EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Frequency Distribution Tables and Graphs

Grade : SSC Grade VIII

The daily wages (in rupees) of 17 workers in a factory are given below.

1. Represent the data in the form of a frequency distribution in exclusive form taking class size 20.

247 298 243 245 265 254 243 229 261 205 209 259 252 281 266 278 257

(i)

Wages (in rupees)	205 - 225	225 - 245	245 - 265	265 - 285	285 - 305
No. of Workers	2	7	3	4	1

(ii)

Wages (in rupees)	205 - 225	225 - 245	245 - 265	265 - 285	285 - 305
No. of Workers	2	8	7	4	1

(iii)

Wages (in rupees)	205 - 225	225 - 245	245 - 265	265 - 285	285 - 305
No. of Workers	2	3	7	4	1

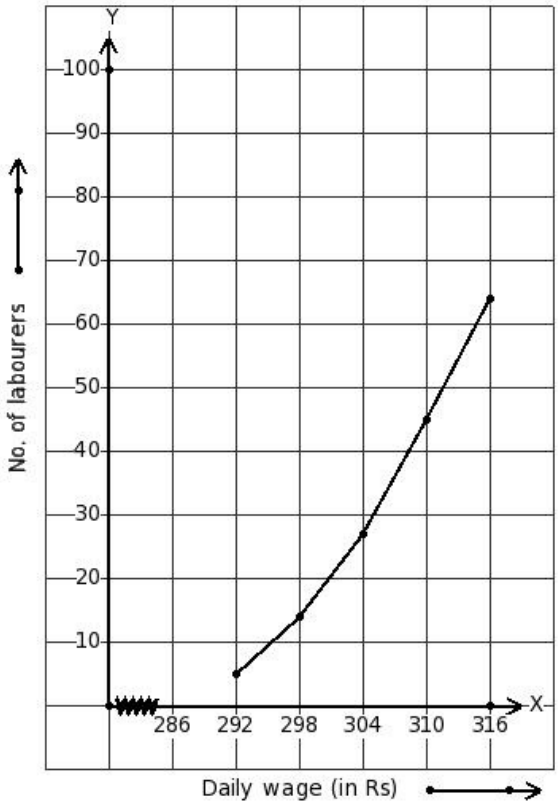
(iv)

Wages (in rupees)	205 - 225	225 - 245	245 - 265	265 - 285	285 - 305
No. of Workers	2	1	7	4	3

(v)

Wages (in rupees)	205 - 225	225 - 245	245 - 265	265 - 285	285 - 305
No. of Workers	2	3	9	4	1

2. Daily wages of 64 labourers (in ₹) are given below. Identify the frequency distribution table for the given 'less than ' ogive.



(i)

Daily wage (in Rs)	286 - 292	292 - 298	298 - 304	304 - 310	310 - 316
No. of labourers	5	4	13	18	19

(ii)

Daily wage (in Rs)	286 - 292	292 - 298	298 - 304	304 - 310	310 - 316
No. of labourers	5	13	9	18	19

(iii)

Daily wage (in Rs)	286 - 292	292 - 298	298 - 304	304 - 310	310 - 316
No. of labourers	5	9	8	18	19

(iv)

Daily wage (in Rs)	286 - 292	292 - 298	298 - 304	304 - 310	310 - 316
No. of labourers	5	19	13	18	9

(v)

Daily wage (in Rs)	286 - 292	292 - 298	298 - 304	304 - 310	310 - 316
No. of labourers	5	9	13	18	19

3. The upper limit of the class with frequency x is

Class-Interval	**Frequency**
10 - 18	2
18 - 26	x
26 - 34	2
34 - 42	10
42 - 50	2

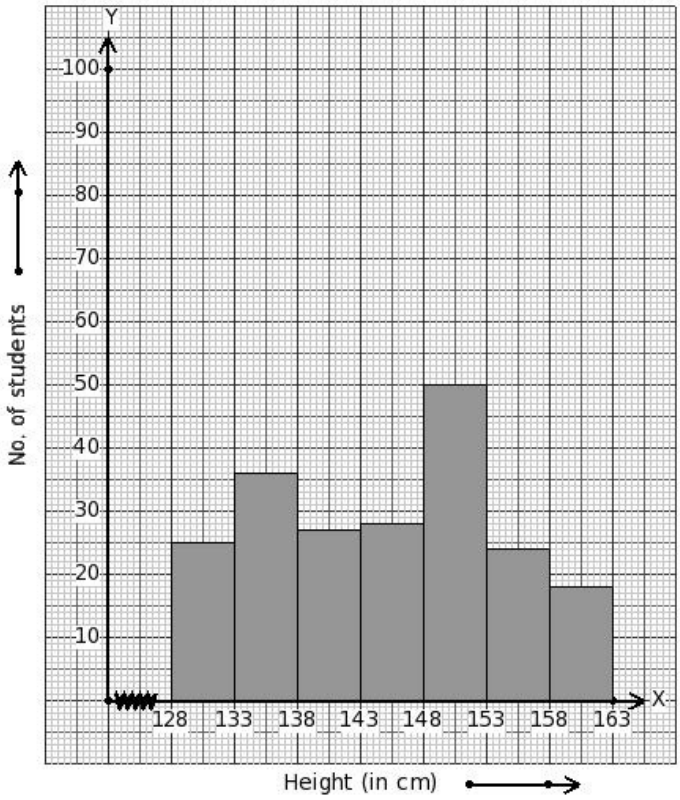
(i) 29 (ii) 27 (iii) 23 (iv) 25 (v) 26

4. Daily wages of 14 labourers (in ₹) are given below. Find the median wage.

410 342 442 435 301 314 451 431 491 474 342 407 325 414

(i) ₹414.00 (ii) ₹413.00 (iii) ₹412.00 (iv) ₹411.00 (v) ₹410.00

5. Heights of 208 students (in cm) are given below. Identify the class interval table for the given histogram.



(i)

Height (in cm)	128 - 133	133 - 138	138 - 143	143 - 148	148 - 153	153 - 158	158 - 163
No. of students	25	36	27	30	50	24	18

(ii)

Height (in cm)	128 - 133	133 - 138	138 - 143	143 - 148	148 - 153	153 - 158	158 - 163
No. of students	25	18	27	28	50	24	36

(iii)

Height (in cm)	128 - 133	133 - 138	138 - 143	143 - 148	148 - 153	153 - 158	158 - 163
No. of students	25	36	32	28	50	24	18

(iv)

Height (in cm)	128 - 133	133 - 138	138 - 143	143 - 148	148 - 153	153 - 158	158 - 163
No. of students	25	36	27	28	50	24	18

(v)

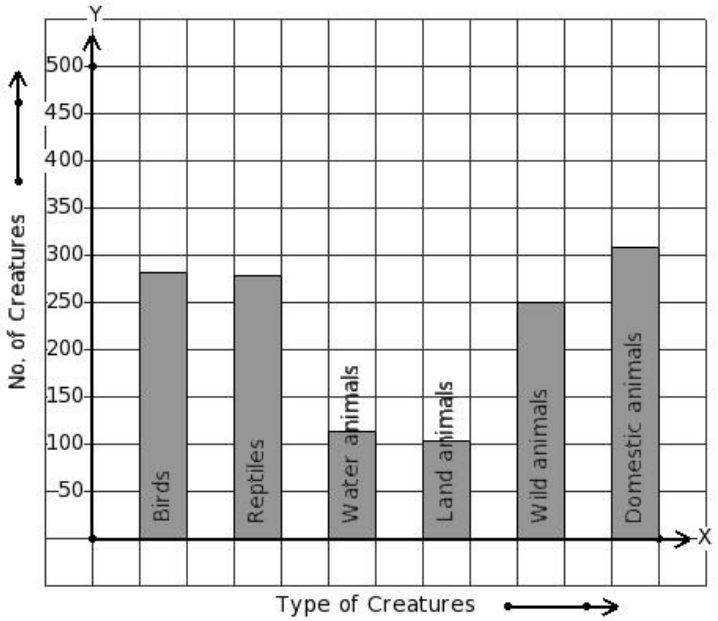
Height (in cm)	128 - 133	133 - 138	138 - 143	143 - 148	148 - 153	153 - 158	158 - 163
No. of students	25	27	36	28	50	24	18

6. The marks obtained by 14 students in a test are given below. Find the mean of their marks when the marks of each student is increased by 7.

25 35 18 20 13 4 36 15 15 20 41 8 39 48

(i) $\frac{437}{14}$ (ii) $\frac{373}{12}$ (iii) $\frac{433}{14}$ (iv) $\frac{435}{14}$ (v) $\frac{497}{16}$

7. There are certain creatures in a zoo. Find the type of creature that has minimum presense in the zoo.



(i) Land animals (ii) Water animals (iii) Birds (iv) Domestic animals (v) Wild animals

8. Convert the discontinuous form of the class interval 13 - 16 to continuous form

(i) 12.5-17 (ii) 12.5-16.5 (iii) 12-17 (iv) 12-16.5 (v) 13-16

9. Heights of 14 plants (in cm) are given below. Find the median height.
88 58 54 58 73 96 93 56 88 93 87 88 96 64

(i) $\frac{175}{2}$ cm (ii) 88 cm (iii) $\frac{177}{2}$ cm (iv) $\frac{179}{2}$ cm

10. During the medical check-up of 73 students of a class, their weights in kgs are recorded as follows. Identify the number of students whose weight is less than 75 kg

Class-Interval	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75
Frequency	5	11	11	6	12	7	11	10

(i) 71 (ii) 74 (iii) 72 (iv) 75 (v) 73

11. The marks obtained by 15 students in an examination are given below.
Represent the data in the form of a frequency distribution table in exclusive form taking class size 5.
58 62 80 72 41 55 46 57 73 51 76 67 70 52 44

(i)

Marks	41 - 46	46 - 51	51 - 56	56 - 61	61 - 66	66 - 71	71 - 76	76 - 81
No. of Students	2	2	3	2	1	2	2	1

(ii)

Marks	41 - 46	46 - 51	51 - 56	56 - 61	61 - 66	66 - 71	71 - 76	76 - 81
No. of Students	2	1	3	2	5	2	2	2

(iii)

Marks	41 - 46	46 - 51	51 - 56	56 - 61	61 - 66	66 - 71	71 - 76	76 - 81
No. of Students	2	1	3	2	1	2	2	2

(iv)

Marks	41 - 46	46 - 51	51 - 56	56 - 61	61 - 66	66 - 71	71 - 76	76 - 81
No. of Students	2	1	7	2	1	2	2	2

(v)

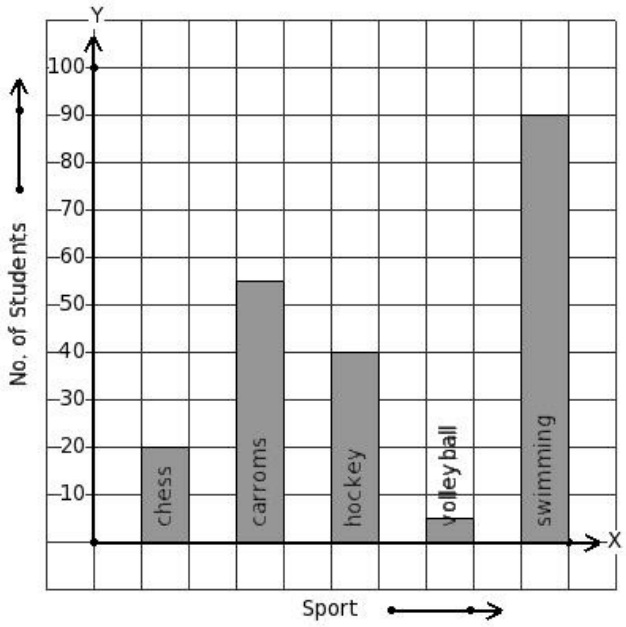
Marks	41 - 46	46 - 51	51 - 56	56 - 61	61 - 66	66 - 71	71 - 76	76 - 81
No. of Students	2	1	2	3	1	2	2	2

12. During the medical check-up of 29 students of a class, their weights in kgs are recorded as follows. Identify the number of students whose weight is more than 53 kg

Class-Interval	38 - 43	43 - 48	48 - 53	53 - 58
Frequency	7	8	7	7

(i) 10 (ii) 7 (iii) 6 (iv) 8 (v) 5

13. Given the bar graph, find the maximum frequency



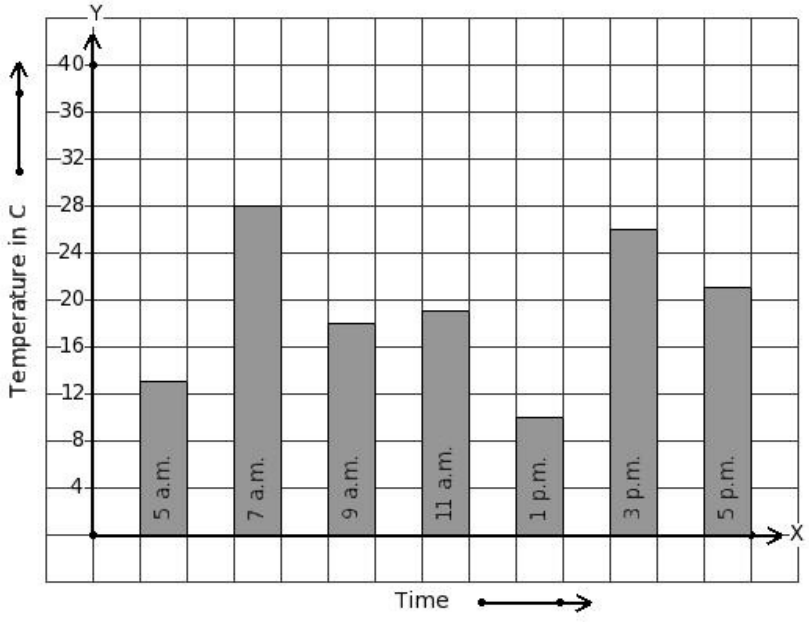
(i) 85 (ii) 95 (iii) 105 (iv) 100 (v) 90

14. Scores of 13 students are given below. Find the mean score.

87 87 80 74 71 75 78 80 83 84 74 81 73

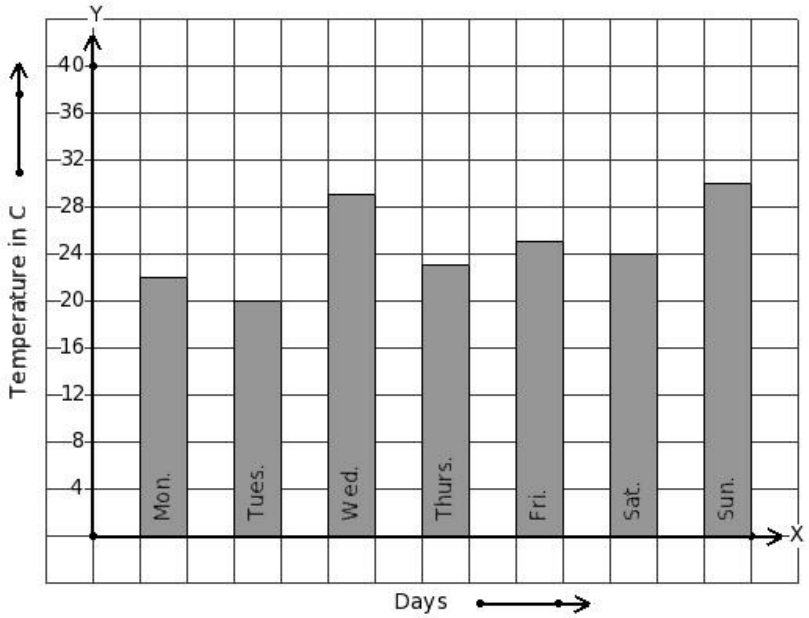
(i) 81 (ii) 78 (iii) 79 (iv) 77 (v) 80

15. On a certain day, the temperature in a city was recorded as shown below. Find the time that has maximum temperature.



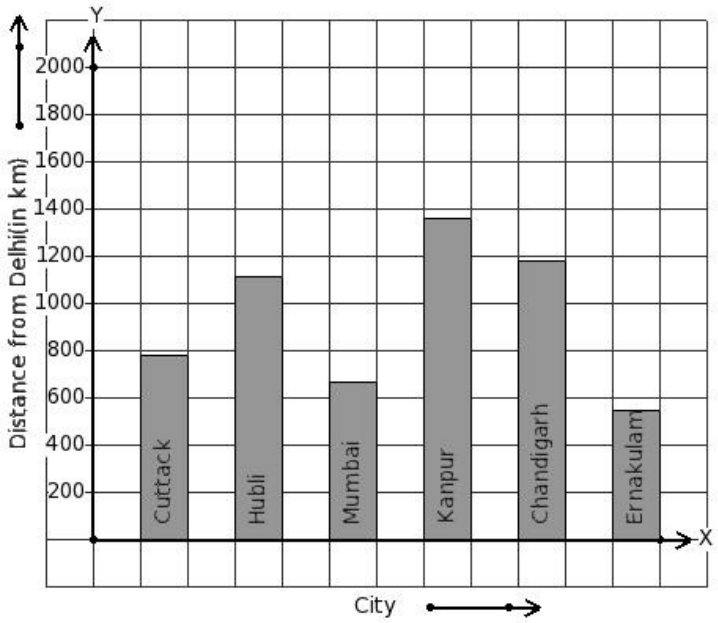
(i) 1 p.m. (ii) 5 p.m. (iii) 3 p.m. (iv) 7 a.m. (v) 11 a.m.

16. Following bar graph gives the average temperature of a place during a week. Find the day that has minimum temperature.



(i) Sat. (ii) Tues. (iii) Fri. (iv) Wed. (v) Thurs.

17. The air distance of some cities from Delhi (in km) are given below. Find the city that has 546 km distance.



(i) Ernakulam (ii) Kanpur (iii) Chandigarh (iv) Hubli (v) Mumbai

18. Construct a frequency distribution table from the following cumulative frequency distribution

Class-Interval	Cumulative Frequency
16 - 23	8
23 - 30	13
30 - 37	28
37 - 44	44
44 - 51	50
51 - 58	57

(i)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51	51 - 58
Frequency	8	15	5	16	6	7

(ii)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51	51 - 58
Frequency	8	5	20	16	6	7

(iii)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51	51 - 58
Frequency	8	5	15	16	6	7

(iv)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51	51 - 58
Frequency	8	5	15	12	6	7

(v)

Class-Interval	16 - 23	23 - 30	30 - 37	37 - 44	44 - 51	51 - 58
Frequency	8	7	15	16	6	5

19. Given the sample data, prepare the class interval table in inclusive form with 4 as min value and a class size of 7 .

35 4 9 23 45 6 23 48 15 23 13 31 50 27 14 37 36 28 24

(i)

Class-Interval	4 - 10	11 - 17	18 - 24	25 - 31	32 - 38	39 - 45	46 - 52
Frequency	3	2	4	3	3	1	3

(ii)

Class-Interval	4 - 10	11 - 17	18 - 24	25 - 31	32 - 38	39 - 45	46 - 52
Frequency	3	4	3	3	3	1	2

(iii)

Class-Interval	4 - 11	11 - 18	18 - 25	25 - 32	32 - 39	39 - 46	46 - 53
Frequency	3	3	4	3	3	1	2

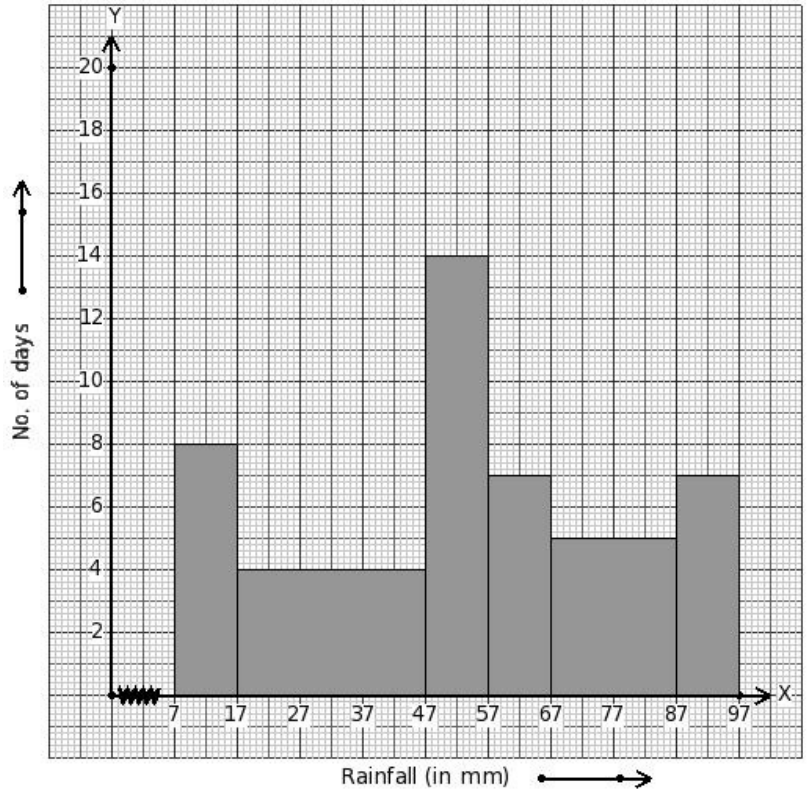
(iv)

Class-Interval	4 - 10	11 - 17	18 - 24	25 - 31	32 - 38	39 - 45	46 - 52
Frequency	3	3	4	3	3	1	2

(v)

Class-Interval	4 - 10	11 - 17	18 - 24	25 - 31	32 - 38	39 - 45	46 - 52
Frequency	3	3	9	3	3	1	2

20. Which of the following tables represent the given histogram with varying base widths



(i)

Rainfall (in mm)	7 - 17	17 - 47	47 - 57	57 - 67	67 - 87	87 - 97
No. of days	8	4	14	3	5	7

(ii)

Rainfall (in mm)	7 - 17	17 - 47	47 - 57	57 - 67	67 - 87	87 - 97
No. of days	8	12	14	5	10	7

(iii)

Rainfall (in mm)	7 - 17	17 - 47	47 - 57	57 - 67	67 - 87	87 - 97
No. of days	8	4	14	7	5	7

(iv)

Rainfall (in mm)	7 - 17	17 - 47	47 - 57	57 - 67	67 - 87	87 - 97
No. of days	8	12	12	7	10	7

(v)

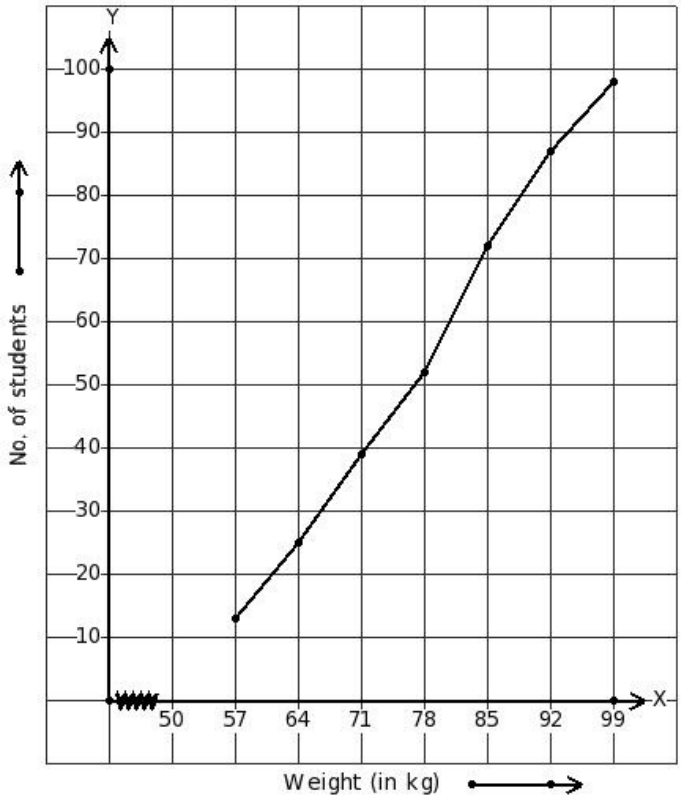
Rainfall (in mm)	7 - 17	17 - 47	47 - 57	57 - 67	67 - 87	87 - 97
No. of days	8	12	14	7	10	7

21. The class marks of a frequency distribution are 32.5 , 40.5 , 48.5 , 56.5 .
Find the class size and class intervals in inclusive form

(i) 8;30-37,38-45,46-53,54-61 (ii) 7;29-36,36-43,43-50,50-57 (iii) 8;28-35,36-43,44-51,52-59

(iv) 8;28-36,36-44,44-52,52-60 (v) 8;29-36,37-44,45-52,53-60

22. Weights of 98 students (in kg) are given below. Identify the frequency distribution table for the given 'less than ' ogive.



(i)

Weight (in kg)	50 - 57	57 - 64	64 - 71	71 - 78	78 - 85	85 - 92	92 - 99
No. of students	13	12	14	13	20	15	11

(ii)

Weight (in kg)	50 - 57	57 - 64	64 - 71	71 - 78	78 - 85	85 - 92	92 - 99
No. of students	13	14	12	13	20	15	11

(iii)

Weight (in kg)	50 - 57	57 - 64	64 - 71	71 - 78	78 - 85	85 - 92	92 - 99
No. of students	13	12	9	13	20	15	11

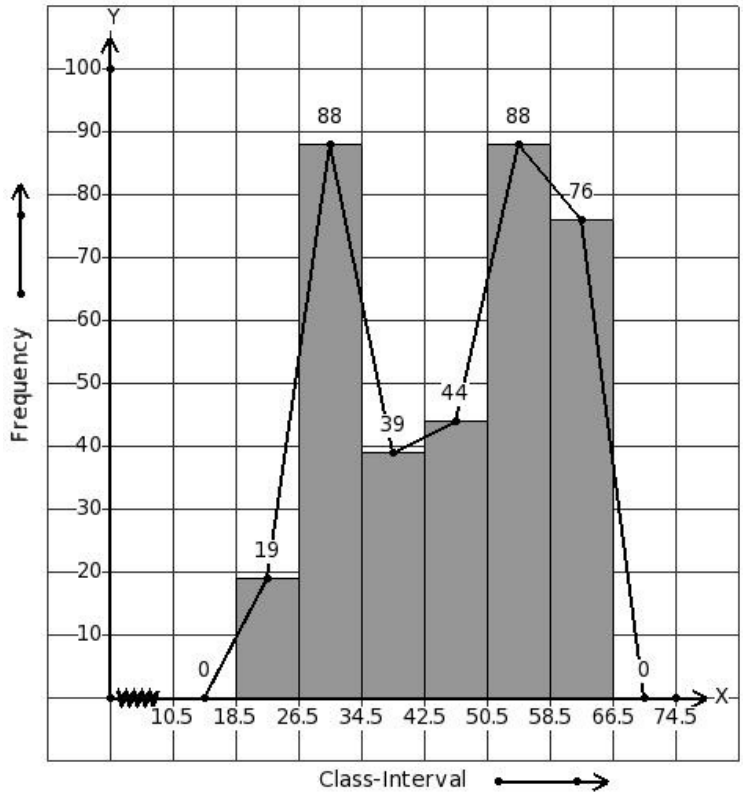
(iv)

Weight (in kg)	50 - 57	57 - 64	64 - 71	71 - 78	78 - 85	85 - 92	92 - 99
No. of students	13	11	14	13	20	15	12

(v)

Weight (in kg)	50 - 57	57 - 64	64 - 71	71 - 78	78 - 85	85 - 92	92 - 99
No. of students	13	12	14	17	20	15	11

23. Identify the class interval table for the given histogram and frequency polygon on the same graph.



(i)

Class-Interval	19 - 26	27 - 34	35 - 42	43 - 50	51 - 58	59 - 66
Frequency	19	88	39	44	88	76

(ii)

Class-Interval	19 - 26	27 - 34	35 - 42	43 - 50	51 - 58	59 - 66
Frequency	19	76	39	44	88	88

(iii)

Class-Interval	19 - 26	27 - 34	35 - 42	43 - 50	51 - 58	59 - 66
Frequency	19	39	88	44	88	76

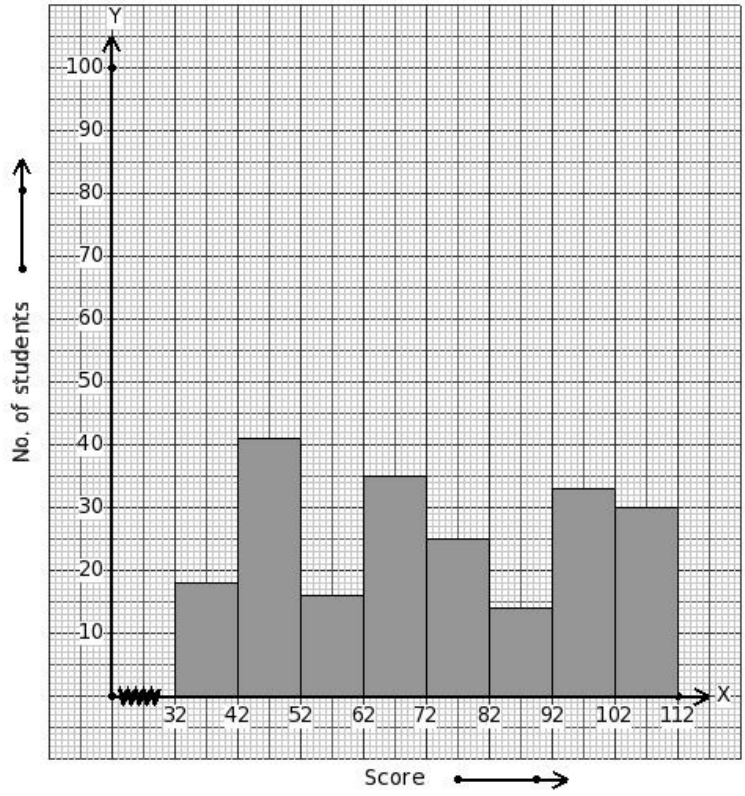
(iv)

Class-Interval	19 - 26	27 - 34	35 - 42	43 - 50	51 - 58	59 - 66
Frequency	19	88	39	48	88	76

(v)

Class-Interval	19 - 26	27 - 34	35 - 42	43 - 50	51 - 58	59 - 66
Frequency	19	88	41	44	88	76

24. Scores of 212 students are given below. Identify the class mark table for the given histogram.



(i)

Score	37	47	57	67	77	87	97	107
No. of students	18	41	12	35	25	14	33	30

(ii)

Score	37	47	57	67	77	87	97	107
No. of students	18	41	35	16	25	14	33	30

(iii)

Score	37	47	57	67	77	87	97	107
No. of students	18	30	16	35	25	14	33	41

(iv)

Score	37	47	57	67	77	87	97	107
No. of students	18	41	16	35	22	14	33	30

(v)

Score	37	47	57	67	77	87	97	107
No. of students	18	41	16	35	25	14	33	30

25. The marks obtained by 13 students in a test are given below. Find the mean of their marks when the marks of each student is decreased by 8.

8 33 29 42 25 9 36 38 2 8 47 36 46

(i) $\frac{217}{11}$ (ii) $\frac{293}{15}$ (iii) $\frac{253}{13}$ (iv) $\frac{255}{13}$ (v) $\frac{257}{13}$

Assignment Key

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