



1. Arrange the following data 36 24 18 17 31 26 19 36 26 21 in ascending order

- (i) 23 23 16 16 34 33 38 24 30 39 (ii) 11 32 35 18 27 40 11 10 23 17
(iii) 28 33 36 37 16 18 38 29 10 31 (iv) 17 18 19 21 24 26 26 31 36 36
(v) 15 12 22 20 22 31 40 30 34 15

2. Arrange the following data 28 27 23 31 22 17 16 28 28 29 in descending order

- (i) 31 29 28 28 27 23 22 17 16 (ii) 18 20 36 22 13 18 27 19 36 27
(iii) 19 10 28 18 13 32 13 10 22 34 (iv) 28 29 24 24 21 18 25 23 15 16
(v) 15 31 15 34 20 31 23 14 23 14

3. Given class interval 25 -31 in exclusive form, its lower limit is

- (i) 26 (ii) 27 (iii) 24 (iv) 25 (v) 23

4. Given class interval 38 -43 in exclusive form, its upper limit is

- (i) 44 (ii) 42 (iii) 43 (iv) 45 (v) 40

5. Given class interval 15 -19 in exclusive form, its class size is

- (i) 5 (ii) 7 (iii) 4 (iv) 1 (v) 3

6. Given class interval 46 -54 in exclusive form, its mid value is

- (i) 53 (ii) 48 (iii) 50 (iv) 51 (v) 49

7. If the upper and lower limit of class interval are 30 and 26 respectively, then the class interval is

- (i) 26-30 (ii) 26-30.5 (iii) 25.5-30.5 (iv) 26.5-29.5 (v) 25.5-30

8. Given class interval 43 -49 in exclusive form, its upper limit is

- (i) 50 (ii) 48 (iii) 49 (iv) 47 (v) 52

9. Given class interval 11 -13 in exclusive form, its class size is

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

10. Given class interval 31 -37 in exclusive form, its class mark is

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

11. Given class interval 32 -41 in exclusive form, its mid value is

- (i) 37 (ii) $\frac{145}{4}$ (iii) $\frac{75}{2}$ (iv) $\frac{73}{2}$ (v) $\frac{71}{2}$

12. If the upper and lower limit of class interval are 29 and 26 respectively, then the class interval is

- (i) 25.5-29.5 (ii) 26-29.5 (iii) 25.5-29 (iv) 26.5-28.5 (v) 26-29

13. If the lower and upper limit of class interval are 14 and 17 respectively, then the class interval is

- (i) 14.5-16.5 (ii) 13.5-17.5 (iii) 14-17.5 (iv) 13.5-17 (v) 14-17

14. The class boundaries of 47 - 56 which is in exclusive form are

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

15. The class boundaries of 29 - 36 which is in inclusive form are

- (i) 28-36.5 (ii) 28.5-36.5 (iii) 28-37 (iv) 29-36 (v) 28.5-37

16. If the lower and upper limit of class interval are 21 and 28 respectively, then the class interval is

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

17. The class boundaries of 46 - 51 which is in exclusive form are

- (i) 46-51 (ii) 45.5-51.5 (iii) 46.5-50.5 (iv) 45.5-51 (v) 46-51.5

18. The class boundaries of 46 - 52 which is in inclusive form are

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

19. Convert the discontinuous form of the class interval 21 - 26 to continuous form

- (i) 20.5-26.5 (ii) 20-26.5 (iii) 20-27 (iv) 20.5-27 (v) 21-26

20. Convert the continuous form of the class interval 34.5 - 37.5 to discontinuous form

- (i) 35-37 (ii) 34.5-37 (iii) 35.5-36.5 (iv) 35-37.5 (v) 34.5-37.5

21. The class size used in the below table is

Class-Interval	29 - 35	36 - 42	43 - 49	50 - 56	57 - 63
Frequency	18	29	5	17	25

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

22. The class size used in the below table is

Class-Interval	15 - 24	24 - 33	33 - 42	42 - 51	51 - 60	60 - 69
Frequency	19	29	13	22	27	30

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

23. Convert the discontinuous form of the class interval 15 - 19 to continuous form

- (i) 14.5-19.5 (ii) 15-19 (iii) 14.5-20 (iv) 14-20 (v) 14-19.5

24. Convert the continuous form of the class interval 28.5 - 39.5 to discontinuous form

- (i) 29.5-38.5 (ii) 29-39 (iii) 28.5-39 (iv) 28.5-39.5 (v) 29-39.5

25. The class size used in the below table is

Class-Interval	35 - 40	41 - 46	47 - 52	53 - 58	59 - 64	65 - 70
Frequency	5	7	28	28	15	4

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

26. The class size used in the below table is

Class-Interval	35 - 42	42 - 49	49 - 56	56 - 63
Frequency	14	9	17	8

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

27. Which of the following are true?

- a) The true lower limit of the exclusive form class interval 50 - 60 is 50.
 - b) The true lower limit of the inclusive form class interval 50 - 60 is 50.
 - c) The number of times a particular observation occurs is called its frequency.
 - d) The difference between the true upper limit and true lower limit is called the class mark.
 - e) Each numerical figure in a data set is called an observation.
- (i) {a,c,e} (ii) {b,d,e} (iii) {b,a,c} (iv) {b,a} (v) {d,c}

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

- a) 18.5 - 25.5 , 25.5 - 32.5 , 32.5 - 39.5...
 - b) 37 - 43 , 43 - 49 , 49 - 55...
 - c) 40 - 46 , 47 - 53 , 54 - 60,...
 - d) 19 - 25 , 26 - 32 , 33 - 39,...
 - e) 19 - 25 , 25 - 31 , 31 - 37,...
- (i) {b,d,c} (ii) {b,d} (iii) {c,d} (iv) {e,a,c} (v) {a,c}

29. In inclusive form representation, the observation 27 falls in which class?

- (i) 17-27 (ii) 7-17 (iii) 16-26 (iv) 28-37 (v) 12-22

30. In exclusive form representation, the observation 46 falls in which class?

- (i) 46-56 (ii) 51-61 (iii) 41-46 (iv) 36-46 (v) 56-66

The class mark of the class with frequency x is

Class-Interval	Frequency
17 - 22	29
23 - 28	x
29 - 34	28
35 - 40	9
41 - 46	12

- (i) $\frac{49}{2}$ (ii) $\frac{53}{2}$ (iii) $\frac{101}{4}$ (iv) 26 (v) $\frac{51}{2}$

The class mark of the class with frequency x is

Class-Interval	Frequency
7 - 17	11
17 - 27	x
27 - 37	1
37 - 47	17
47 - 57	30

- (i) 21 (ii) 19 (iii) 25 (iv) 23 (v) 22

The mid value of the class with frequency x is

Class-Interval	Frequency
15 - 20	12
21 - 26	9
27 - 32	8
33 - 38	x
39 - 44	24

33. (i) $\frac{71}{2}$ (ii) $\frac{141}{4}$ (iii) $\frac{73}{2}$ (iv) $\frac{69}{2}$ (v) 36

The mid value of the class with frequency x is

Class-Interval	Frequency
3 - 13	4
13 - 23	x
23 - 33	21
33 - 43	2
43 - 53	30

34. (i) 20 (ii) 18 (iii) 15 (iv) 19 (v) 17

The class boundaries of the class with frequency x is

Class-Interval	Frequency
34 - 39	27
40 - 45	15
46 - 51	5
52 - 57	x
58 - 63	30

35. (i) 51.5-58 (ii) 51-57.5 (iii) 51-58 (iv) 51.5-57.5 (v) 52-57

The class boundaries of the class with frequency x is

Class-Interval	Frequency
13 - 20	x
20 - 27	10
27 - 34	5
34 - 41	11
41 - 48	21

36. (i) 13.5-19.5 (ii) 12.5-20.5 (iii) 12.5-20 (iv) 13-20.5 (v) 13-20

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

Class-Interval	Frequency
28 - 35	x
36 - 43	7
44 - 51	2
52 - 59	25
60 - 67	2

37. (i) 27.5-35.5 (ii) 28-35 (iii) 27.5-36 (iv) 27-35.5 (v) 27-36

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

38.

Class-Interval	Frequency
12 - 17	18
17 - 22	25
22 - 27	19
27 - 32	18
32 - 37	x

- (i) 32-37.5 (ii) 32-37 (iii) 31.5-37.5 (iv) 31.5-37 (v) 32.5-36.5

The lower limit of the class with frequency x is

39.

Class-Interval	Frequency
40 - 46	9
47 - 53	3
54 - 60	14
61 - 67	x
68 - 74	6

- (i) 58 (ii) 62 (iii) 60 (iv) 61 (v) 63

The upper limit of the class with frequency x is

40.

Class-Interval	Frequency
45 - 54	9
54 - 63	x
63 - 72	16
72 - 81	16
81 - 90	26

- (i) 63 (ii) 61 (iii) 66 (iv) 62 (v) 64

41. If the sample data with range 40 has to be divided into 8 class intervals, then the length of the class is

- (i) 2 (ii) 5 (iii) 4 (iv) 6 (v) 8

42. If the length of the class is 9, then the number of class intervals needed to represent data with range 50 is

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

43. The number of classes of class size 10 required to represent the given random sample in exclusive form

2 3 5 7 9 11 15 17 17 26 26 27 31 32 32 33 34 36 40 40 47 50 50

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

Given class interval table, find the sum of frequencies.

44.

Class-Interval	18 - 23	24 - 29	30 - 35	36 - 41
Frequency	9	16	26	9

- (i) 59 (ii) 57 (iii) 60 (iv) 61 (v) 63

Given class interval table, find the sum of frequencies.

45.

Class-Interval	38 - 44	44 - 50	50 - 56	56 - 62	62 - 68
Frequency	23	16	3	16	8

- (i) 67 (ii) 68 (iii) 66 (iv) 65 (v) 63

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

Class-Interval	10 - 17	18 - 25	26 - 33	34 - 41	42 - 49
Frequency	42	17	37	14	31

(i)	Class-Interval	10.5 - 17.5	18.5 - 25.5	26.5 - 33.5	34.5 - 41.5	42.5 - 49.5
	Frequency	42	17	37	14	31

(ii)	Class-Interval	9.5 - 16.5	17.5 - 24.5	25.5 - 32.5	33.5 - 40.5	41.5 - 48.5
	Frequency	42	17	37	14	31

(iii)	Class-Interval	10 - 17	17 - 24	24 - 31	31 - 38	38 - 45
	Frequency	45	15	37	34	13

(iv)	Class-Interval	9.5 - 17	17.5 - 25	25.5 - 33	33.5 - 41	41.5 - 49
	Frequency	42	17	37	14	31

(v)	Class-Interval	9.5 - 17.5	17.5 - 25.5	25.5 - 33.5	33.5 - 41.5	41.5 - 49.5
	Frequency	42	17	37	14	31

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

- a) 19 - 26 , 26 - 33 , 33 - 40,...
- b) 18.5 - 26.5 , 26.5 - 34.5 , 34.5 - 42.5...
- c) 40 - 47 , 47 - 54 , 54 - 61...
- d) 43 - 50 , 51 - 58 , 59 - 66,...
- e) 19 - 26 , 27 - 34 , 35 - 42,...

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

48. Convert the exclusive form of the class interval 37.5 - 43.5 to inclusive form

(i) 38-43 (ii) 38.5-42.5 (iii) 37.5-43.5 (iv) 38-43.5 (v) 37.5-43

49. Convert the inclusive form of the class interval 32 - 34 to exclusive form

(i) 32-34 (ii) 31-34.5 (iii) 31.5-34.5 (iv) 31-35 (v) 31.5-35

Assignment Key

1) (iv)	2) (i)	3) (iv)	4) (iii)	5) (iii)	6) (iii)
7) (i)	8) (iii)	9) (v)	10) (iii)	11) (iv)	12) (v)
13) (v)	14) (v)	15) (ii)	16) (i)	17) (i)	18) (i)
19) (i)	20) (i)	21) (i)	22) (iv)	23) (i)	24) (ii)
25) (i)	26) (i)	27) (i)	28) (iii)	29) (i)	30) (i)
31) (v)	32) (v)	33) (i)	34) (ii)	35) (iv)	36) (v)
37) (i)	38) (ii)	39) (iv)	40) (i)	41) (ii)	42) (iii)
43) (i)	44) (iii)	45) (iii)	46) (v)	47) (iv)	48) (i)
49) (iii)					