EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Median, Quartiles and Mode

Grade : ICSE Grade X

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1. Heights of 31 students are given below. Find the first quartile.

Height (in cm)	136	138	140	148	150	157	158	170
No. of students	4	2	5	4	4	3	5	4

(i) 139 (ii) 138 (iii) 141 (iv) 140 (v) 142

2. Heights of 13 plants (in cm) are given below. Find the mode height.

87 53 80 86 78 89 60 70 95 97 75 100 53

(i) 54 cm (ii) 52 cm (iii) 53 cm (iv) 51 cm (v) 55 cm

3. Find the median of first 10 whole numbers.

(i) 5 (ii) $\frac{11}{2}$ (iii) $\frac{17}{4}$ (iv) $\frac{9}{2}$ (v) $\frac{7}{2}$

4. In a class test, the marks obtained by 8 students are

24 39 13 49 15 39 16 26

Find the upper quartile.

(i) 15 (ii) 24 (iii) 39 (iv) 12 (v) 36

5. Ages of 30 students are given below. Find the median.

Age (in years)	10	11	12	13	14	15
No. of students	5	5	4	3	8	5

(i) 11 years (ii) 13 years (iii) 14 years (iv) 12 years (v) 15 years

6. The following table shows the weights of 92 persons in a group. Find the median weight.

Weight (in kg)	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 - 99
No. of persons	6	9	15	18	14	12	10	8

(i) $\frac{1087}{18}$ kg (ii) $\frac{117}{2}$ kg (iii) $\frac{1069}{18}$ kg (iv) $\frac{526}{9}$ kg (v) $\frac{1051}{18}$ kg

7. Scores of 30 students are given below. Find the median.

Score	72	74	81	82	84	86	88	90
No. of students	6	5	2	3	8	2	2	2

(i) 80 (ii) 82 (iii) 81 (iv) 84 (v) 83

8. Greater than cumulative curves are drawn using

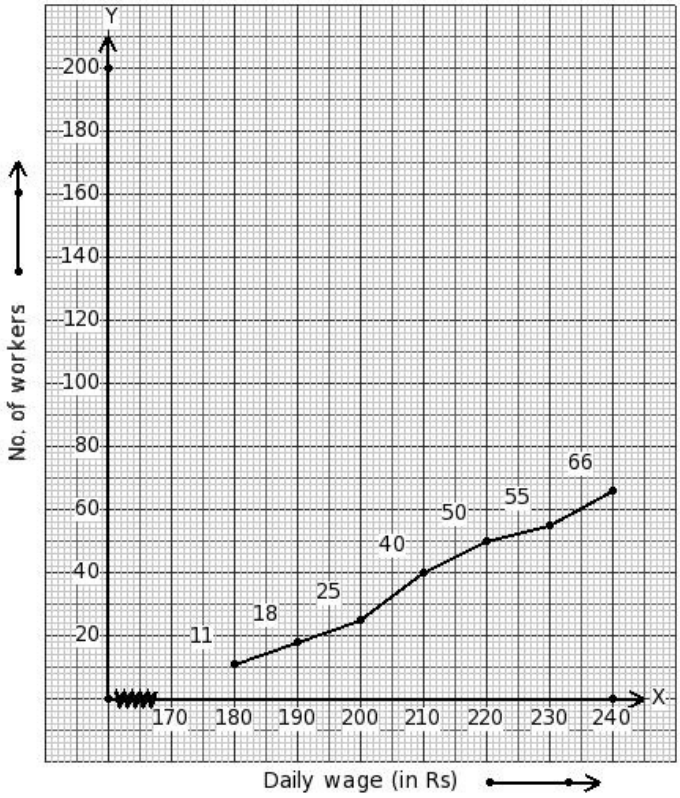
(i) upper boundaries of classes and less than cumulative frequencies

(ii) upper boundaries of classes and greater than cumulative frequencies

(iii) mid values of classes and greater than cumulative frequencies

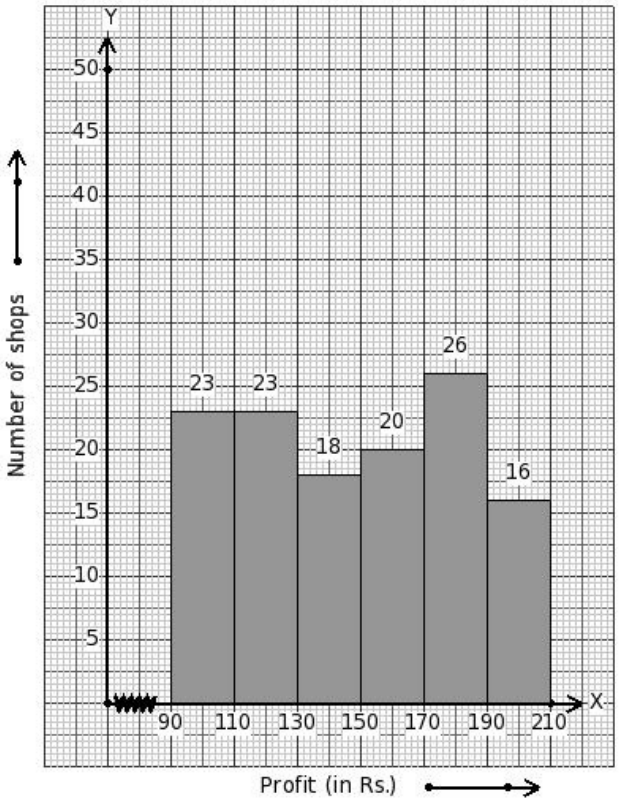
(iv) lower boundaries of classes and greater than cumulative frequencies

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



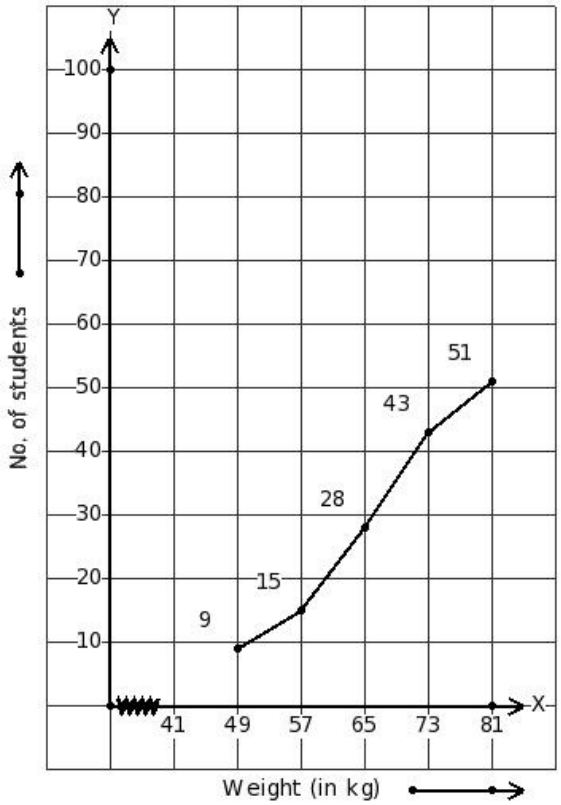
(i) ₹200.33 (ii) ₹205.33 (iii) ₹210.33 (iv) ₹207.83 (v) ₹202.83

10. The daily profits of 126 shops in a department store are distributed as given below. Find the mode profit.



(i) ₹182.50 (ii) ₹167.50 (iii) ₹177.50 (iv) ₹187.50 (v) ₹172.50

11. Weights of 51 students (in kg) are shown in the given ogive.
Find the number of students whose weight is less than 49 kg



(i) 6 (ii) 11 (iii) 9 (iv) 7 (v) 12

12. The following frequency distribution table gives the monthly consumption of electricity of 66 consumers in a locality. Find the mode units.

Monthly consumption (in units)	43 - 53	53 - 63	63 - 73	73 - 83	83 - 93	93 - 103	103 - 113
No. of consumers	11	5	5	15	8	13	9

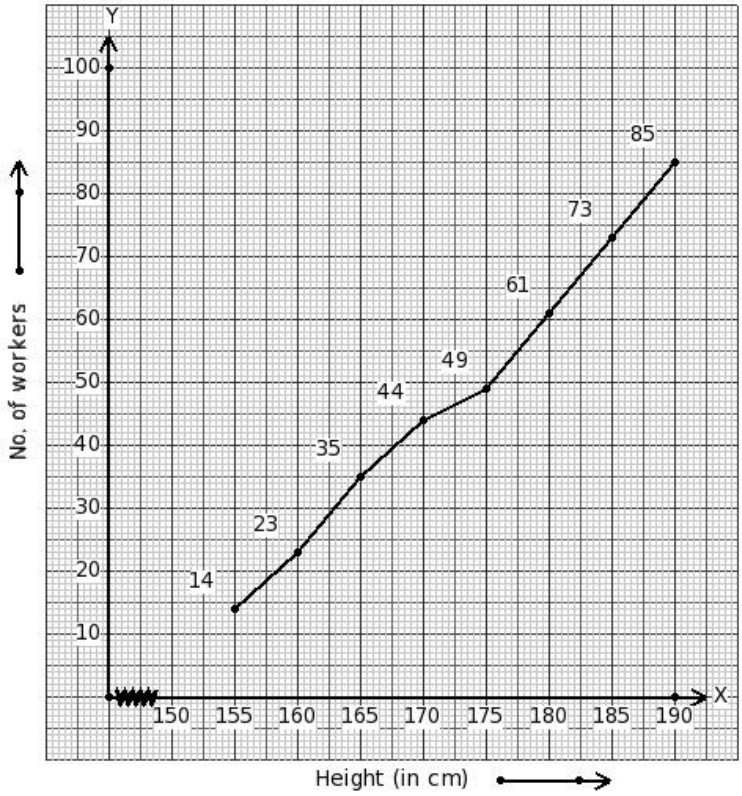
(i) $\frac{1341}{17}$ units (ii) 79 units (iii) $\frac{1375}{17}$ units (iv) $\frac{1342}{17}$ units (v) $\frac{1358}{17}$ units

13. Weights of 16 students are given below. Find the mode.

Weight (in kg)	41	45	48	49	50	55	59	60
No. of students	2	2	4	1	2	1	3	1

(i) 47 kg (ii) 46 kg (iii) 50 kg (iv) 48 kg (v) 49 kg

14. The following ogive shows the distribution of the heights of a group of factory workers. Estimate the upper quartile.



(i) 183.65 cm (ii) 181.15 cm (iii) 182.40 cm (iv) 179.90 cm (v) 178.65 cm

15. Ages of 13 students (in years) are given below. Find the mode age.

15 14 12 12 11 12 10 12 10 11 14 15 12

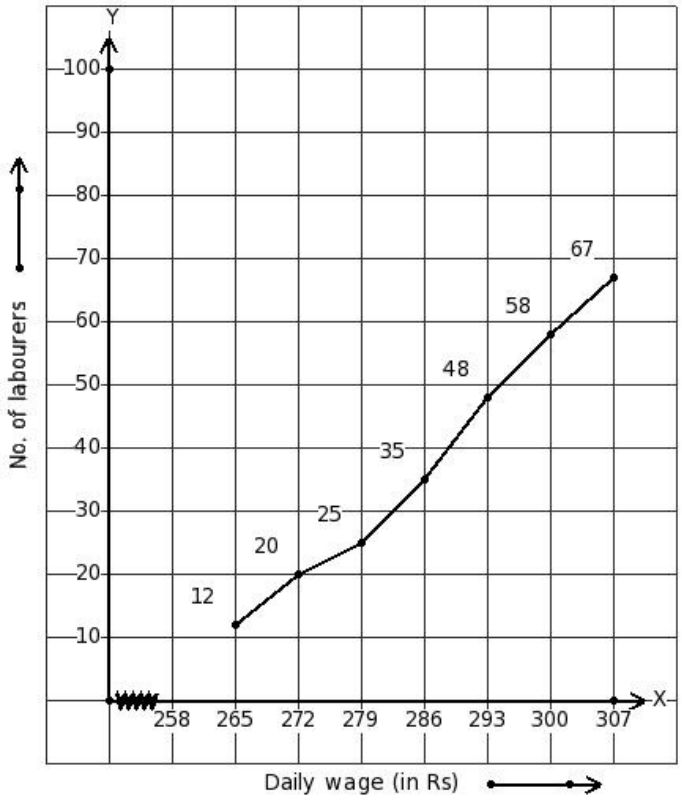
(i) 12 years (ii) 10 years (iii) 11 years (iv) 14 years (v) 13 years

16. Heights of 35 students are given below. Find the interquartile.

Height (in cm)	128	134	135	140	141	142	149	156	161	167	175
No. of students	3	6	1	5	2	3	2	2	3	4	4

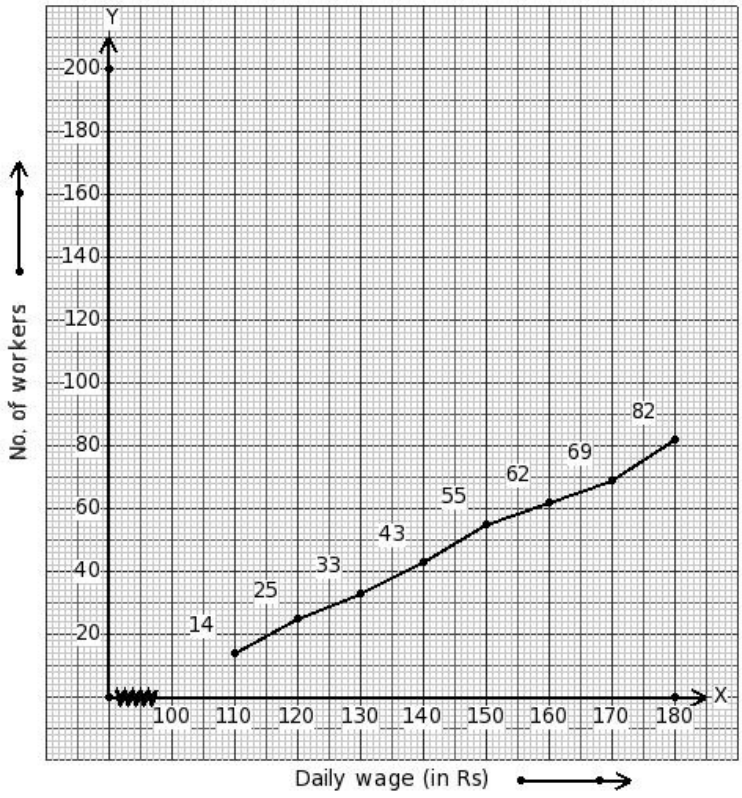
(i) 26 (ii) 25 (iii) 27 (iv) 28 (v) 29

17. Daily wages of 67 labourers (in ₹) are shown in the given ogive.
Find the number of labourers whose wage is more than ₹285



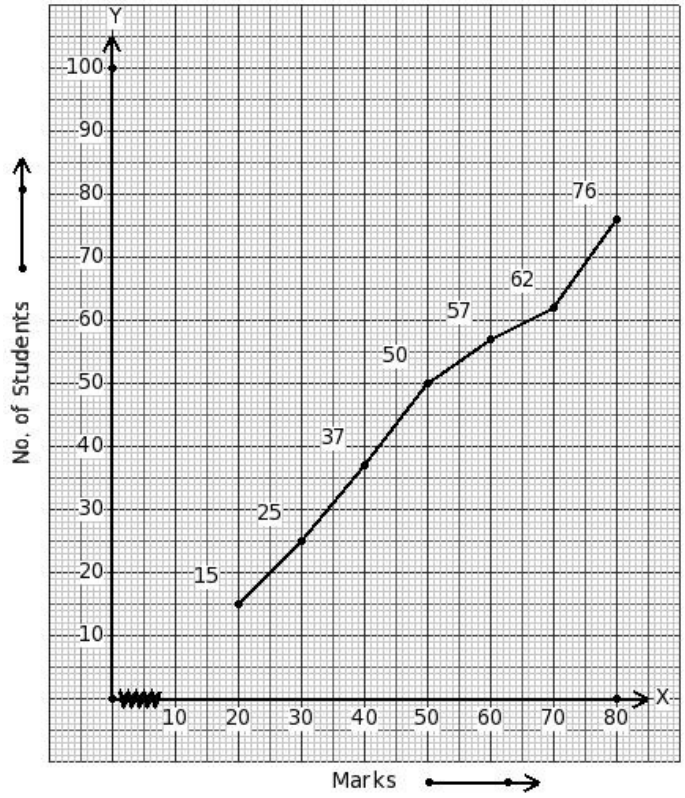
(i) 33 (ii) 35 (iii) 31 (iv) 36 (v) 30

18. The following ogive shows the daily wages of workers in a factory. Estimate the lower quartile.



(i) ₹113.41 (ii) ₹110.91 (iii) ₹118.41 (iv) ₹120.91 (v) ₹115.91

19. The marks obtained by certain students in a mathematics examination are given below. Estimate the median.



(i) 45.77 (ii) 38.27 (iii) 35.77 (iv) 40.77 (v) 43.27

20. Rainfall of 14 days (in mm) are given below. Find the median rainfall.

12 6 15 5 11 14 10 9 9 9 9 14 11 8

(i) 10 mm (ii) $\frac{21}{2}$ mm (iii) $\frac{19}{2}$ mm (iv) $\frac{23}{2}$ mm

21. The marks obtained by 11 students in a test are given below. Find their mode marks.

37 3 19 26 4 27 22 45 6 46 3

(i) 3 (ii) 2 (iii) 1 (iv) 5 (v) 4

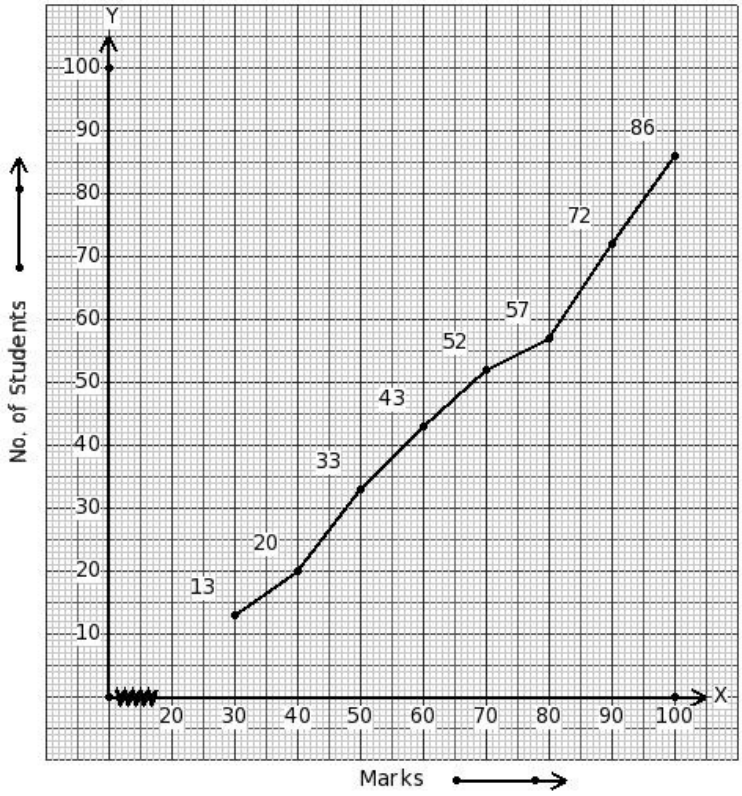
22. In a class test, the marks obtained by 9 students are

46 36 21 44 26 12 44 10 13

Find the lower quartile.

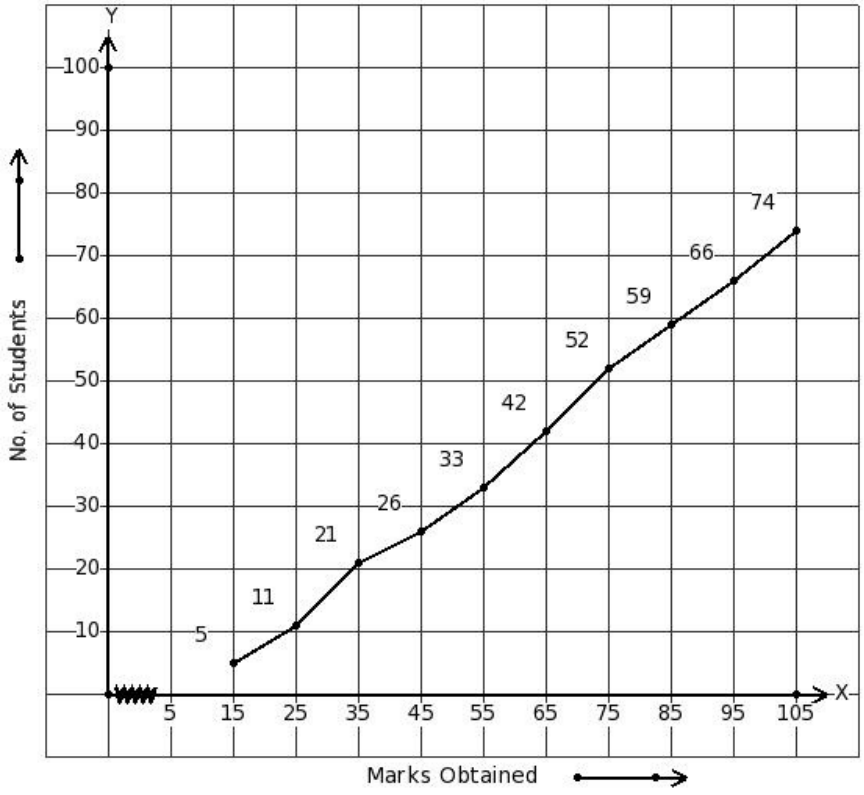
(i) $15\frac{3}{4}$ (ii) $31\frac{1}{2}$ (iii) 36 (iv) 44 (v) $12\frac{1}{2}$

23. The marks obtained by certain students in a mathematics examination are given below. Estimate the lower quartile.



(i) 43.65 (ii) 46.15 (iii) 41.15 (iv) 38.65 (v) 36.15

24. The marks obtained by 74 students in an examination are shown in the given ogive.
Find the number of students who obtained more than 5 marks in examination.



(i) 73 (ii) 76 (iii) 72 (iv) 74 (v) 75

25. The mean and median of a uni-modal grouped data are 87 and 20 respectively. Find the mode of the data.

(i) 219 (ii) 222 (iii) 221 (iv) 223 (v) 220

Assignment Key

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