EduSahara™ Learning Center Assignment

Grade : Class VIII, SSC
Chapter : Frequency Distribution Tables and Graphs
Name : Class Interval Table Concepts
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1. Given class interval 28 - 36 in exclusive form, its lower limit is

   (i) 29 (ii) 28 (iii) 30 (iv) 25 (v) 27

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2. Given class interval 33 - 40 in exclusive form, its upper limit is

   (i) 41 (ii) 43 (iii) 40 (iv) 38 (v) 39

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3. Given class interval 13 - 22 in exclusive form, its class size is

   (i) 10 (ii) 9 (iii) 12 (iv) 7 (v) 8

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4. Given class interval 30 - 36 in exclusive form, its class mark is

   (i) 33 (ii) 34 (iii) 35 (iv) 30 (v) 32

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5. Given class interval 35 - 45 in exclusive form, its mid value is

   (i) 40 (ii) 42 (iii) 39 (iv) 38 (v) 41

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6. If the upper and lower limit of class interval are 56 and 47 respectively, then the class interval is

   (i) 46.5 - 56.5 (ii) 47 - 56 (iii) 47 - 56.5 (iv) 46.5 - 56 (v) 47.5 - 55.5

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7. If the lower and upper limit of class interval are 48 and 50 respectively, then the class interval is

   (i) 47.5 - 50.5 (ii) 48.5 - 49.5 (iii) 47.5 - 50 (iv) 48 - 50.5 (v) 48 - 50

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8. The class boundaries of 11 - 17 which is in exclusive form are

   (i) 11.5 - 16.5 (ii) 10.5 - 17 (iii) 11 - 17.5 (iv) 10.5 - 17.5 (v) 11 - 17

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9. The class boundaries of 28 - 32 which is in inclusive form are

(i) 27 - 33 (ii) 27.5 - 33 (iii) 28 - 32 (iv) 27.5 - 32.5 (v) 27 - 32.5

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

Class–Interval	Frequency
17 - 22	x
23 - 28	14
29 - 34	5
35 - 40	7
41 - 46	28

(i) 16 - 23 (ii) 16.5 - 22.5 (iii) 17 - 22 (iv) 16.5 - 23 (v) 16 - 22.5

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

Class–Interval	Frequency
49 - 57	x
57 - 65	29
65 - 73	9
73 - 81	11
81 - 89	27

(i) 49 - 57.5 (ii) 49.5 - 56.5 (iii) 48.5 - 57 (iv) 48.5 - 57.5 (v) 49 - 57

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12. The lower limit of the class with frequency x is

Class–Interval	Frequency
15 - 22	6
23 - 30	30
31 - 38	9
39 - 46	x
47 - 54	12

(i) 39 (ii) 38 (iii) 40 (iv) 41 (v) 37

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13. The class size used in the below table is

Class–Interval	46 - 56	57 - 67	68 - 78	79 - 89	90 - 100	101 - 111
Frequency	2	6	25	15	2	2

(i) 11 (ii) 12 (iii) 14 (iv) 10 (v) 8

The class size used in the below table is

14.

Class–Interval	30 - 39	39 - 48	48 - 57	57 - 66	66 - 75	75 - 84	84 - 93	93 - 102
Frequency	15	5	6	19	13	17	25	6

(i) 12 (ii) 7 (iii) 9 (iv) 10 (v) 8

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15. Which of the following are true?

a) Each numerical figure in a data set is called an observation
b) The true lower limit of the inclusive form class interval 20 - 30 is 20
c) The number of times a particular observation occurs is called its frequency
d) The true lower limit of the exclusive form class interval 20 - 30 is 20
e) The difference between the true upper limit and true lower limit is called the class mark

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

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

a) 35 - 40 , 40 - 45 , 45 - 50...
b) 20 - 25 , 25 - 30 , 30 - 35,...
c) 20 - 25 , 26 - 31 , 32 - 37,...
d) 38 - 43 , 44 - 49 , 50 - 55,...
e) 19.5 - 25.5 , 25.5 - 31.5 , 31.5 - 37.5...

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

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17. In inclusive form representation, the observation 53 falls in which class?

(i) 54 - 63 (ii) 38 - 48 (iii) 42 - 52 (iv) 43 - 53 (v) 33 - 43

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18. In exclusive form representation, the observation 36 falls in which class?

(i) 31 - 36 (ii) 41 - 51 (iii) 46 - 56 (iv) 26 - 36 (v) 36 - 46

The class mark of the class with frequency x is

19.

Class–Interval	Frequency
19 - 24	16
25 - 30	27
31 - 36	19

37 - 42	20
43 - 48	x

(i) $\frac{181}{4}$ (ii) $\frac{91}{2}$ (iii) 46 (iv) $\frac{93}{2}$ (v) $\frac{89}{2}$

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20. The class mark of the class with frequency x is

Class–Interval	Frequency
19 - 29	11
29 - 39	x
39 - 49	13
49 - 59	17
59 - 69	20

(i) 32 (ii) 37 (iii) 34 (iv) 35 (v) 33

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

Class–Interval	Frequency
10 - 15	23
16 - 21	19
22 - 27	x
28 - 33	2
34 - 39	21

(i) $\frac{97}{4}$ (ii) $\frac{47}{2}$ (iii) 25 (iv) $\frac{49}{2}$ (v) $\frac{51}{2}$

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

Class–Interval	Frequency
10 - 20	2
20 - 30	27
30 - 40	x
40 - 50	30
50 - 60	27

(i) 35 (ii) 36 (iii) 34 (iv) 38 (v) 32

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

Class–Interval	Frequency
33 - 39	x
40 - 46	25
47 - 53	21
54 - 60	21
61 - 67	7

(i) 32 - 40 (ii) 33 - 39 (iii) 32 - 39.5 (iv) 32.5 - 39.5 (v) 32.5 - 40

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

Class–Interval	Frequency
25 - 30	x
30 - 35	12
35 - 40	22
40 - 45	30
45 - 50	14

(i) 24.5 - 30 (ii) 25.5 - 29.5 (iii) 25 - 30.5 (iv) 24.5 - 30.5 (v) 25 - 30

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

Class–Interval	Frequency
19 - 25	x
25 - 31	15
31 - 37	28
37 - 43	8
43 - 49	20

(i) 28 (ii) 26 (iii) 24 (iv) 25 (v) 22

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26. If the sample data with range 60 has to be divided into 10 class intervals, then the length of the class is

(i) 3 (ii) 5 (iii) 9 (iv) 7 (v) 6

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27. If the length of the class is 5, then the number of class intervals needed to represent data with range 30 is

(i) 9 (ii) 7 (iii) 6 (iv) 8 (v) 4

The number of classes of class size 9 required to represent
the given random sample in exclusive form

28. 1 , 2 , 4 , 4 , 5 , 6 , 7 , 7 , 8 , 8 , 9 , 9 , 11 , 13 , 13
16 , 21 , 21 , 23 , 24 , 25 , 28 , 30 , 31 , 32 , 34 , 34 , 35 , 36 , 40
40 , 41 , 42 , 43 , 44 , 47 , 48

(i) 6 (ii) 7 (iii) 8 (iv) 5 (v) 3

If some random sample data is arranged in a frequency distribution table in
29. inclusive form with 8 - 17 as the first class,
then the observation 30 falls in which class?

(i) 28 - 37 (ii) 27.5 - 37.5 (iii) 28.5 - 36.5 (iv) 29 - 38 (v) 27 - 36

If some random sample data is arranged in a frequency distribution table in
30. exclusive form with 1 - 10 as the first class,
then the observation 29 falls in which class?

(i) 29 - 38 (ii) 27.5 - 37.5 (iii) 27 - 36 (iv) 28 - 37 (v) 28.5 - 36.5

Given class interval table, find the sum of frequencies.

31.

Class–Interval	40 - 47	47 - 54	54 - 61	61 - 68	68 - 75
Frequency	30	27	30	26	27

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

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32. Which of the following are continuous variables?
a) Weights of persons in a group
b) Heights of children in a class
c) Number of workers in a factory
d) Wages of workers in a factory
e) Number of members in a family

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

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33. Which of the following are discontinuous variables?
a) Heights of children in a class
b) Wages of workers in a factory
c) Number of members in a family

d) Number of workers in a factory
e) Weights of persons in a group

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

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34. Which of the following class intervals are in exclusive form?
a) 22.5 - 28.5 , 28.5 - 34.5 , 34.5 - 40.5...
b) 23 - 28 , 29 - 34 , 35 - 40,...
c) 41 - 46 , 47 - 52 , 53 - 58,...
d) 38 - 43 , 43 - 48 , 48 - 53...
e) 23 - 28 , 28 - 33 , 33 - 38,...

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

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35. If the sum of the following frequency distribution is 33 ,
find the value of 'x'.

Value	Frequency
3	7
4	4
5	7
6	3
7	3
8	3
9	x
10	4

(i) 3 (ii) 1 (iii) 5 (iv) 2 (v) 0

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36. If the sum of the following frequency distribution is 38 ,
find the value of 'x'.

Class-Interval	Frequency
20 - 29	6
30 - 39	2
40 - 49	x
50 - 59	3
60 - 69	6
70 - 79	5

80 - 89	10

(i) 5 (ii) 9 (iii) 4 (iv) 7 (v) 6

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37. Which of the following are continuous variables?
    a) Number of players in a team
    b) Population of cities
    c) Wages of workers in a factory
    d) Rainfall at a place over a month
    e) Number of members in a family

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

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38. Which of the following are discrete variables?
    a) Rainfall at a place over a month
    b) Number of players in a team
    c) Population of cities
    d) Temperature at a place over a month
    e) Heights of children in a class

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

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39. Convert the exclusive form of the class interval 17.5 - 21.5 to inclusive form

    (i) 17.5 - 21.5 (ii) 17.5 - 21 (iii) 18 - 21.5 (iv) 18 - 21 (v) 18.5 - 20.5

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40. Convert the inclusive form of the class interval 35 - 45 to exclusive form

    (i) 34 - 46 (ii) 35 - 45 (iii) 34 - 45.5 (iv) 34.5 - 46 (v) 34.5 - 45.5

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41. Convert the discontinuous form of the class interval 10 - 20 to continuous form

    (i) 9 - 21 (ii) 10 - 20 (iii) 9.5 - 21 (iv) 9 - 20.5 (v) 9.5 - 20.5

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42. Convert the continuous form of the class interval 20.5 - 28.5 to discontinuous form

    (i) 21 - 28 (ii) 21 - 28.5 (iii) 20.5 - 28.5 (iv) 20.5 - 28 (v) 21.5 - 27.5

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

43.

Class–Interval	16 - 21	22 - 27	28 - 33	34 - 39	40 - 45	46 - 51
Frequency	17	27	40	36	40	20

(i)

Class-Interval	15.5 - 20.5	21.5 - 26.5	27.5 - 32.5	33.5 - 38.5	39.5 - 44.5	45.5 - 50.5
Frequency	17	27	40	36	40	20

(ii)

Class-Interval	16.5 - 21.5	22.5 - 27.5	28.5 - 33.5	34.5 - 39.5	40.5 - 45.5	46.5 - 51.5
Frequency	17	27	40	36	40	20

(iii)

Class-Interval	16 - 21	21 - 26	26 - 31	31 - 36	36 - 41	41 - 46
Frequency	20	26	11	11	40	22

(iv)

Class-Interval	15.5 - 21	21.5 - 27	27.5 - 33	33.5 - 39	39.5 - 45	45.5 - 51
Frequency	17	27	40	36	40	20

(v)

Class-Interval	15.5 - 21.5	21.5 - 27.5	27.5 - 33.5	33.5 - 39.5	39.5 - 45.5	45.5 - 51.5
Frequency	17	27	40	36	40	20

Assignment Key

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

37) (iv)
38) (iii)
39) (iv)
40) (v)
41) (v)
42) (i)
43) (v)