EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Statistics

Grade : ICSE Grade VIII

1. If some random sample data is arranged in a frequency distribution table in inclusive form with 7 - 12 as the first class, then the observation 33 falls in which class?

(i) 32-37 (ii) 30-35 (iii) 31-36 (iv) 30.5-36.5 (v) 31.5-35.5

2. The true lower limit and true upper limit of the class with frequency x is

Class-Interval	Frequency
41 - 47	x
48 - 54	9
55 - 61	22
62 - 68	1
69 - 75	4

(i) 40.5-47.5 (ii) 40-47.5 (iii) 40.5-48 (iv) 40-48 (v) 41-47

3. The following table shows the weights of 44 persons in a group. Find the mean weight.

Weight (in kg)	30 - 38	38 - 46	46 - 54	54 - 62	62 - 70	70 - 78
No. of persons	9	6	6	6	11	6

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

4. The following table shows the weights of 66 persons in a group. Find the mean weight.

Weight (in kg)	40 - 45	46 - 51	52 - 57	58 - 63	64 - 69
No. of persons	6	10	11	19	20

(i) $\frac{1273}{22}$ kg (ii) $\frac{1275}{22}$ kg (iii) $\frac{637}{11}$ kg (iv) $\frac{1317}{22}$ kg (v) $\frac{1295}{22}$ kg

5. The observations of an ungrouped data are x_1, x_2, x_3 and $x_1 < x_2 < x_3$.
If the mean and median of the data are 54 and 36 respectively and $x_3 - x_1 = 90$, find x_1, x_2, x_3

(i) 22, 36, 112 (ii) 36, 36, 216 (iii) 18, 36, 108 (iv) 20, 36, 110

6. Heights of 15 plants (in cm) are given below. Find the median height.
79 58 56 100 68 61 54 50 63 53 91 75 78 53 53

(i) 61 cm (ii) 63 cm (iii) 60 cm (iv) 62 cm (v) 59 cm

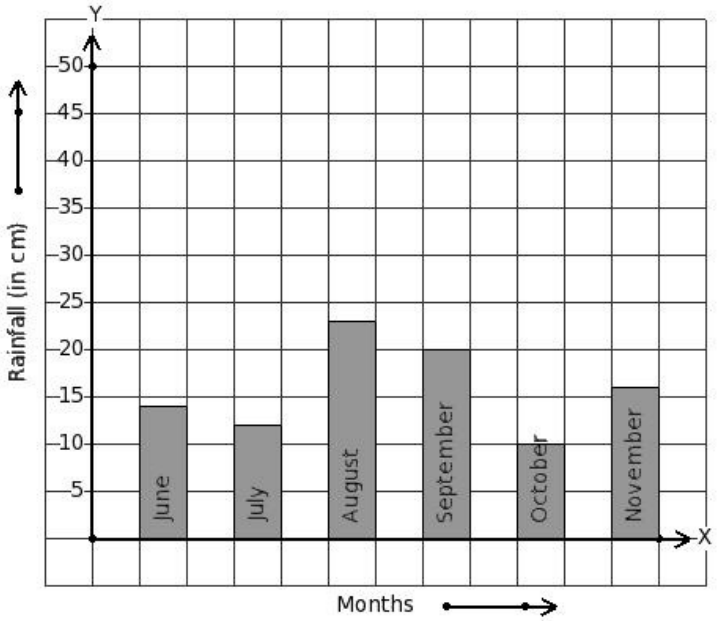
7. Find the mean of all prime numbers between 30 and 80.

(i) $\frac{331}{6}$ (ii) $\frac{329}{6}$ (iii) $\frac{111}{2}$ (iv) $\frac{441}{8}$ (v) $\frac{221}{4}$

8. In a bar diagram the value represented by a rectangle is proportional to its

(i) breadth (ii) length (iii) area (iv) perimeter

9. Read the given column-graph. Find the month that has minimum rainfall.



(i) August (ii) July (iii) September (iv) November (v) October

10. The class marks of a frequency distribution are 30 , 39 , 48 , 57 .
Find the class size and class intervals in inclusive form

(i) 9;27-35,36-44,45-53,54-62 (ii) 9;26-34,35-43,44-52,53-61 (iii) 9;25-33,34-42,43-51,52-60

(iv) 8;26-34,34-42,42-50,50-58 (v) 9;25-34,34-43,43-52,52-61

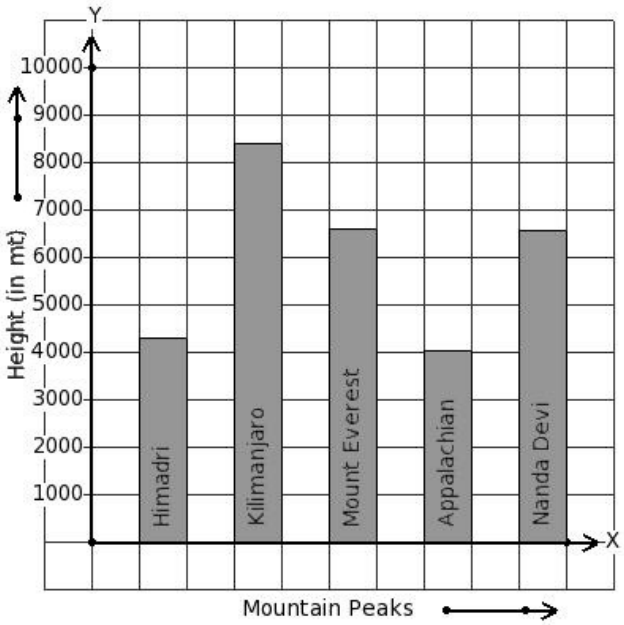
11. Ages of 11 students (in years) are given below. Find the median age.
15 14 14 14 14 13 12 10 13 15 10

(i) 12 years (ii) 15 years (iii) 13 years (iv) 16 years (v) 14 years

12. Given class interval 12 - 17 in exclusive form, its class size is

(i) 5 (ii) 6 (iii) 3 (iv) 4 (v) 7

13. Given below is the column-graph showing heights of some mountain peaks. Find the mountain that has maximum height.



(i) Himadri (ii) Nanda Devi (iii) Mount Everest (iv) Kilimanjaro (v) Appalachian

14. The daily wages (in rupees) of 15 workers in a factory are given below.
Represent the data in the form of a frequency distribution in inclusive form taking class size 30.

206 271 212 281 239 244 293 203 238 296 241 275 229 293 271

(i)

Wages (in rupees)	203 - 232	233 - 262	263 - 292	293 - 322
No. of Workers	4	6	4	3

(ii)

Wages (in rupees)	203 - 232	233 - 262	263 - 292	293 - 322
No. of Workers	3	4	4	4

(iii)

Wages (in rupees)	203 - 232	233 - 262	263 - 292	293 - 322
No. of Workers	4	4	4	3

(iv)

Wages (in rupees)	203 - 232	233 - 262	263 - 292	293 - 322
No. of Workers	4	4	8	3

15. The class boundaries of the class with frequency x is

Class-Interval	Frequency
44 - 52	15
52 - 60	x
60 - 68	10
68 - 76	16
76 - 84	12

(i) 52.5-59.5 (ii) 51.5-60 (iii) 51.5-60.5 (iv) 52-60 (v) 52-60.5

16. The weights (in gm) of 19 fruits are as follows. Form the grouped frequency table in inclusive form by taking class size 40.

308 217 204 297 317 399 373 368 245 221 358 376 255 227 338 394 348 293 270

(i)

Weight (in gm)	204 - 243	244 - 283	284 - 323	324 - 363	364 - 403
No. of Fruits	4	5	4	3	3

(ii)

Weight (in gm)	204 - 243	244 - 283	284 - 323	324 - 363	364 - 403
No. of Fruits	4	4	3	3	5

(iii)

Weight (in gm)	204 - 243	244 - 283	284 - 323	324 - 363	364 - 403
No. of Fruits	4	3	2	3	5

(iv)

Weight (in gm)	204 - 243	244 - 283	284 - 323	324 - 363	364 - 403
No. of Fruits	4	3	4	3	5

(v)

Weight (in gm)	204 - 243	244 - 283	284 - 323	324 - 363	364 - 403
No. of Fruits	4	6	4	3	5

17. The following outcomes were noted when a dice was thrown 20 times. Identify the frequency distribution table for the given data.

5 6 5 6 3 4 5 1 4 3 6 3 6 2 4 2 2 3 4 5

(i)

Outcome	1	2	3	4	5	6
No. of outcomes	2	3	4	4	3	4

(ii)

Outcome	1	2	3	4	5	6
No. of outcomes	5	3	1	2	5	4

(iii)

Outcome	1	2	3	4	5	6
No. of outcomes	1	3	4	4	4	4

(iv)

Outcome	1	2	3	4	5	6
No. of outcomes	3	4	2	4	2	5

18. Wages of 21 labourers are given below. Find the mode.

Wage (in rupees)	333	354	385	392	398	420	456	474
No. of labourers	4	3	1	1	6	2	3	1

(i) ₹397.00 (ii) ₹400.00 (iii) ₹398.00 (iv) ₹399.00 (v) ₹396.00

19. The number of children in 19 families are given below. Identify the frequency distribution table for the given data.

0 2 3 1 1 0 1 3 3 1 3 1 0 2 0 2 4 4 4

(i)

No. of children	0	1	2	3	4	5
No. of families	5	4	1	3	3	3

(ii)

No. of children	0	1	2	3	4
No. of families	4	5	3	4	3

(iii)

No. of children	0	1	2	3	4	5
No. of families	1	1	4	5	4	4

(iv)

No. of children	0	1	2	3	4
No. of families	4	5	2	5	3

(v)

No. of children	0	1	2	3	4
No. of families	4	5	2	4	4

20. The scores obtained by 11 students in a test are given below. Find the mean score.

11 20 10 12 20 19 2 17 16 17 10

(i) 10 (ii) 2 (iii) 14 (iv) 16 (v) 18

21. Heights of 21 plants are given below. Find the mode.

Height (in cm)	55	63	74	85	88	91
No. of plants	6	3	1	3	3	5

(i) 54 cm (ii) 57 cm (iii) 56 cm (iv) 55 cm (v) 53 cm

22. The class marks of a frequency distribution are 32.5 , 37.5 , 42.5 , 47.5 .
Find the class size and class intervals in exclusive form

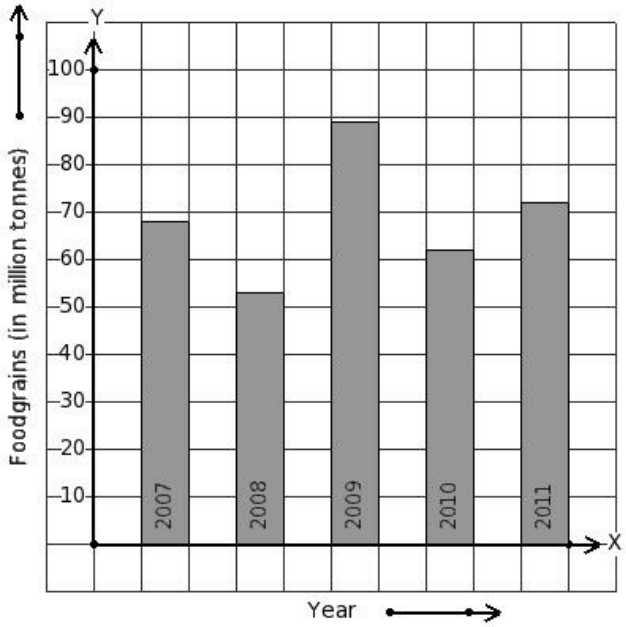
(i) 6;30-35,36-41,42-47,48-53 (ii) 5;31-36,36-41,41-46,46-51 (iii) 5;30-35,35-40,40-45,45-50

(iv) 7;29-35,36-42,43-49,50-56 (v) 5;29-34,34-39,39-44,44-49

23. Find the mean of all prime numbers between 50 and 90.

(i) $\frac{495}{7}$ (ii) $\frac{637}{9}$ (iii) $\frac{635}{9}$ (iv) $\frac{775}{11}$ (v) $\frac{211}{3}$

24. Read the column-graph given below. Find the year that has 53 million tonnes food grains production.



(i) 2010 (ii) 2011 (iii) 2007 (iv) 2008 (v) 2009

25. The marks obtained by 13 students in a test are given below. Find their mode marks.

12 13 38 46 4 46 39 14 46 47 19 48 25

(i) 45 (ii) 44 (iii) 46 (iv) 47 (v) 48

Assignment Key

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