29 - 37	38 - 46	47 - 55	56 - 64	65 - 73	74 - 82	83 - 91
Frequency	5	5	8	8	11	7	9	7

20. Rainfall of 105 days (in mm) are given below. Identify the frequency distribution table for the given 'ogive'.



- (i)
- | Rainfall (in mm) | 12 - 18 | 19 - 25 | 26 - 32 | 33 - 39 | 40 - 46 | 47 - 53 | 54 - 60 | 61 - 67 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 14 | 14 | 14 | 10 | 15 | 7 | 16 | 17 |
- (ii)
- | Rainfall (in mm) | 12 - 18 | 19 - 25 | 26 - 32 | 33 - 39 | 40 - 46 | 47 - 53 | 54 - 60 | 61 - 67 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 14 | 14 | 11 | 10 | 13 | 7 | 16 | 17 |
- (iii)
- | Rainfall (in mm) | 12 - 18 | 19 - 25 | 26 - 32 | 33 - 39 | 40 - 46 | 47 - 53 | 54 - 60 | 61 - 67 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 14 | 14 | 10 | 14 | 13 | 7 | 16 | 17 |
- (iv)
- | Rainfall (in mm) | 12 - 18 | 19 - 25 | 26 - 32 | 33 - 39 | 40 - 46 | 47 - 53 | 54 - 60 | 61 - 67 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 14 | 17 | 14 | 10 | 13 | 7 | 16 | 14 |
- (v)
- | Rainfall (in mm) | 12 - 18 | 19 - 25 | 26 - 32 | 33 - 39 | 40 - 46 | 47 - 53 | 54 - 60 | 61 - 67 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 14 | 14 | 14 | 10 | 13 | 7 | 16 | 17 |

21. Weights of 96 students (in kg) are given below. Identify the frequency distribution table for the given 'less than' ogive.



- (i)

Weight (in kg)	45 - 55	56 - 66	67 - 77	78 - 88	89 - 99	100 - 110	111 - 121
No. of students	11	18	18	18	14	5	12
- (ii)

Weight (in kg)	45 - 55	56 - 66	67 - 77	78 - 88	89 - 99	100 - 110	111 - 121
No. of students	11	18	18	13	14	5	12
- (iii)

Weight (in kg)	45 - 55	56 - 66	67 - 77	78 - 88	89 - 99	100 - 110	111 - 121
No. of students	11	18	16	18	14	5	12
- (iv)

Weight (in kg)	45 - 55	56 - 66	67 - 77	78 - 88	89 - 99	100 - 110	111 - 121
No. of students	11	12	18	18	14	5	18

If the mean of the following frequency distribution is $55\frac{47}{64}$,

find the value of 'x'.

22.

Class-Interval	Frequency
10 - 20	8
21 - 31	5
32 - 42	9
43 - 53	7
54 - 64	8
65 - 75	10
76 - 86	8
87 - 97	x

- (i) 9 (ii) 11 (iii) 10 (iv) 7 (v) 8

A frequency distribution table is given below. Find the median .

23.

Class-Interval	19 - 29	29 - 39	39 - 49	49 - 59	59 - 69	69 - 79
Frequency	6	46	30	6	41	41

- (i) 54 (ii) 56 (iii) 52 (iv) 55 (v) 53

If the sum of the following frequency distribution is 30 ,
find the value of 'x'.

24.

Value	Frequency
2	4
3	3
4	2
5	x
6	4
7	4
8	5
9	3
10	3

(i) 3 (ii) 4 (iii) 1 (iv) 2 (v) -1

Rainfall of 20 days are given below. Find the median.

25.

Rainfall (in mm)	6	7	8	10	11	12	13	15
No. of days	3	3	2	4	3	2	2	1

(i) 12mm (ii) 8mm (iii) 11mm (iv) 10mm (v) 9mm

Assignment Key

1) (i)	2) (iv)	3) (v)	4) (iv)	5) (v)	6) (ii)
7) (iii)	8) (ii)	9) (iv)	10) (v)	11) (v)	12) (ii)
13) (v)	14) (iii)	15) (i)	16) (v)	17) (ii)	18) (iii)
19) (v)	20) (v)	21) (i)	22) (i)	23) (i)	24) (iv)
25) (iv)					