

EduSahara™ Learning Center Assignment**Grade : Class X, CBSE****Chapter : Statistics****Name : Statistics Miscellaneous**

1. Given class interval 48 - 53 in exclusive form, its class mark is

- (i) $\frac{99}{2}$ (ii) 51 (iii) $\frac{101}{2}$ (iv) $\frac{201}{4}$ (v) $\frac{103}{2}$

2. Given class interval 21 - 25 in exclusive form, its mid value is

- (i) 21 (ii) 24 (iii) 26 (iv) 22 (v) 23

3. If the upper and lower limit of class interval are 22 and 15 respectively, then the class interval is

- (i) 14.5 - 22 (ii) 15 - 22 (iii) 15 - 22.5 (iv) 14.5 - 22.5 (v) 15.5 - 21.5

4. If the lower and upper limit of class interval are 44 and 52 respectively, then the class interval is

- (i) 43.5 - 52 (ii) 43.5 - 52.5 (iii) 44 - 52.5 (iv) 44.5 - 51.5 (v) 44 - 52

5. The class boundaries of 39 - 43 which is in exclusive form are

- (i) 39 - 43 (ii) 39 - 43.5 (iii) 39.5 - 42.5 (iv) 38.5 - 43 (v) 38.5 - 43.5

6. The class boundaries of 49 - 52 which is in inclusive form are

- (i) 48 - 53 (ii) 48.5 - 53 (iii) 48 - 52.5 (iv) 49 - 52 (v) 48.5 - 52.5

7. Convert the exclusive form of the class interval 15.5 - 26.5 to inclusive form

- (i) 15.5 - 26 (ii) 15.5 - 26.5 (iii) 16 - 26 (iv) 16 - 26.5 (v) 16.5 - 25.5

8. Convert the inclusive form of the class interval 40 - 50 to exclusive form

- (i) 39 - 51 (ii) 40 - 50 (iii) 39.5 - 50.5 (iv) 39.5 - 51 (v) 39 - 50.5

9. Convert the discontinuous form of the class interval 46 - 56 to continuous form

- (i) 45 - 57 (ii) 45 - 56.5 (iii) 45.5 - 56.5 (iv) 45.5 - 57 (v) 46 - 56

10. Convert the continuous form of the class interval 14.5 - 17.5 to discontinuous form

- (i) 14.5 - 17 (ii) 14.5 - 17.5 (iii) 15 - 17.5 (iv) 15 - 17 (v) 15.5 - 16.5

The class size used in the below table is

11.	Class-Interval	33 - 41	42 - 50	51 - 59	60 - 68	69 - 77	78 - 86	87 - 95
	Frequency	12	11	28	30	12	25	22

- (i) 8 (ii) 9 (iii) 6 (iv) 12 (v) 10

The class size used in the below table is

12.

Class-Interval	19 - 24	24 - 29	29 - 34	34 - 39	39 - 44	44 - 49
Frequency	15	28	29	11	21	3

- (i) 4 (ii) 6 (iii) 8 (iv) 3 (v) 5

13. Which of the following are true?

- a) The number of times a particular observation occurs is called its frequency
 b) The true lower limit of the exclusive form class interval 40 - 50 is 40
 c) The true lower limit of the inclusive form class interval 40 - 50 is 40
 d) Each numerical figure in a data set is called an observation
 e) The difference between the true upper limit and true lower limit is called the class mark
 (i) {c,a} (ii) {c,a,b} (iii) {c,e,d} (iv) {a,b,d} (v) {e,b}

14. Which of the following class intervals are in inclusive form?

- a) 15 - 22 , 23 - 30 , 31 - 38,...
 b) 15 - 22 , 22 - 29 , 29 - 36,...
 c) 36 - 43 , 43 - 50 , 50 - 57...
 d) 39 - 46 , 47 - 54 , 55 - 62,...
 e) 14.5 - 22.5 , 22.5 - 30.5 , 30.5 - 38.5...
 (i) {a,d} (ii) {e,b,a} (iii) {c,d,a} (iv) {c,d} (v) {b,a}

The class mark of the class with frequency x is

15.

Class-Interval	Frequency
14 - 19	4
20 - 25	x
26 - 31	29
32 - 37	27
38 - 43	3

- (i) $\frac{43}{2}$ (ii) $\frac{89}{4}$ (iii) 23 (iv) $\frac{47}{2}$ (v) $\frac{45}{2}$

The class mark of the class with frequency x is

16.

Class-Interval	Frequency
11 - 21	4
21 - 31	x
31 - 41	27
41 - 51	11
51 - 61	28

- (i) 26 (ii) 25 (iii) 23 (iv) 27 (v) 28

17. The mid value of the class with frequency x is

Class-Interval	Frequency
2 - 7	27
8 - 13	19
14 - 19	x
20 - 25	16
26 - 31	29

- (i) $\frac{65}{4}$ (ii) 17 (iii) $\frac{31}{2}$ (iv) $\frac{35}{2}$ (v) $\frac{33}{2}$

The mid value of the class with frequency x is

18.

Class-Interval	Frequency
15 - 25	10
25 - 35	x
35 - 45	14
45 - 55	14
55 - 65	29

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

The class boundaries of the class with frequency x is

19.

Class-Interval	Frequency
46 - 52	x
53 - 59	4
60 - 66	7
67 - 73	16
74 - 80	24

- (i) 46 - 52 (ii) 45.5 - 53 (iii) 45.5 - 52.5 (iv) 45 - 52.5 (v) 45 - 53

The class boundaries of the class with frequency x is

20.

Class-Interval	Frequency
32 - 37	5
37 - 42	x
42 - 47	3
47 - 52	11
52 - 57	1

- (i) 37 - 42.5 (ii) 36.5 - 42.5 (iii) 37 - 42 (iv) 37.5 - 41.5 (v) 36.5 - 42

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

Class-Interval	Frequency
42 - 49	x
50 - 57	18
58 - 65	20
66 - 73	24

74 - 81	24
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(i) 41 - 50 (ii) 41 - 49.5 (iii) 42 - 49 (iv) 41.5 - 49.5 (v) 41.5 - 50

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

22.

Class-Interval	Frequency
35 - 40	5
40 - 45	12
45 - 50	x
50 - 55	17
55 - 60	16

(i) 44.5 - 50 (ii) 45.5 - 49.5 (iii) 45 - 50 (iv) 45 - 50.5 (v) 44.5 - 50.5

The lower limit of the class with frequency x is

23.

Class-Interval	Frequency
13 - 19	x
20 - 26	12
27 - 33	23
34 - 40	22
41 - 47	19

(i) 12 (ii) 14 (iii) 13 (iv) 10 (v) 15

The upper limit of the class with frequency x is

24.

Class-Interval	Frequency
28 - 33	x
33 - 38	29
38 - 43	12
43 - 48	9
48 - 53	16

(i) 33 (ii) 32 (iii) 36 (iv) 30 (v) 34

Given class interval table, find the sum of frequencies.

25.

Class-Interval	39 - 48	49 - 58	59 - 68	69 - 78	79 - 88	89 - 98
Frequency	29	1	11	2	7	18

(i) 65 (ii) 68 (iii) 67 (iv) 69 (v) 70

Given class interval table, find the sum of frequencies.

26.

Class-Interval	43 - 49	49 - 55	55 - 61	61 - 67	67 - 73	73 - 79	79 - 85
Frequency	14	10	29	1	23	19	29

(i) 127 (ii) 122 (iii) 126 (iv) 125 (v) 124

27. Which of the following are continuous variables?

- a) Heights of children in a class
 - b) Weights of persons in a group
 - c) Wages of workers in a factory
 - d) Number of workers in a factory
 - e) Number of members in a family
- (i) {d,a} (ii) {a,b,c} (iii) {d,a,b} (iv) {d,e,c} (v) {e,b}

28. Which of the following are discontinuous variables?

- a) Number of members in a family
 - b) Heights of children in a class
 - c) Wages of workers in a factory
 - d) Number of workers in a factory
 - e) Weights of persons in a group
- (i) {c,d,a} (ii) {a,d} (iii) {e,b,a} (iv) {c,d} (v) {b,a}

Given table in inclusive form, convert it into exclusive form.

29.

Class-Interval	9 - 18	19 - 28	29 - 38	39 - 48	49 - 58	59 - 68
Frequency	48	29	24	14	29	47

(i)

Class-Interval	8.5 - 18.5	18.5 - 28.5	28.5 - 38.5	38.5 - 48.5	48.5 - 58.5	58.5 - 68.5
Frequency	48	29	24	14	29	47

(ii)

Class-Interval	8.5 - 17.5	18.5 - 27.5	28.5 - 37.5	38.5 - 47.5	48.5 - 57.5	58.5 - 67.5
Frequency	48	29	24	14	29	47

(iii)

Class-Interval	9.5 - 18.5	19.5 - 28.5	29.5 - 38.5	39.5 - 48.5	49.5 - 58.5	59.5 - 68.5
Frequency	48	29	24	14	29	47

(iv)

Class-Interval	8.5 - 18	18.5 - 28	28.5 - 38	38.5 - 48	48.5 - 58	58.5 - 68
Frequency	48	29	24	14	29	47

(v)

Class-Interval	9 - 18	18 - 27	27 - 36	36 - 45	45 - 54	54 - 63
Frequency	25	39	34	36	20	19

30. Which of the following class intervals are in exclusive form?

- a) 32 - 37 , 37 - 42 , 42 - 47...
 - b) 17 - 22 , 22 - 27 , 27 - 32,...
 - c) 16.5 - 22.5 , 22.5 - 28.5 , 28.5 - 34.5...
 - d) 35 - 40 , 41 - 46 , 47 - 52,...
 - e) 17 - 22 , 23 - 28 , 29 - 34,...
- (i) {d,a,b} (ii) {a,b,c} (iii) {d,a} (iv) {e,b} (v) {d,e,c}

31. If the sum of the following frequency distribution is 26 ,
find the value of 'x'.

Value	Frequency

1	3
3	3
4	1
5	1
6	1
7	5
8	3
9	2
10	1
11	x
12	3
13	2

- (i) 2 (ii) 1 (iii) -2 (iv) 4 (v) 0

32. Empirical relation between Mean, Median and Mode is

- (i) $\text{Mode} = 3\text{Median} - 2\text{Mean}$ (ii) $\text{Mode} = 3\text{Median} - 3\text{Mean}$
 (iii) $\text{Mode} = 2\text{Median} - 3\text{Mean}$ (iv) $\text{Mode} = 3\text{Median} + 2\text{Mean}$

33. Find the Mode when Median is 19.3 and Mean is 14.4.

- (i) 28.1 (ii) 31.1 (iii) 27.1 (iv) 29.1 (v) 30.1

34. Find the Mode when Median is 72 and Mean is 21.

- (i) 174 (ii) 173 (iii) 175 (iv) 176 (v) 172

35. The mean and median of a uni-modal grouped data are 66.8 and 35.3 respectively. Find the mode of the data.

- (i) 128.8 (ii) 127.8 (iii) 130.8 (iv) 129.8 (v) 131.8

36. The mean and median of a uni-modal grouped data are 47 and 31 respectively. Find the mode of the data.

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

37. Which of the following are continuous variables?

- a) Rainfall at a place over a month
 b) Number of members in a family
 c) Marks obtained by student in a particular subject
 d) Number of players in a team
 e) Weights of persons in a group
 (i) {c,e} (ii) {c,e,a} (iii) {d,b,a} (iv) {a,e} (v) {b,a}

38. Which of the following are discrete variables?

- a) Heights of children in a class
 b) Weights of persons in a group
 c) Number of members in a family
 d) Temperature at a place over a month
 e) Population of cities

(i) {a,c} (ii) {d,a,c} (iii) {b,e} (iv) {b,e,c} (v) {c,e}

Assignment Key

- 1) (iii)
- 2) (v)
- 3) (ii)
- 4) (v)
- 5) (i)
- 6) (v)
- 7) (iii)
- 8) (iii)
- 9) (iii)
- 10) (iv)
- 11) (ii)
- 12) (v)
- 13) (iv)
- 14) (i)
- 15) (v)
- 16) (i)
- 17) (v)
- 18) (ii)
- 19) (iii)
- 20) (iii)
- 21) (iv)
- 22) (iii)
- 23) (iii)
- 24) (i)
- 25) (ii)
- 26) (iv)
- 27) (ii)
- 28) (ii)
- 29) (i)
- 30) (ii)
- 31) (ii)
- 32) (i)
- 33) (iv)
- 34) (i)
- 35) (iv)
- 36) (iii)
- 37) (iv)
- 38) (v)