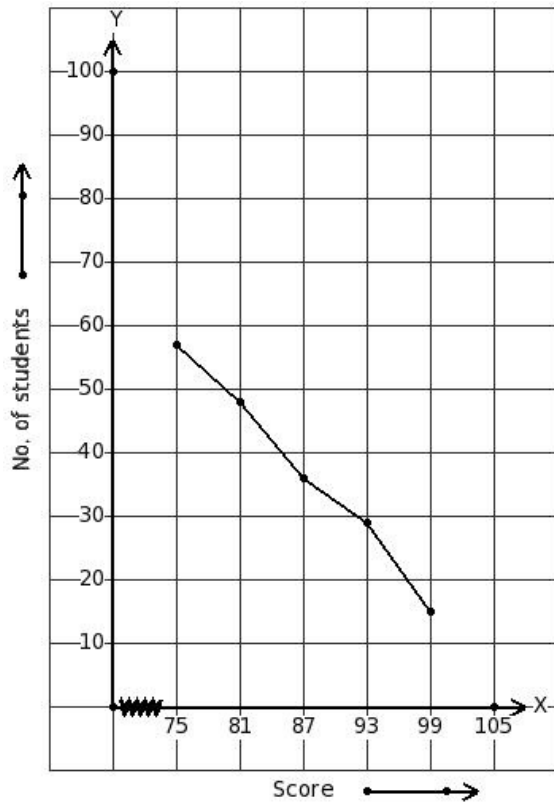




1. Scores of 57 students are given below. Identify the frequency distribution table for the given 'more than' ogive.



(i)

Score	75 - 81	81 - 87	87 - 93	93 - 99	99 - 105
No. of students	9	12	4	14	15

(ii)

Score	75 - 81	81 - 87	87 - 93	93 - 99	99 - 105
No. of students	9	15	7	14	12

(iii)

Score	75 - 81	81 - 87	87 - 93	93 - 99	99 - 105
No. of students	9	12	7	14	15

(iv)

Score	75 - 81	81 - 87	87 - 93	93 - 99	99 - 105
No. of students	9	7	12	14	15

(v)

Score	75 - 81	81 - 87	87 - 93	93 - 99	99 - 105
No. of students	9	8	7	14	15

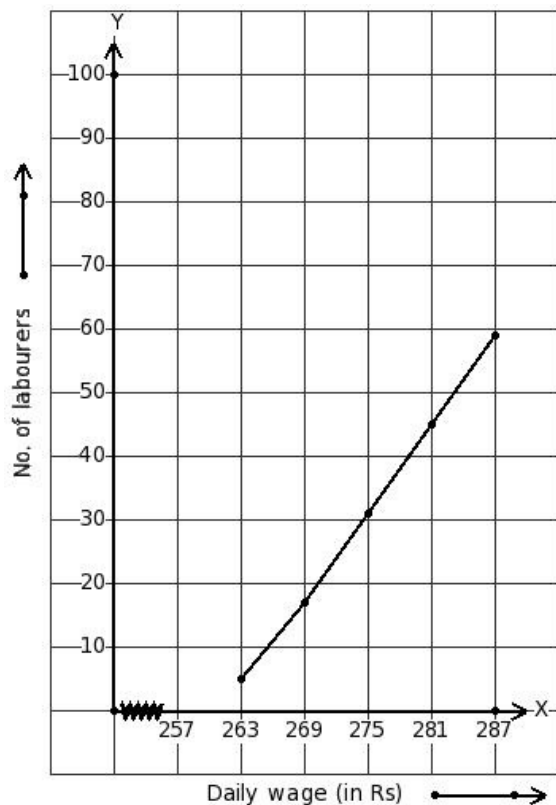
The following table shows the weights of 110 persons in a group. Find the mode weight.

2.

Weight (in kg)	10 - 18	18 - 26	26 - 34	34 - 42	42 - 50	50 - 58	58 - 66	66 - 74
No. of persons	20	19	11	14	12	15	8	11

- (i) $\frac{391}{21}$ kg (ii) $\frac{370}{21}$ kg (iii) $\frac{412}{21}$ kg (iv) $\frac{53}{3}$ kg (v) $\frac{124}{7}$ kg

3. Daily wages of 59 labourers (in ₹) are given below. Identify the frequency distribution table for the given 'less than' ogive.



- (i)
- | Daily wage (in Rs) | 257 - 263 | 263 - 269 | 269 - 275 | 275 - 281 | 281 - 287 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 5 | 7 | 14 | 14 | 14 |
- (ii)
- | Daily wage (in Rs) | 257 - 263 | 263 - 269 | 269 - 275 | 275 - 281 | 281 - 287 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 5 | 14 | 14 | 14 | 12 |
- (iii)
- | Daily wage (in Rs) | 257 - 263 | 263 - 269 | 269 - 275 | 275 - 281 | 281 - 287 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 5 | 12 | 14 | 14 | 14 |
- (iv)
- | Daily wage (in Rs) | 257 - 263 | 263 - 269 | 269 - 275 | 275 - 281 | 281 - 287 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 5 | 12 | 18 | 14 | 14 |
- (v)
- | Daily wage (in Rs) | 257 - 263 | 263 - 269 | 269 - 275 | 275 - 281 | 281 - 287 |
|--------------------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 5 | 14 | 12 | 14 | 14 |

Temperatures of 31 days are given below. Find the mode.

4. Temperature (in degree C)	25	26	27	29	31	32	33	34	35
No. of days	2	2	5	2	4	3	4	7	2

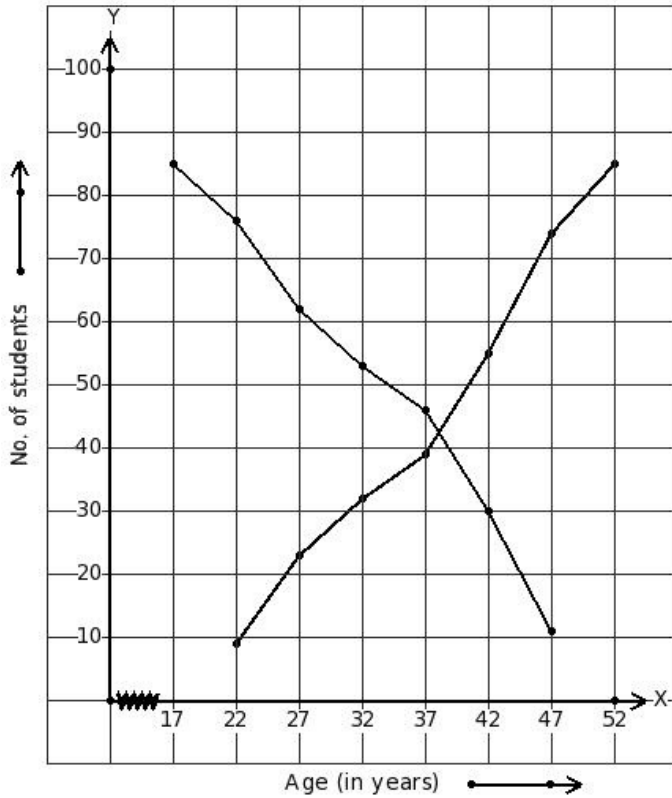
- (i) 36°C (ii) 35°C (iii) 32°C (iv) 34°C (v) 33°C

The following table shows the weights of 52 persons in a group. Find the mean weight.

5. Weight (in kg)	40 - 48	49 - 57	58 - 66	67 - 75	76 - 84
No. of persons	6	6	14	20	6

- (i) $\frac{1675}{26}$ kg (ii) $\frac{1727}{26}$ kg (iii) $\frac{838}{13}$ kg (iv) $\frac{129}{2}$ kg (v) $\frac{1701}{26}$ kg

6. Ages of 85 students (in years) are given below. Identify the frequency distribution table for the given 'median ogive'.



(i)

Age (in years)	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42	42 - 47	47 - 52
No. of students	9	14	14	7	16	19	11

(ii)

Age (in years)	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42	42 - 47	47 - 52
No. of students	9	14	9	5	16	19	11

(iii)

Age (in years)	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42	42 - 47	47 - 52
No. of students	9	14	9	7	16	19	11

(iv)

Age (in years)	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42	42 - 47	47 - 52
No. of students	9	11	9	7	16	19	14

(v)

Age (in years)	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42	42 - 47	47 - 52
No. of students	9	9	14	7	16	19	11

Construct a frequency distribution table from the following cumulative frequency distribution

Class-Interval	Cumulative Frequency
14 - 19	10
19 - 24	23
24 - 29	37
29 - 34	45
34 - 39	50
39 - 44	59
44 - 49	65

7.

(i)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49
Frequency	10	13	14	6	5	9	6

(ii)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49
Frequency	10	14	13	8	5	9	6

(iii)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49
Frequency	10	13	18	8	5	9	6

(iv)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49
Frequency	10	6	14	8	5	9	13

(v)

Class-Interval	14 - 19	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49
Frequency	10	13	14	8	5	9	6

If the mean of the following frequency distribution is $5\frac{18}{23}$,

find the value of 'x'.

Value	Frequency
2	3
3	4
4	x
5	3
7	3
8	3
9	1
10	1
12	2

8.

- (i) 0 (ii) 6 (iii) 4 (iv) 3 (v) 2

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

9.

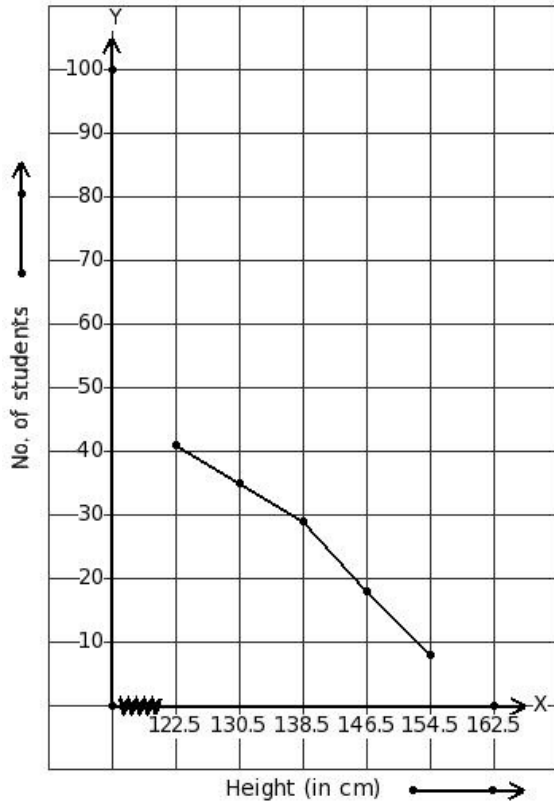
Temperature (in degree C)	25	27	28	30	31	32	35
No. of days	4	2	3	3	2	2	4

- (i) 29°C (ii) 32°C (iii) 31°C (iv) 28°C (v) 30°C

10. Less 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) lower boundaries of classes and less than cumulative frequencies
- (iv) mid values of classes and less than cumulative frequencies

11. Heights of 41 students (in cm) are given below. Identify the frequency distribution table for the given 'more than' ogive.



(i)

Height (in cm)	123 - 130	131 - 138	139 - 146	147 - 154	155 - 162
No. of students	6	6	14	10	8

(ii)

Height (in cm)	123 - 130	131 - 138	139 - 146	147 - 154	155 - 162
No. of students	6	11	6	10	8

(iii)

Height (in cm)	123 - 130	131 - 138	139 - 146	147 - 154	155 - 162
No. of students	6	10	11	10	8

(iv)

Height (in cm)	123 - 130	131 - 138	139 - 146	147 - 154	155 - 162
No. of students	6	8	11	10	6

(v)

Height (in cm)	123 - 130	131 - 138	139 - 146	147 - 154	155 - 162
No. of students	6	6	11	10	8

The following table shows the weights of 77 persons in a group. Find the median weight.

12.

Weight (in kg)	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
No. of persons	6	5	6	13	11	20	16

- (i) $\frac{1187}{22}$ kg (ii) $\frac{593}{11}$ kg (iii) $\frac{1207}{22}$ kg (iv) $\frac{1185}{22}$ kg (v) $\frac{1229}{22}$ kg

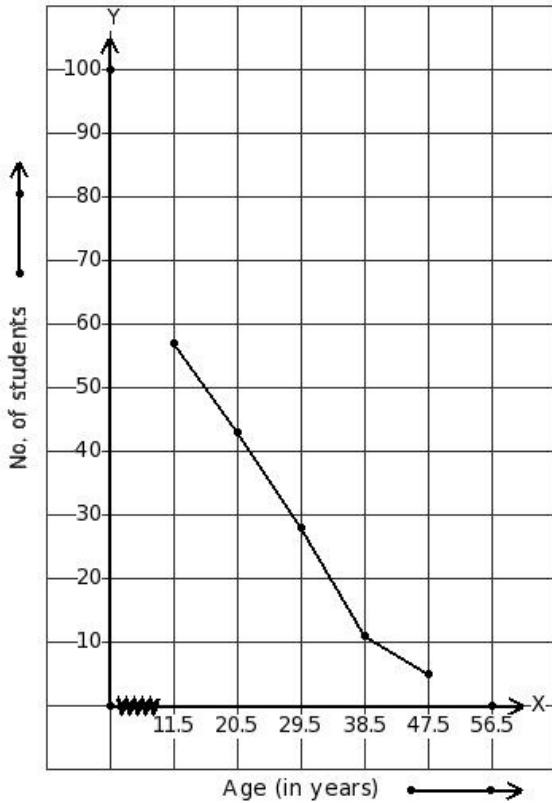
Wages of 20 labourers are given below. Find the mean.

13.

Wage (in rupees)	303	344	352	387	435	453	497
No. of labourers	1	4	2	2	4	5	2

- (i) ₹408.00 (ii) ₹408.80 (iii) ₹409.80 (iv) ₹407.80 (v) ₹408.20

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



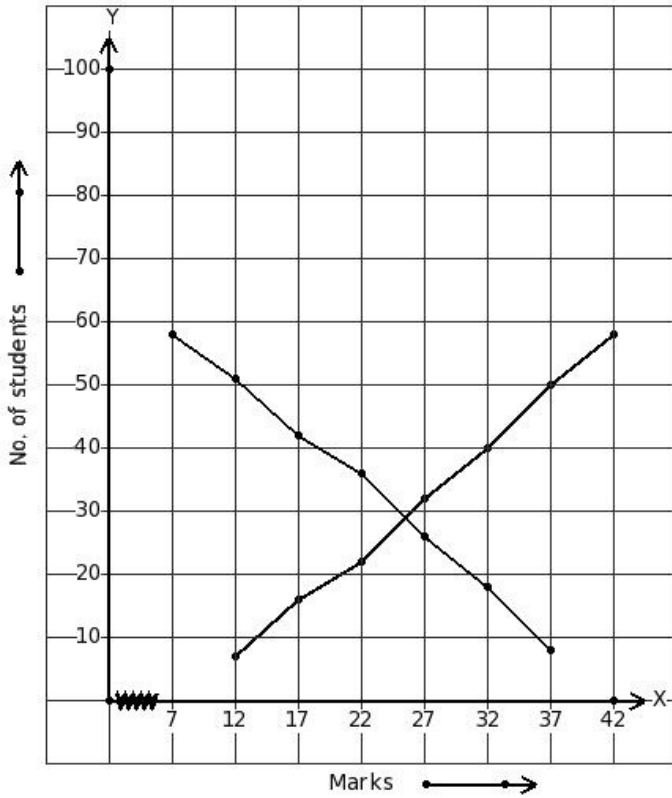
- (i)
- | Age (in years) | 12 - 20 | 21 - 29 | 30 - 38 | 39 - 47 | 48 - 56 |
|-----------------|---------|---------|---------|---------|---------|
| No. of students | 14 | 12 | 17 | 6 | 5 |
- (ii)
- | Age (in years) | 12 - 20 | 21 - 29 | 30 - 38 | 39 - 47 | 48 - 56 |
|-----------------|---------|---------|---------|---------|---------|
| No. of students | 14 | 17 | 15 | 6 | 5 |
- (iii)
- | Age (in years) | 12 - 20 | 21 - 29 | 30 - 38 | 39 - 47 | 48 - 56 |
|-----------------|---------|---------|---------|---------|---------|
| No. of students | 14 | 15 | 17 | 6 | 5 |
- (iv)
- | Age (in years) | 12 - 20 | 21 - 29 | 30 - 38 | 39 - 47 | 48 - 56 |
|-----------------|---------|---------|---------|---------|---------|
| No. of students | 14 | 5 | 17 | 6 | 15 |
- (v)
- | Age (in years) | 12 - 20 | 21 - 29 | 30 - 38 | 39 - 47 | 48 - 56 |
|-----------------|---------|---------|---------|---------|---------|
| No. of students | 14 | 15 | 21 | 6 | 5 |

The following frequency distribution table gives the monthly consumption of electricity of 91 consumers in a locality. Find the mode units.

- 15.
- | Monthly consumption (in units) | 42 - 62 | 62 - 82 | 82 - 102 | 102 - 122 | 122 - 142 | 142 - 162 |
|--------------------------------|---------|---------|----------|-----------|-----------|-----------|
| No. of consumers | 12 | 22 | 6 | 23 | 17 | 11 |

- (i) $\frac{2688}{23}$ units (ii) $\frac{2687}{23}$ units (iii) $\frac{2686}{23}$ units (iv) $\frac{2709}{23}$ units (v) $\frac{2732}{23}$ units

16. The Marks obtained by 58 students of a class in an examination is given below. Identify the frequency distribution table for the given 'median' ogive.



(i)

Marks	7 - 12	12 - 17	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42
No. of students	7	8	6	10	8	10	9

(ii)

Marks	7 - 12	12 - 17	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42
No. of students	7	9	6	10	8	10	8

(iii)

Marks	7 - 12	12 - 17	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42
No. of students	7	9	1	10	8	10	8

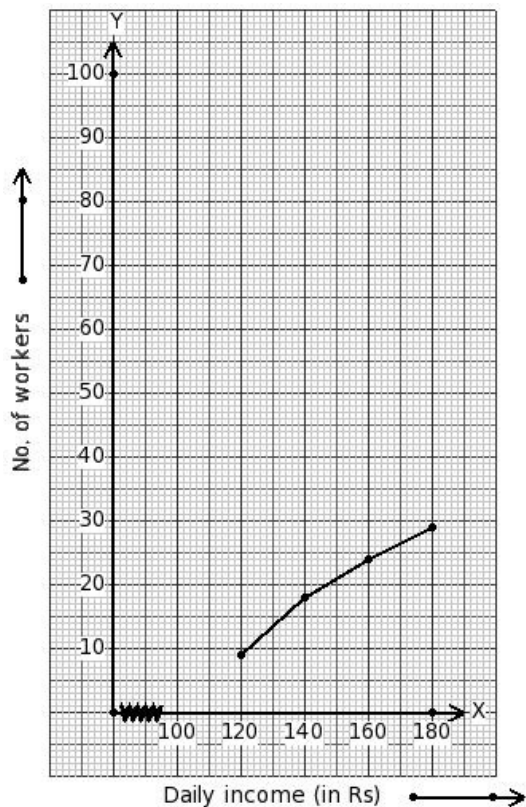
(iv)

Marks	7 - 12	12 - 17	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42
No. of students	7	6	9	10	8	10	8

(v)

Marks	7 - 12	12 - 17	17 - 22	22 - 27	27 - 32	32 - 37	37 - 42
No. of students	7	9	6	15	8	10	8

17. The daily income of 29 workers of a factory is given below. Identify the frequency distribution table for the given less than ogive.



- (i)

Daily income (in Rs)	less than 120	less than 140	less than 160	less than 180
No. of workers	9	18	21	26
- (ii)

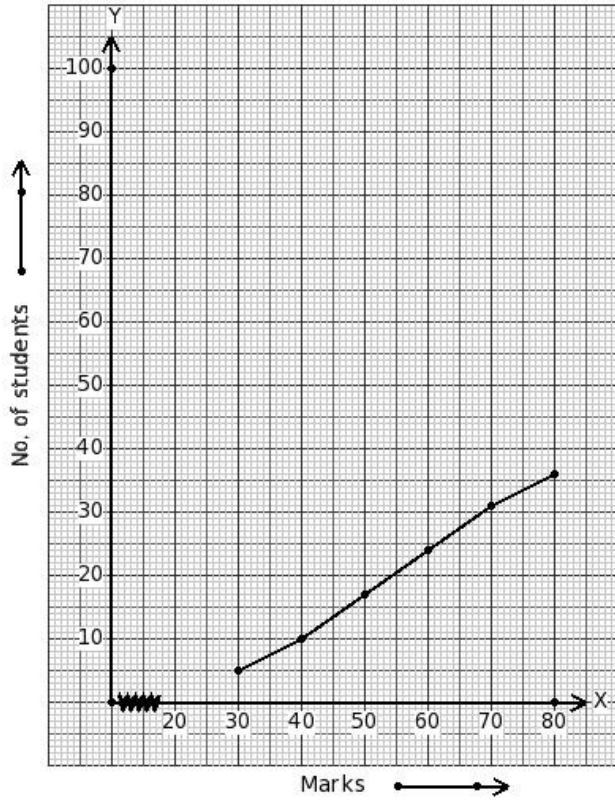
Daily income (in Rs)	less than 120	less than 140	less than 160	less than 180
No. of workers	5	14	20	29
- (iii)

Daily income (in Rs)	less than 120	less than 140	less than 160	less than 180
No. of workers	9	15	24	29
- (iv)

Daily income (in Rs)	less than 120	less than 140	less than 160	less than 180
No. of workers	9	20	26	31
- (v)

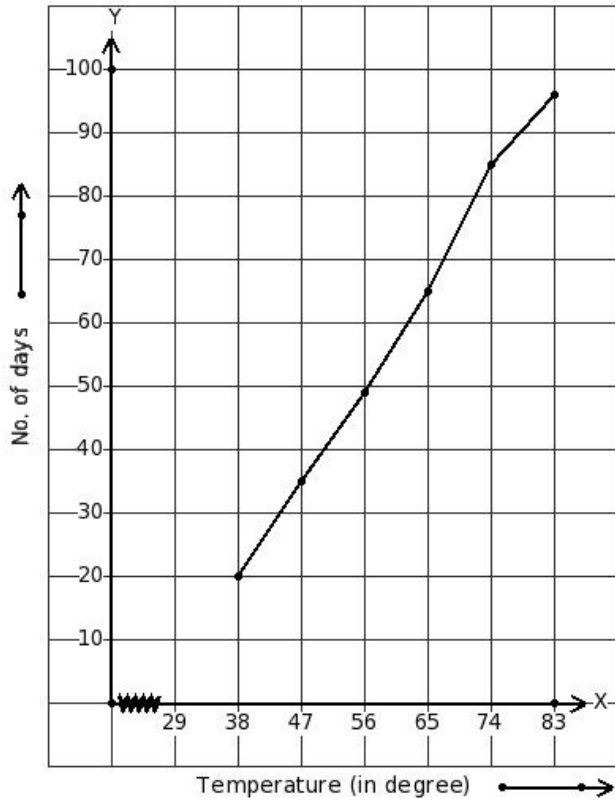
Daily income (in Rs)	less than 120	less than 140	less than 160	less than 180
No. of workers	9	18	24	29

18. The marks obtained by 36 students of a class in an examination is given below. Identify the frequency distribution table for the given less than ogive.



- (i)
- | Marks | less than 30 | less than 40 | less than 50 | less than 60 | less than 70 | less than 80 |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| No. of students | 5 | 12 | 17 | 24 | 31 | 36 |
- (ii)
- | Marks | less than 30 | less than 40 | less than 50 | less than 60 | less than 70 | less than 80 |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| No. of students | 5 | 10 | 17 | 21 | 28 | 33 |
- (iii)
- | Marks | less than 30 | less than 40 | less than 50 | less than 60 | less than 70 | less than 80 |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| No. of students | 5 | 10 | 17 | 24 | 31 | 36 |
- (iv)
- | Marks | less than 30 | less than 40 | less than 50 | less than 60 | less than 70 | less than 80 |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| No. of students | 5 | 10 | 15 | 22 | 29 | 34 |

19. Temperatures of 96 days (in °C) are given below. Identify the frequency distribution table for the given 'less than' ogive.



- (i)

Temperature (in degree)	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74	74 - 83
No. of days	20	15	9	16	20	11
- (ii)

Temperature (in degree)	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74	74 - 83
No. of days	20	15	14	20	20	11
- (iii)

Temperature (in degree)	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74	74 - 83
No. of days	20	14	15	16	20	11
- (iv)

Temperature (in degree)	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74	74 - 83
No. of days	20	11	14	16	20	15
- (v)

Temperature (in degree)	29 - 38	38 - 47	47 - 56	56 - 65	65 - 74	74 - 83
No. of days	20	15	14	16	20	11

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

20.

Class-Interval	5 - 15	16 - 26	27 - 37	38 - 48	49 - 59
Frequency	28	1	49	12	18

- (i) $\frac{187}{6}$ (ii) $\frac{385}{12}$ (iii) $\frac{125}{4}$ (iv) $\frac{397}{12}$ (v) $\frac{373}{12}$

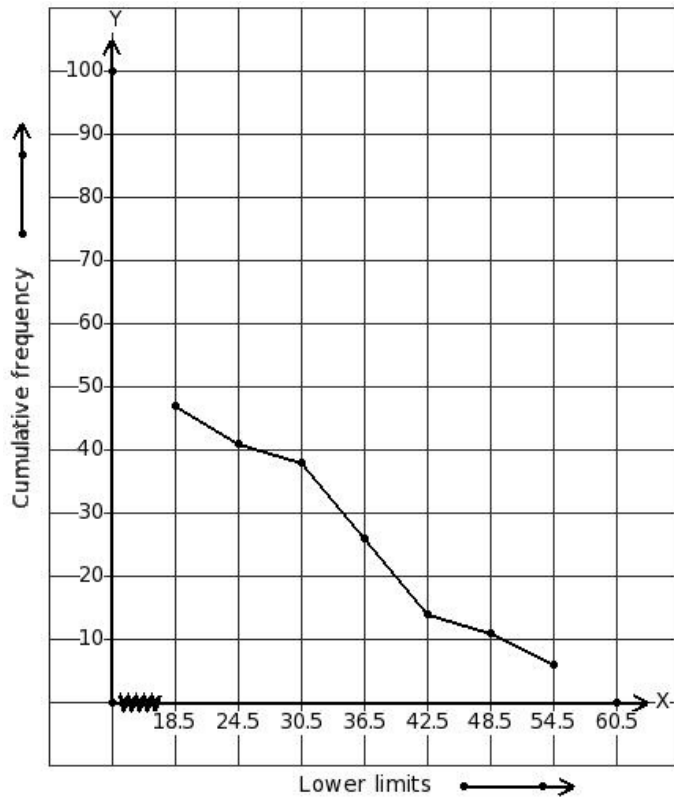
Weights of 10 students are given below. Find the mean.

21.

Weight (in kg)	49	51	53	54	57
No. of students	2	2	1	3	2

- (i) $\frac{531}{10}$ kg (ii) $\frac{539}{10}$ kg (iii) $\frac{529}{10}$ kg (iv) 53kg (v) $\frac{549}{10}$ kg

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



(i)

Class-Interval	19 - 24	25 - 30	31 - 36	37 - 42	43 - 48	49 - 54	55 - 60
Frequency	10	20	14	11	15	11	13

(ii)

Class-Interval	19 - 24	25 - 30	31 - 36	37 - 42	43 - 48	49 - 54	55 - 60
Frequency	5	8	1	9	19	11	2

(iii)

Class-Interval	19 - 24	25 - 30	31 - 36	37 - 42	43 - 48	49 - 54	55 - 60
Frequency	6	12	18	15	5	12	2

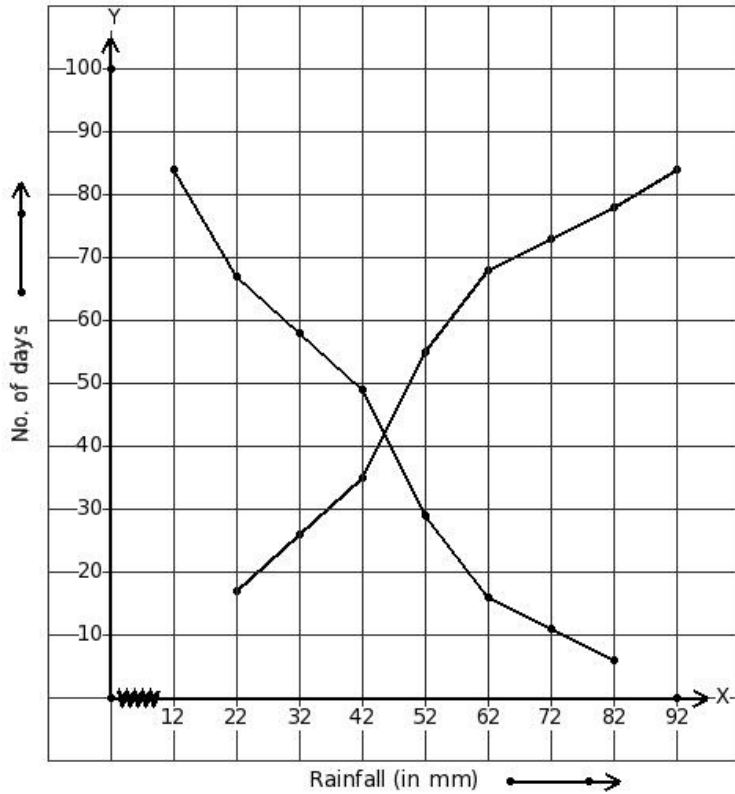
(iv)

Class-Interval	19 - 24	25 - 30	31 - 36	37 - 42	43 - 48	49 - 54	55 - 60
Frequency	3	17	4	18	19	6	17

(v)

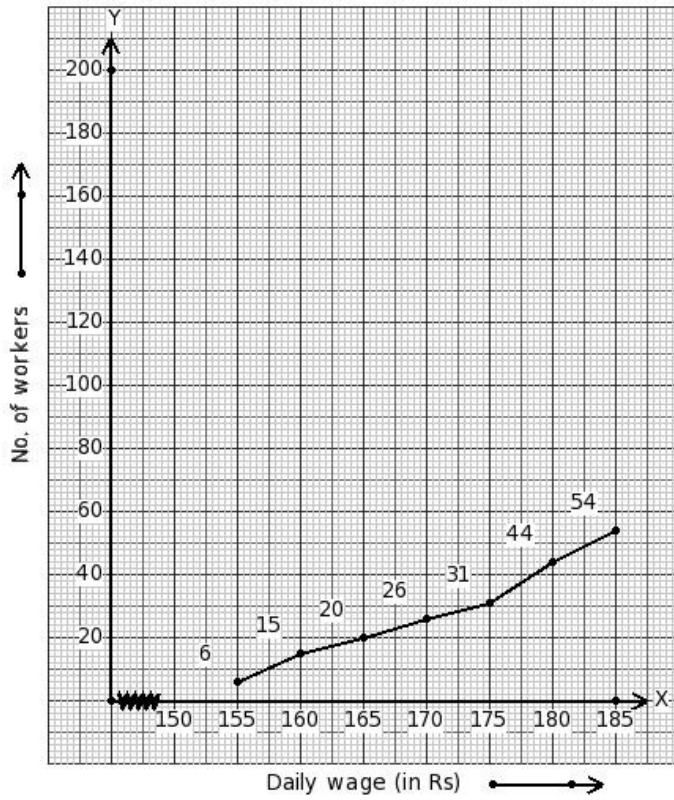
Class-Interval	19 - 24	25 - 30	31 - 36	37 - 42	43 - 48	49 - 54	55 - 60
Frequency	6	3	12	12	3	5	6

23. Rainfall of 84 days (in mm) are given below. Identify the frequency distribution table for the given 'ogive'.



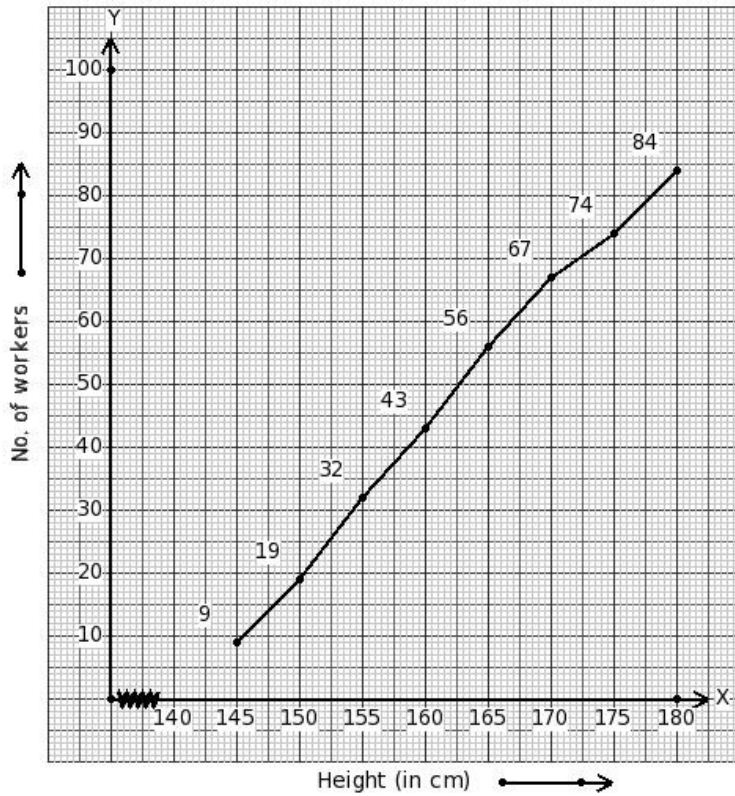
- (i)
- | Rainfall (in mm) | 12 - 22 | 22 - 32 | 32 - 42 | 42 - 52 | 52 - 62 | 62 - 72 | 72 - 82 | 82 - 92 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 17 | 9 | 9 | 20 | 13 | 5 | 5 | 6 |
- (ii)
- | Rainfall (in mm) | 12 - 22 | 22 - 32 | 32 - 42 | 42 - 52 | 52 - 62 | 62 - 72 | 72 - 82 | 82 - 92 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 17 | 9 | 13 | 20 | 13 | 5 | 5 | 6 |
- (iii)
- | Rainfall (in mm) | 12 - 22 | 22 - 32 | 32 - 42 | 42 - 52 | 52 - 62 | 62 - 72 | 72 - 82 | 82 - 92 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 17 | 9 | 20 | 9 | 13 | 5 | 5 | 6 |
- (iv)
- | Rainfall (in mm) | 12 - 22 | 22 - 32 | 32 - 42 | 42 - 52 | 52 - 62 | 62 - 72 | 72 - 82 | 82 - 92 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 17 | 6 | 9 | 20 | 13 | 5 | 5 | 9 |
- (v)
- | Rainfall (in mm) | 12 - 22 | 22 - 32 | 32 - 42 | 42 - 52 | 52 - 62 | 62 - 72 | 72 - 82 | 82 - 92 |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| No. of days | 17 | 9 | 9 | 20 | 11 | 5 | 5 | 6 |

24. The following ogive shows the daily wages of workers in a factory. Estimate the median.



- (i) ₹168.50 (ii) ₹171.00 (iii) ₹169.75 (iv) ₹173.50 (v) ₹172.25

25. The following ogive shows the distribution of the heights of a group of factory workers. Estimate the median.



- (i) 158.30 cm (ii) 162.05 cm (iii) 157.05 cm (iv) 159.55 cm (v) 160.80 cm

Assignment Key

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