

EduSahara™ Learning Center Assignment

Grade : Class IX, CBSE

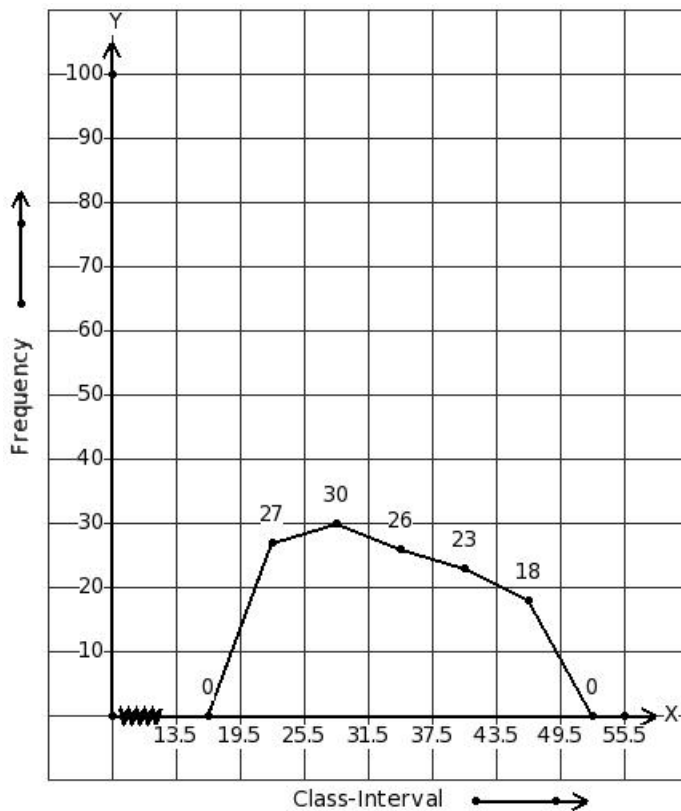
Chapter : Statistics

Name : Frequency Polygon

1. The frequency polygon is one drawn using

- (i) end points of classes and frequencies
- (ii) mid point of classes and frequencies
- (iii) upper boundaries of classes and cumulative frequencies
- (iv) lower boundaries of classes and greater than cumulative frequencies

2. Identify the class interval table for the given frequency polygon.



(i)

Class-Interval	20 - 25	26 - 31	32 - 37	38 - 43	44 - 49
Frequency	27	26	30	23	18

(ii)

Class-Interval	20 - 25	26 - 31	32 - 37	38 - 43	44 - 49
Frequency	27	30	26	23	18

(iii)

Class-Interval	20 - 25	26 - 31	32 - 37	38 - 43	44 - 49
Frequency	27	30	23	23	18

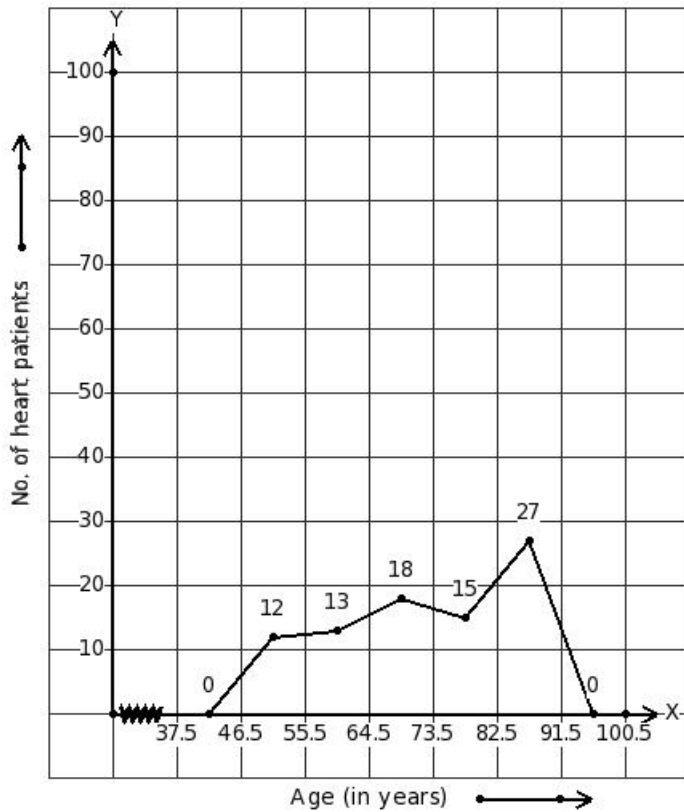
(iv)

Class-Interval	20 - 25	26 - 31	32 - 37	38 - 43	44 - 49
Frequency	27	32	26	23	18

(v)

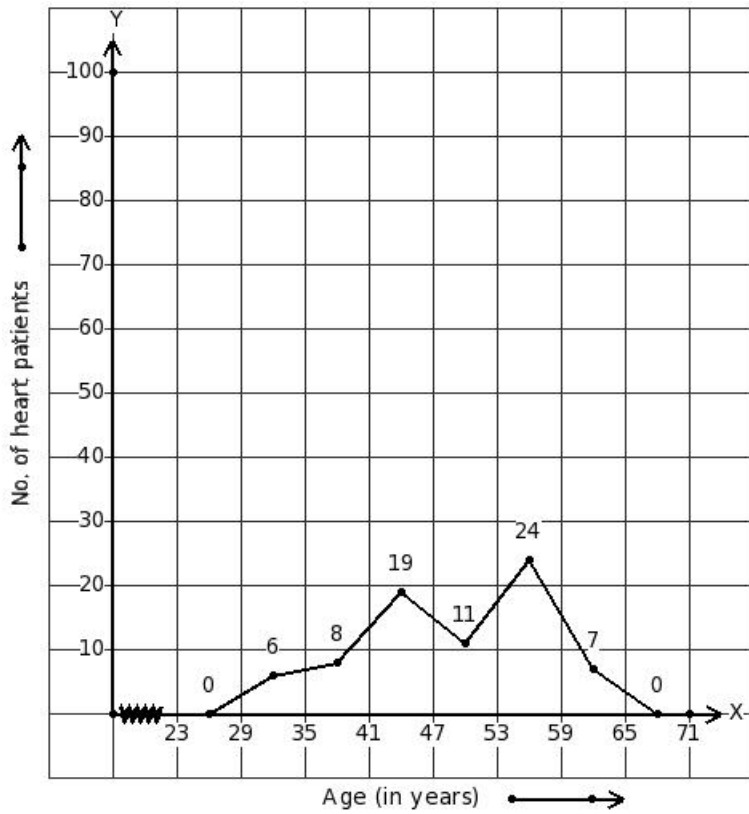
Class-Interval	20 - 25	26 - 31	32 - 37	38 - 43	44 - 49
Frequency	27	18	26	23	30

3. Given frequency polygon showing the number of heart patients at various age groups, identify the class interval table.



- (i)
- | Age (in years) | 47 - 55 | 56 - 64 | 65 - 73 | 74 - 82 | 83 - 91 |
|-----------------------|---------|---------|---------|---------|---------|
| No. of heart patients | 12 | 27 | 18 | 15 | 13 |
- (ii)
- | Age (in years) | 47 - 55 | 56 - 64 | 65 - 73 | 74 - 82 | 83 - 91 |
|-----------------------|---------|---------|---------|---------|---------|
| No. of heart patients | 12 | 18 | 13 | 15 | 27 |
- (iii)
- | Age (in years) | 47 - 55 | 56 - 64 | 65 - 73 | 74 - 82 | 83 - 91 |
|-----------------------|---------|---------|---------|---------|---------|
| No. of heart patients | 12 | 13 | 18 | 15 | 27 |
- (iv)
- | Age (in years) | 47 - 55 | 56 - 64 | 65 - 73 | 74 - 82 | 83 - 91 |
|-----------------------|---------|---------|---------|---------|---------|
| No. of heart patients | 12 | 8 | 18 | 15 | 27 |
- (v)
- | Age (in years) | 47 - 55 | 56 - 64 | 65 - 73 | 74 - 82 | 83 - 91 |
|-----------------------|---------|---------|---------|---------|---------|
| No. of heart patients | 12 | 13 | 22 | 15 | 27 |

4. Given frequency polygon showing the number of heart patients at various age groups, identify the class interval table.



(i)

Age (in years)	29 - 35	35 - 41	41 - 47	47 - 53	53 - 59	59 - 65
No. of heart patients	6	19	8	11	24	7

(ii)

Age (in years)	29 - 35	35 - 41	41 - 47	47 - 53	53 - 59	59 - 65
No. of heart patients	6	8	19	16	24	7

(iii)

Age (in years)	29 - 35	35 - 41	41 - 47	47 - 53	53 - 59	59 - 65
No. of heart patients	6	7	19	11	24	8

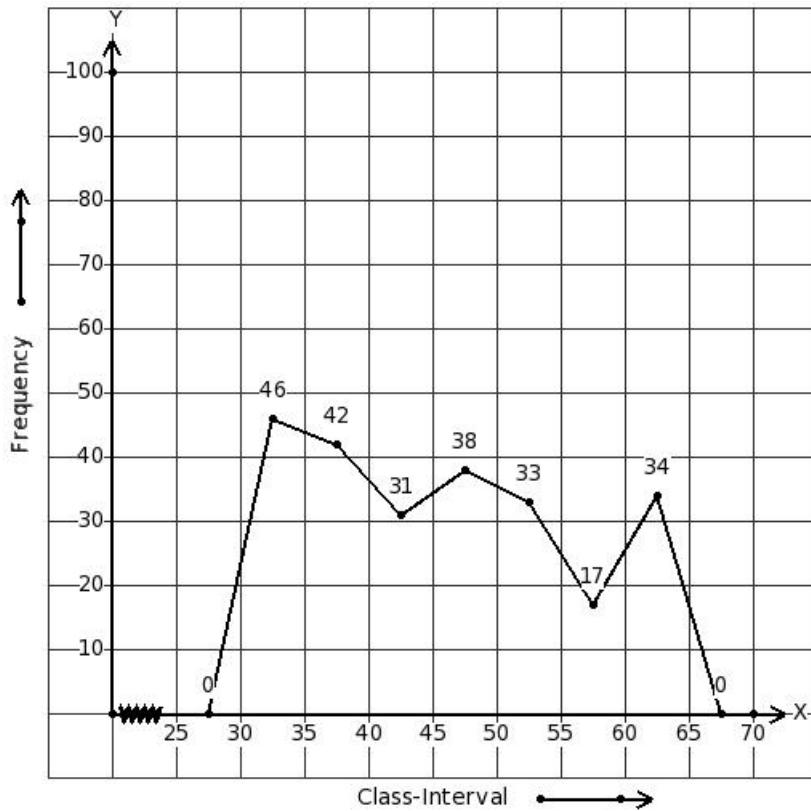
(iv)

Age (in years)	29 - 35	35 - 41	41 - 47	47 - 53	53 - 59	59 - 65
No. of heart patients	6	8	19	11	24	7

(v)

Age (in years)	29 - 35	35 - 41	41 - 47	47 - 53	53 - 59	59 - 65
No. of heart patients	6	8	21	11	24	7

5. Identify the class interval table for the given frequency polygon.



(i)

Class-Interval	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Frequency	46	42	34	38	33	17	34

(ii)

Class-Interval	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Frequency	46	42	31	35	33	17	34

(iii)

Class-Interval	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Frequency	46	31	42	38	33	17	34

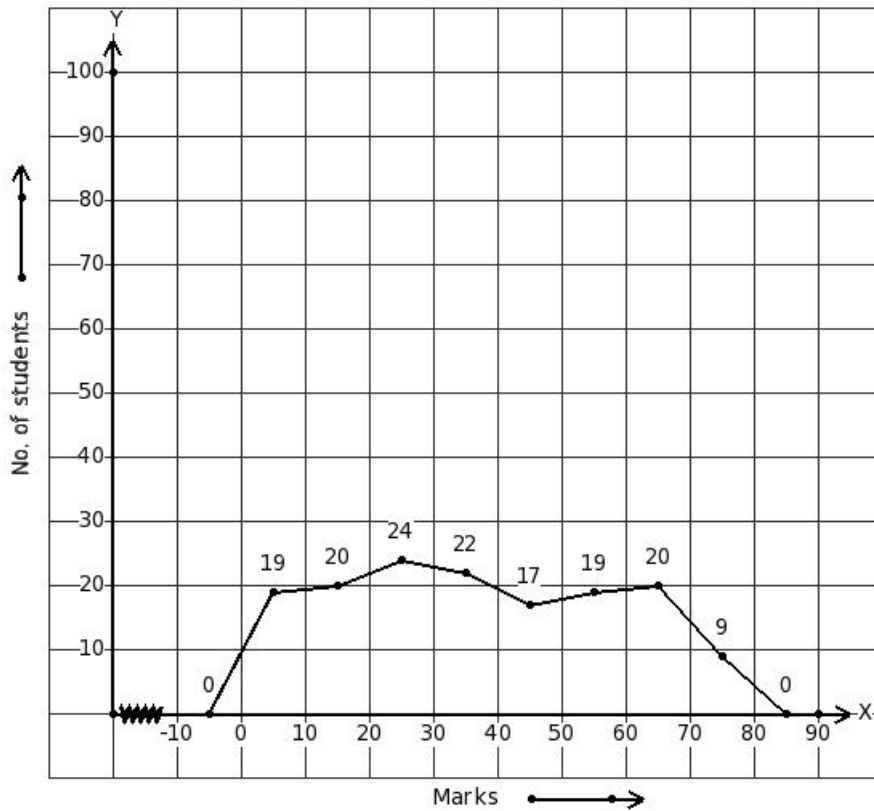
(iv)

Class-Interval	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Frequency	46	34	31	38	33	17	42

(v)

Class-Interval	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65
Frequency	46	42	31	38	33	17	34

6. Marks obtained by 150 students of a class in an examination Identify the class interval table for the given frequency polygon.



(i)

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of students	19	20	24	22	20	19	20	9

(ii)

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of students	19	20	22	24	17	19	20	9

(iii)

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of students	19	9	24	22	17	19	20	20

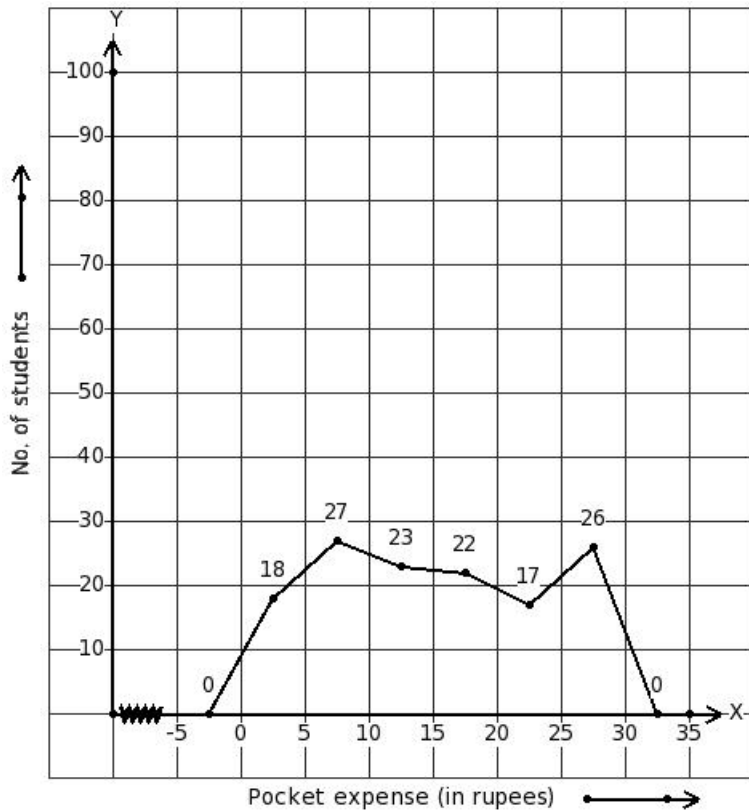
(iv)

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of students	19	20	24	22	17	19	20	9

(v)

Marks	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of students	19	20	26	22	17	19	20	9

7. The daily pocket expenses of 133 students in a school are Identify the class interval table for the given frequency polygon.



(i)

Pocket expense (in rupees)	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
No. of students	18	23	27	22	17	26

(ii)

Pocket expense (in rupees)	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
No. of students	18	26	23	22	17	27

(iii)

Pocket expense (in rupees)	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
No. of students	18	27	19	22	17	26

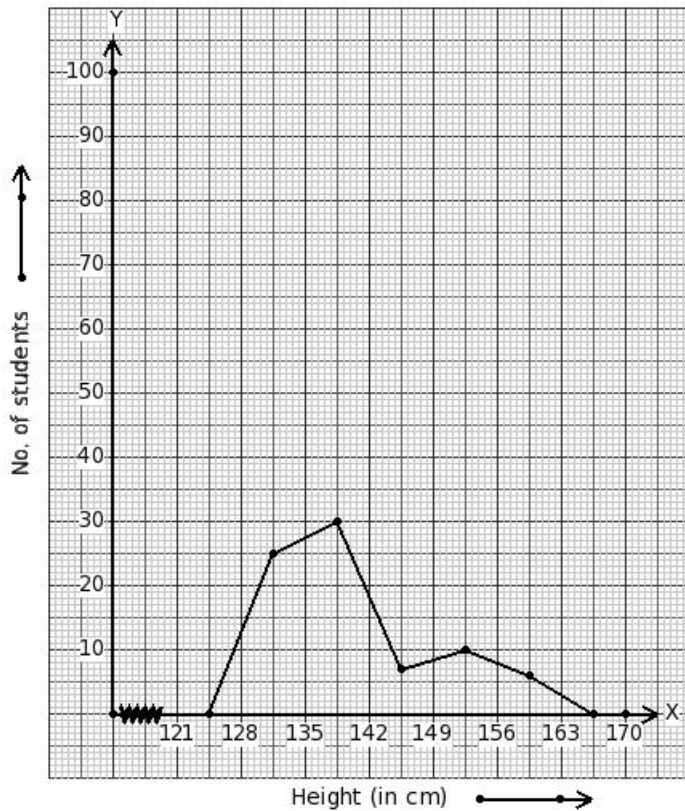
(iv)

Pocket expense (in rupees)	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
No. of students	18	27	23	25	17	26

(v)

Pocket expense (in rupees)	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30
No. of students	18	27	23	22	17	26

8. Heights of 78 students (in cm) are given below. Identify the class interval table for the given frequency polygon.



(i)

Height (in cm)	128 - 135	135 - 142	142 - 149	149 - 156	156 - 163
No. of students	25	7	30	10	6

(ii)

Height (in cm)	128 - 135	135 - 142	142 - 149	149 - 156	156 - 163
No. of students	25	27	7	10	6

(iii)

Height (in cm)	128 - 135	135 - 142	142 - 149	149 - 156	156 - 163
No. of students	25	30	7	10	6

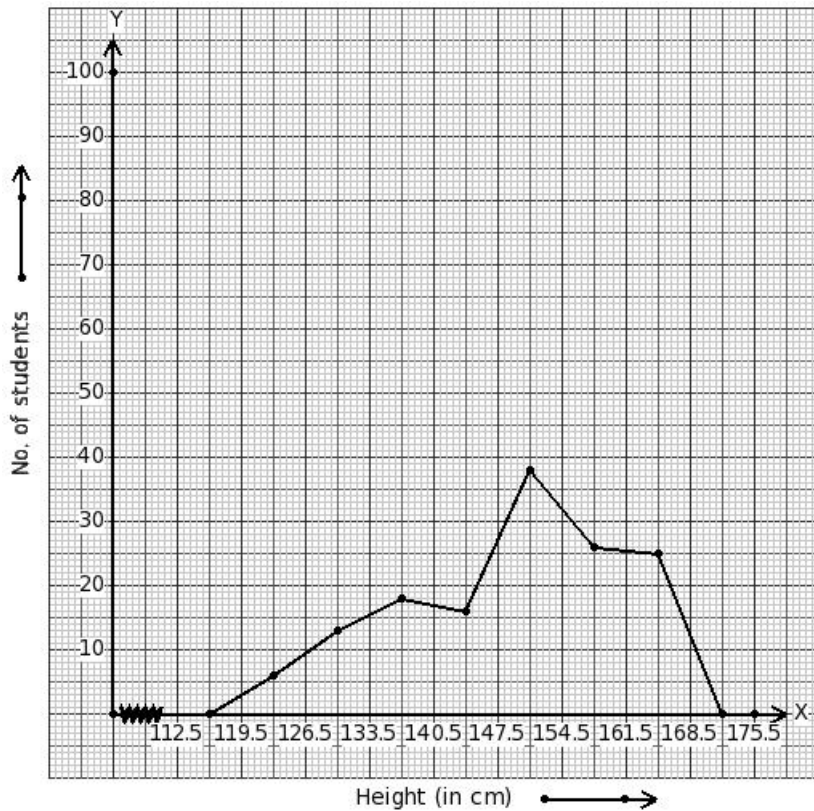
(iv)

Height (in cm)	128 - 135	135 - 142	142 - 149	149 - 156	156 - 163
No. of students	25	30	4	10	6

(v)

Height (in cm)	128 - 135	135 - 142	142 - 149	149 - 156	156 - 163
No. of students	25	6	7	10	30

9. Heights of 142 students (in cm) are given below. Identify the class interval table for the given frequency polygon.



(i)

Height (in cm)	120 - 126	127 - 133	134 - 140	141 - 147	148 - 154	155 - 161	162 - 168
No. of students	6	13	18	13	38	26	25

(ii)

Height (in cm)	120 - 126	127 - 133	134 - 140	141 - 147	148 - 154	155 - 161	162 - 168
No. of students	6	13	18	16	38	26	25

(iii)

Height (in cm)	120 - 126	127 - 133	134 - 140	141 - 147	148 - 154	155 - 161	162 - 168
No. of students	6	13	14	16	38	26	25

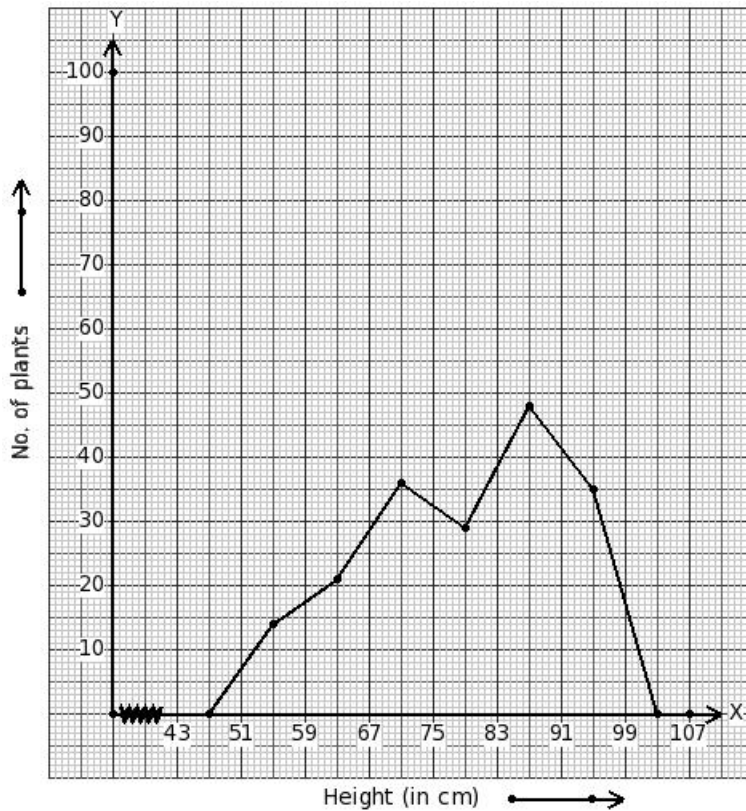
(iv)

Height (in cm)	120 - 126	127 - 133	134 - 140	141 - 147	148 - 154	155 - 161	162 - 168
No. of students	6	18	13	16	38	26	25

(v)

Height (in cm)	120 - 126	127 - 133	134 - 140	141 - 147	148 - 154	155 - 161	162 - 168
No. of students	6	25	18	16	38	26	13

10. Heights of 183 plants (in cm) are given below. Identify the class interval table for the given frequency polygon.



(i)

Height (in cm)	51 - 59	59 - 67	67 - 75	75 - 83	83 - 91	91 - 99
No. of plants	14	21	36	32	48	35

(ii)

Height (in cm)	51 - 59	59 - 67	67 - 75	75 - 83	83 - 91	91 - 99
No. of plants	14	21	41	29	48	35

(iii)

Height (in cm)	51 - 59	59 - 67	67 - 75	75 - 83	83 - 91	91 - 99
No. of plants	14	35	36	29	48	21

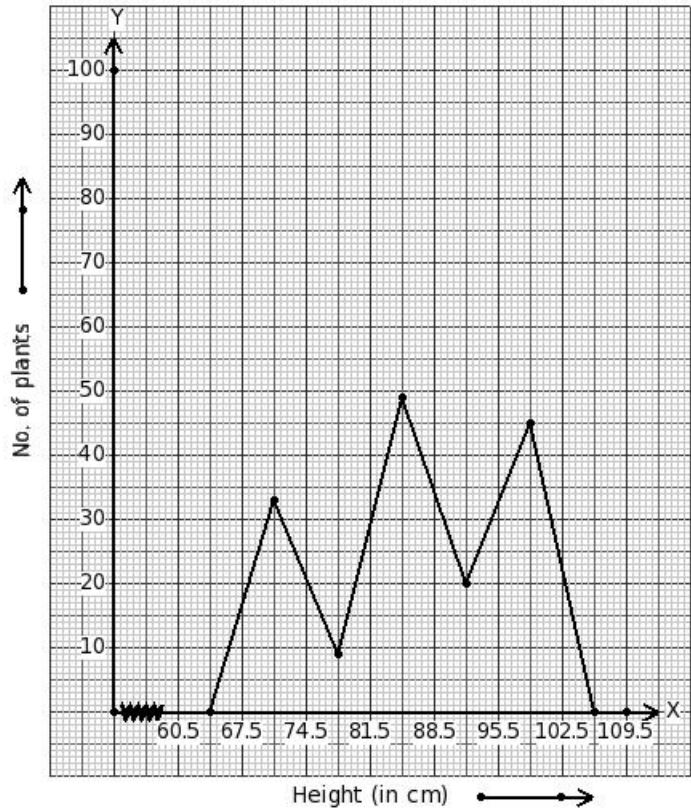
(iv)

Height (in cm)	51 - 59	59 - 67	67 - 75	75 - 83	83 - 91	91 - 99
No. of plants	14	36	21	29	48	35

(v)

Height (in cm)	51 - 59	59 - 67	67 - 75	75 - 83	83 - 91	91 - 99
No. of plants	14	21	36	29	48	35

11. Heights of 156 plants (in cm) are given below. Identify the class interval table for the given frequency polygon.



(i)

Height (in cm)	68 - 74	75 - 81	82 - 88	89 - 95	96 - 102
No. of plants	33	9	53	20	45

(ii)

Height (in cm)	68 - 74	75 - 81	82 - 88	89 - 95	96 - 102
No. of plants	33	49	9	20	45

(iii)

Height (in cm)	68 - 74	75 - 81	82 - 88	89 - 95	96 - 102
No. of plants	33	45	49	20	9

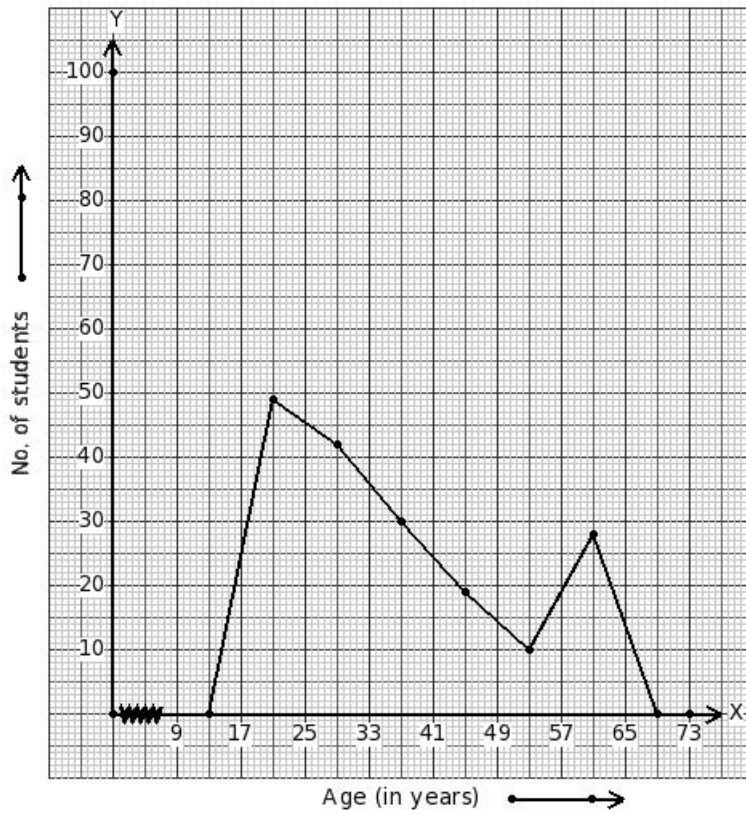
(iv)

Height (in cm)	68 - 74	75 - 81	82 - 88	89 - 95	96 - 102
No. of plants	33	9	49	20	45

(v)

Height (in cm)	68 - 74	75 - 81	82 - 88	89 - 95	96 - 102
No. of plants	33	12	49	20	45

12. Ages of 178 students (in years) are given below. Identify the class interval table for the given frequency polygon.



(i)

Age (in years)	17 - 25	25 - 33	33 - 41	41 - 49	49 - 57	57 - 65
No. of students	49	42	26	19	10	28

(ii)

Age (in years)	17 - 25	25 - 33	33 - 41	41 - 49	49 - 57	57 - 65
No. of students	49	42	30	19	10	28

(iii)

Age (in years)	17 - 25	25 - 33	33 - 41	41 - 49	49 - 57	57 - 65
No. of students	49	28	30	19	10	42

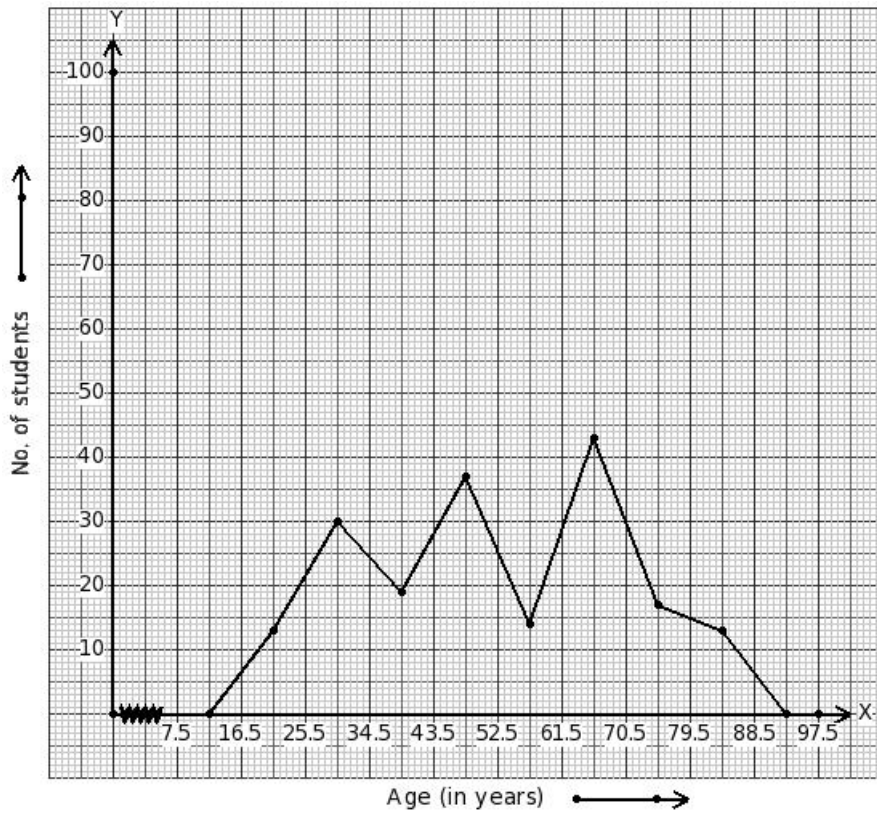
(iv)

Age (in years)	17 - 25	25 - 33	33 - 41	41 - 49	49 - 57	57 - 65
No. of students	49	30	42	19	10	28

(v)

Age (in years)	17 - 25	25 - 33	33 - 41	41 - 49	49 - 57	57 - 65
No. of students	49	42	30	16	10	28

13. Ages of 186 students (in years) are given below. Identify the class interval table for the given frequency polygon.



(i)

Age (in years)	17 - 25	26 - 34	35 - 43	44 - 52	53 - 61	62 - 70	71 - 79	80 - 88
No. of students	13	30	24	37	14	43	17	13

(ii)

Age (in years)	17 - 25	26 - 34	35 - 43	44 - 52	53 - 61	62 - 70	71 - 79	80 - 88
No. of students	13	30	19	37	19	43	17	13

(iii)

Age (in years)	17 - 25	26 - 34	35 - 43	44 - 52	53 - 61	62 - 70	71 - 79	80 - 88
No. of students	13	13	19	37	14	43	17	30

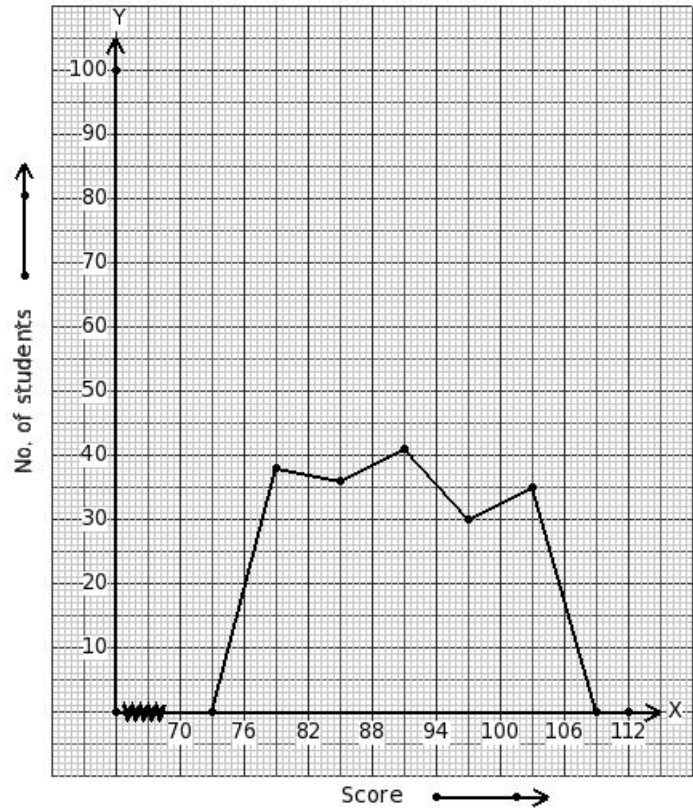
(iv)

Age (in years)	17 - 25	26 - 34	35 - 43	44 - 52	53 - 61	62 - 70	71 - 79	80 - 88
No. of students	13	30	37	19	14	43	17	13

(v)

Age (in years)	17 - 25	26 - 34	35 - 43	44 - 52	53 - 61	62 - 70	71 - 79	80 - 88
No. of students	13	30	19	37	14	43	17	13

14. Scores of 180 students are given below. Identify the class interval table for the given frequency polygon.



(i)

Score	76 - 82	82 - 88	88 - 94	94 - 100	100 - 106
No. of students	38	36	41	30	35

(ii)

Score	76 - 82	82 - 88	88 - 94	94 - 100	100 - 106
No. of students	38	34	41	30	35

(iii)

Score	76 - 82	82 - 88	88 - 94	94 - 100	100 - 106
No. of students	38	41	36	30	35

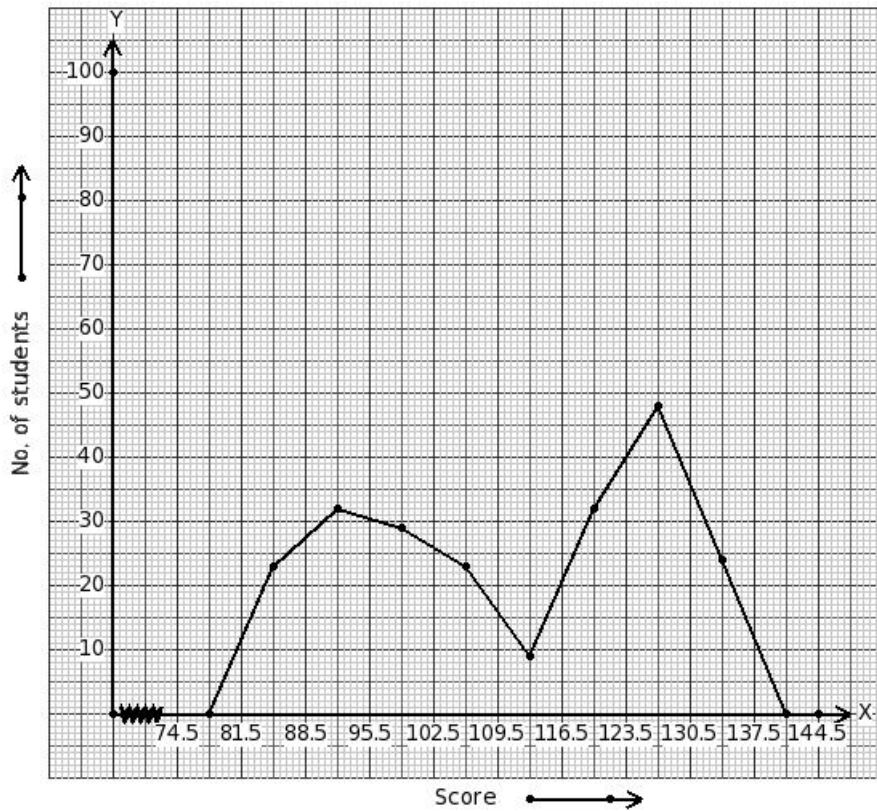
(iv)

Score	76 - 82	82 - 88	88 - 94	94 - 100	100 - 106
No. of students	38	35	41	30	36

(v)

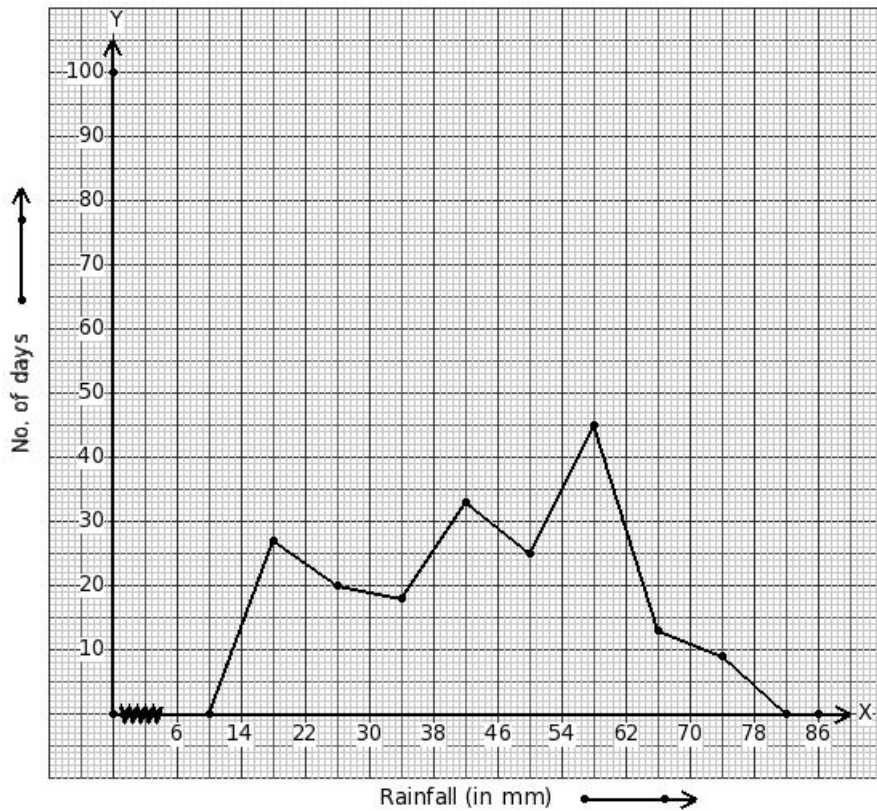
Score	76 - 82	82 - 88	88 - 94	94 - 100	100 - 106
No. of students	38	36	44	30	35

15. Scores of 220 students are given below. Identify the class interval table for the given frequency polygon.



- (i)
- | Score | 82 - 88 | 89 - 95 | 96 - 102 | 103 - 109 | 110 - 116 | 117 - 123 | 124 - 130 | 131 - 137 |
|-----------------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|
| No. of students | 23 | 32 | 29 | 23 | 4 | 32 | 48 | 24 |
- (ii)
- | Score | 82 - 88 | 89 - 95 | 96 - 102 | 103 - 109 | 110 - 116 | 117 - 123 | 124 - 130 | 131 - 137 |
|-----------------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|
| No. of students | 23 | 32 | 23 | 29 | 9 | 32 | 48 | 24 |
- (iii)
- | Score | 82 - 88 | 89 - 95 | 96 - 102 | 103 - 109 | 110 - 116 | 117 - 123 | 124 - 130 | 131 - 137 |
|-----------------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|
| No. of students | 23 | 24 | 29 | 23 | 9 | 32 | 48 | 32 |
- (iv)
- | Score | 82 - 88 | 89 - 95 | 96 - 102 | 103 - 109 | 110 - 116 | 117 - 123 | 124 - 130 | 131 - 137 |
|-----------------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|
| No. of students | 23 | 32 | 27 | 23 | 9 | 32 | 48 | 24 |
- (v)
- | Score | 82 - 88 | 89 - 95 | 96 - 102 | 103 - 109 | 110 - 116 | 117 - 123 | 124 - 130 | 131 - 137 |
|-----------------|---------|---------|----------|-----------|-----------|-----------|-----------|-----------|
| No. of students | 23 | 32 | 29 | 23 | 9 | 32 | 48 | 24 |

16. Rainfall of 190 days (in mm) are given below. Identify the class interval table for the given frequency polygon.



(i)

Rainfall (in mm)	14 - 22	22 - 30	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70	70 - 78
No. of days	27	20	18	33	30	45	13	9

(ii)

Rainfall (in mm)	14 - 22	22 - 30	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70	70 - 78
No. of days	27	9	18	33	25	45	13	20

(iii)

Rainfall (in mm)	14 - 22	22 - 30	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70	70 - 78
No. of days	27	20	13	33	25	45	13	9

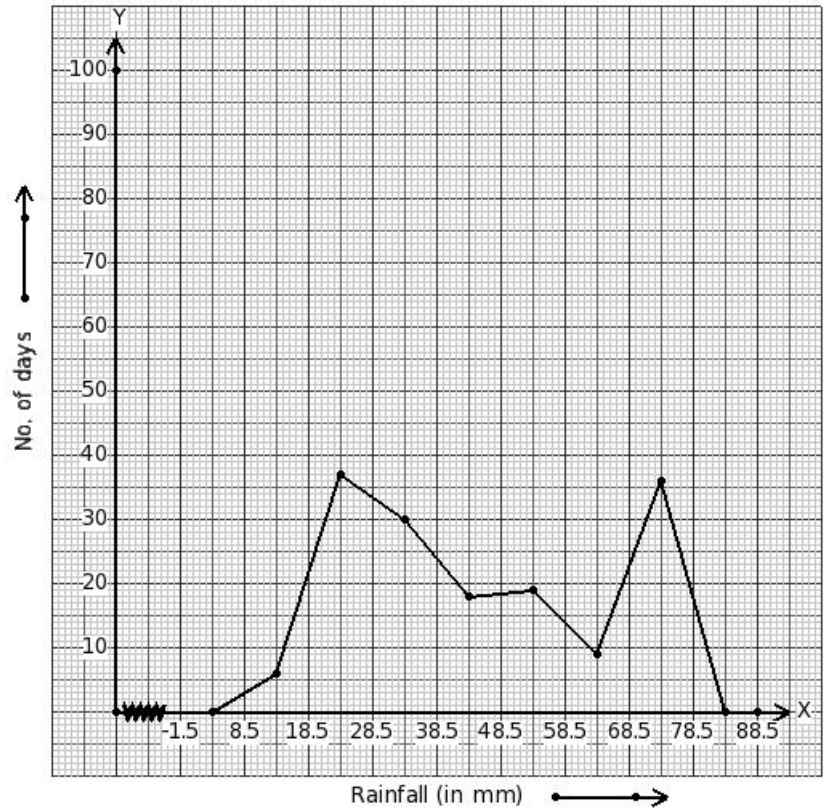
(iv)

Rainfall (in mm)	14 - 22	22 - 30	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70	70 - 78
No. of days	27	20	18	33	25	45	13	9

(v)

Rainfall (in mm)	14 - 22	22 - 30	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70	70 - 78
No. of days	27	20	33	18	25	45	13	9

17. Rainfall of 155 days (in mm) are given below. Identify the class interval table for the given frequency polygon.



- (i)

Rainfall (in mm)	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58	59 - 68	69 - 78
No. of days	6	37	30	21	19	9	36
- (ii)

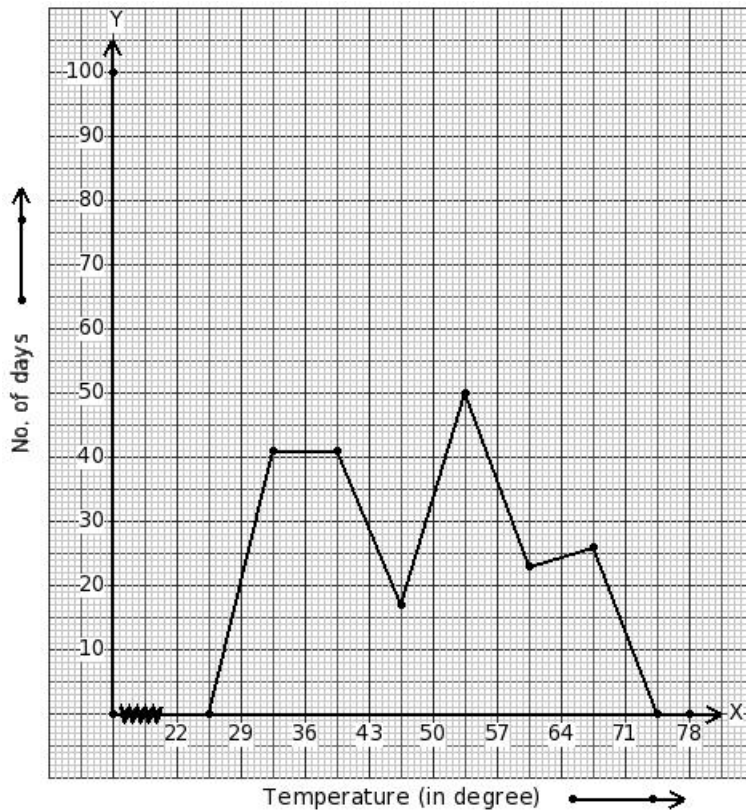
Rainfall (in mm)	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58	59 - 68	69 - 78
No. of days	6	37	30	18	19	9	36
- (iii)

Rainfall (in mm)	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58	59 - 68	69 - 78
No. of days	6	36	30	18	19	9	37
- (iv)

Rainfall (in mm)	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58	59 - 68	69 - 78
No. of days	6	37	34	18	19	9	36
- (v)

Rainfall (in mm)	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58	59 - 68	69 - 78
No. of days	6	30	37	18	19	9	36

18. Temperatures of 198 days (in °C) are given Identify the class interval table for the given frequency below.



(i)

Temperature (in degree)	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71
No. of days	41	17	41	50	23	26

(ii)

Temperature (in degree)	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71
No. of days	41	41	17	47	23	26

(iii)

Temperature (in degree)	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71
No. of days	41	41	19	50	23	26

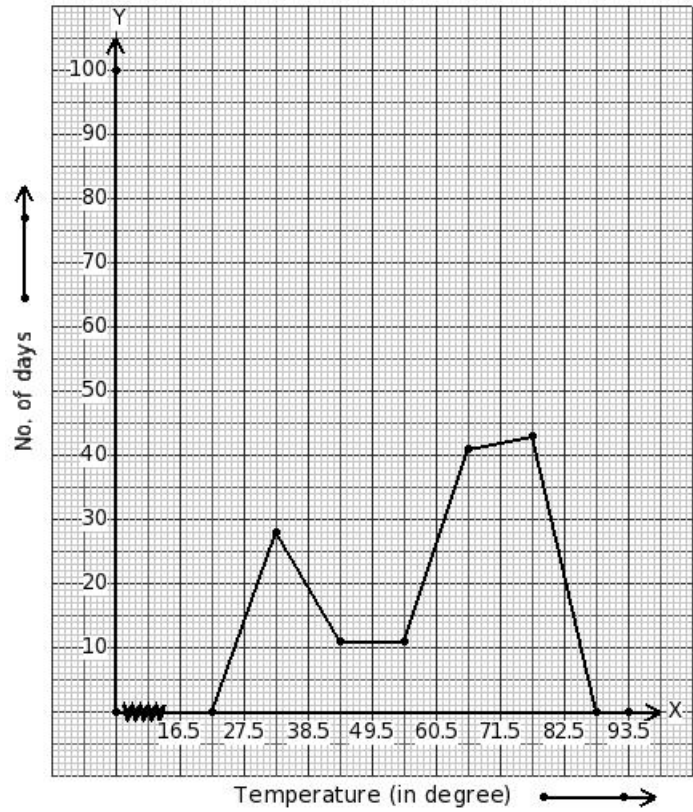
(iv)

Temperature (in degree)	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71
No. of days	41	26	17	50	23	41

(v)

Temperature (in degree)	29 - 36	36 - 43	43 - 50	50 - 57	57 - 64	64 - 71
No. of days	41	41	17	50	23	26

19. Temperatures of 134 days (in °C) are given Identify the class interval table for the given frequency below.



- (i)

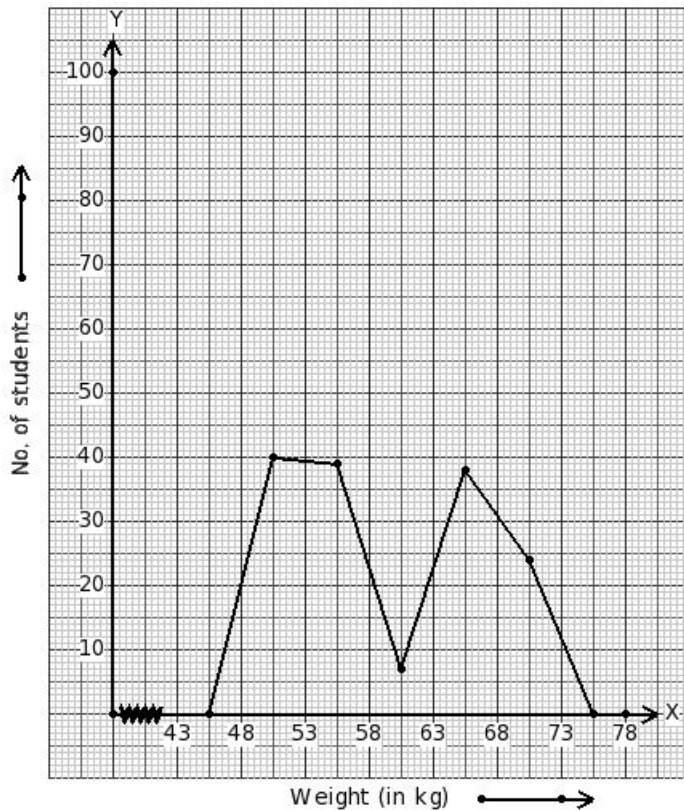
Temperature (in degree)	28 - 38	39 - 49	50 - 60	61 - 71	72 - 82
No. of days	28	15	11	41	43
- (ii)

Temperature (in degree)	28 - 38	39 - 49	50 - 60	61 - 71	72 - 82
No. of days	28	11	11	41	43
- (iii)

Temperature (in degree)	28 - 38	39 - 49	50 - 60	61 - 71	72 - 82
No. of days	28	43	11	41	11
- (iv)

Temperature (in degree)	28 - 38	39 - 49	50 - 60	61 - 71	72 - 82
No. of days	28	11	14	41	43

20. Weights of 148 students (in kg) are given below. Identify the class interval table for the given frequency polygon.



(i)

Weight (in kg)	48 - 53	53 - 58	58 - 63	63 - 68	68 - 73
No. of students	40	24	7	38	39

(ii)

Weight (in kg)	48 - 53	53 - 58	58 - 63	63 - 68	68 - 73
No. of students	40	39	3	38	24

(iii)

Weight (in kg)	48 - 53	53 - 58	58 - 63	63 - 68	68 - 73
No. of students	40	7	39	38	24

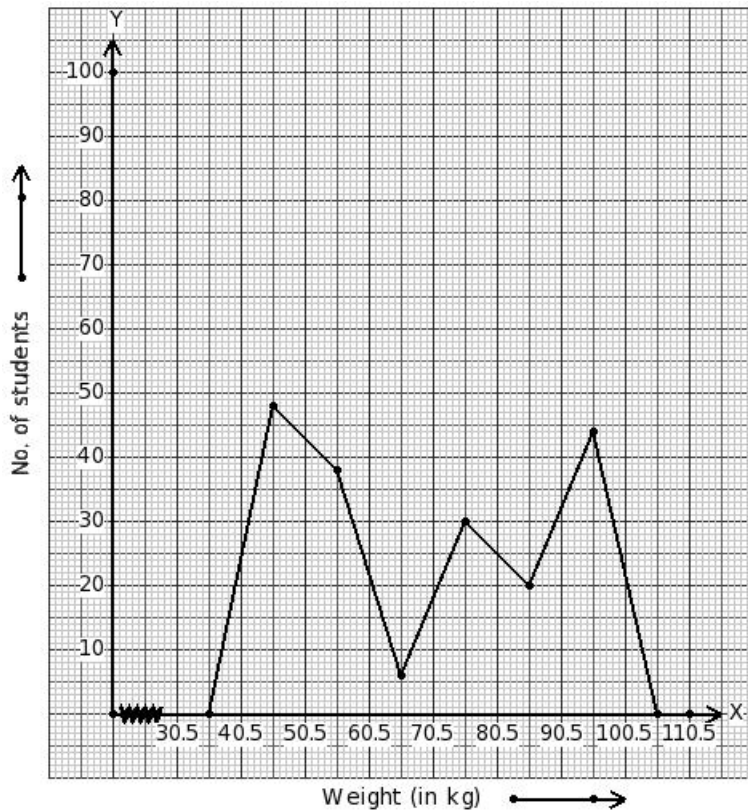
(iv)

Weight (in kg)	48 - 53	53 - 58	58 - 63	63 - 68	68 - 73
No. of students	40	39	7	38	24

(v)

Weight (in kg)	48 - 53	53 - 58	58 - 63	63 - 68	68 - 73
No. of students	40	37	7	38	24

21. Weights of 186 students (in kg) are given below. Identify the class interval table for the given frequency polygon.



(i)

Weight (in kg)	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
No. of students	48	38	6	30	20	44

(ii)

Weight (in kg)	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
No. of students	48	6	38	30	20	44

(iii)

Weight (in kg)	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
No. of students	48	38	2	30	20	44

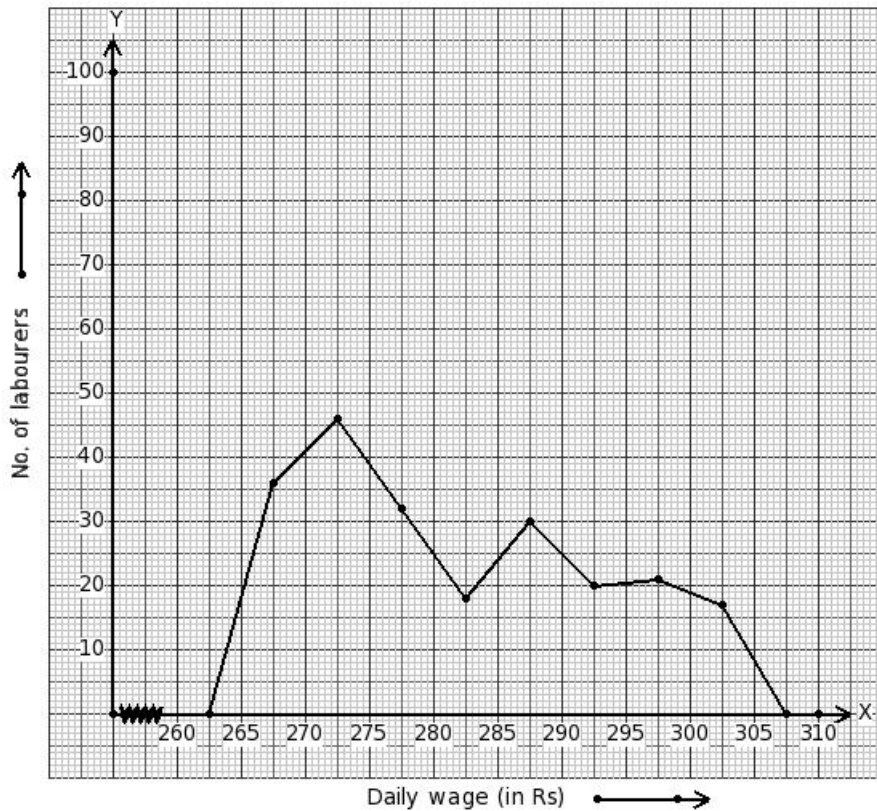
(iv)

Weight (in kg)	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
No. of students	48	38	6	34	20	44

(v)

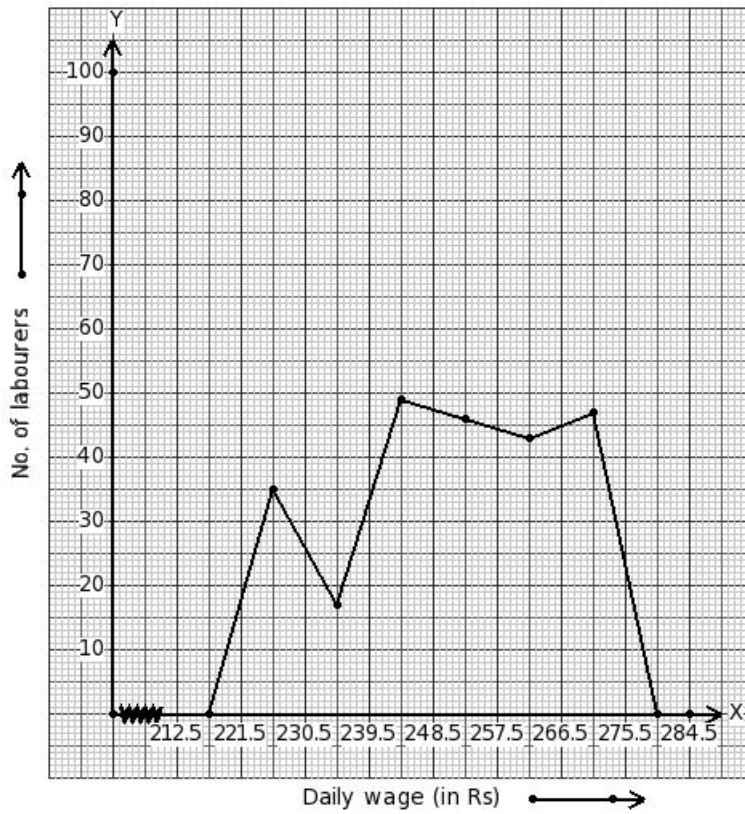
Weight (in kg)	41 - 50	51 - 60	61 - 70	71 - 80	81 - 90	91 - 100
No. of students	48	44	6	30	20	38

22. Daily wages of 220 labourers (in ₹) are given Identify the class interval table for the given frequency polygon.



- (i)
- | Daily wage (in Rs) | 265 - 270 | 270 - 275 | 275 - 280 | 280 - 285 | 285 - 290 | 290 - 295 | 295 - 300 | 300 - 305 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 36 | 46 | 32 | 18 | 26 | 20 | 21 | 17 |
- (ii)
- | Daily wage (in Rs) | 265 - 270 | 270 - 275 | 275 - 280 | 280 - 285 | 285 - 290 | 290 - 295 | 295 - 300 | 300 - 305 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 36 | 46 | 18 | 32 | 30 | 20 | 21 | 17 |
- (iii)
- | Daily wage (in Rs) | 265 - 270 | 270 - 275 | 275 - 280 | 280 - 285 | 285 - 290 | 290 - 295 | 295 - 300 | 300 - 305 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 36 | 17 | 32 | 18 | 30 | 20 | 21 | 46 |
- (iv)
- | Daily wage (in Rs) | 265 - 270 | 270 - 275 | 275 - 280 | 280 - 285 | 285 - 290 | 290 - 295 | 295 - 300 | 300 - 305 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 36 | 46 | 32 | 18 | 30 | 20 | 21 | 17 |
- (v)
- | Daily wage (in Rs) | 265 - 270 | 270 - 275 | 275 - 280 | 280 - 285 | 285 - 290 | 290 - 295 | 295 - 300 | 300 - 305 |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| No. of labourers | 36 | 46 | 28 | 18 | 30 | 20 | 21 | 17 |

23. Daily wages of 237 labourers (in ₹) are given Identify the class interval table for the given frequency polygon.



(i)

Daily wage (in Rs)	222 - 230	231 - 239	240 - 248	249 - 257	258 - 266	267 - 275
No. of labourers	35	17	46	46	43	47

(ii)

Daily wage (in Rs)	222 - 230	231 - 239	240 - 248	249 - 257	258 - 266	267 - 275
No. of labourers	35	47	49	46	43	17

(iii)

Daily wage (in Rs)	222 - 230	231 - 239	240 - 248	249 - 257	258 - 266	267 - 275
No. of labourers	35	17	49	46	43	47

(iv)

Daily wage (in Rs)	222 - 230	231 - 239	240 - 248	249 - 257	258 - 266	267 - 275
No. of labourers	35	49	17	46	43	47

(v)

Daily wage (in Rs)	222 - 230	231 - 239	240 - 248	249 - 257	258 - 266	267 - 275
No. of labourers	35	17	49	44	43	47

Assignment Key

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