

Order and Ranking

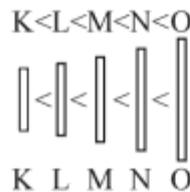
WHAT IS ORDERING TEST?

Under this segment, generally deals with the problems related to the arrangement of persons/objects in ascending/descending order (based on different parameters such as height, weight, ages, merit, marks, salary, length etc.).

Types of Order Sequence:

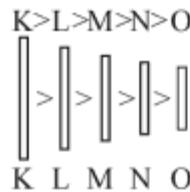
(A) **Ascending Order Sequence:** In the sequence, the persons or objects are arranged in increasing order of their heights, weight, ages etc.

Let us see



(B) **Descending Order Sequence:** In the sequence, the persons or objects are arranged in decreasing order of their heights, weight, ages etc.

Let us see



Example 1. Among M, T, R and P, M is older than only P. T is older than R. Who among them is the oldest?

- (a) T (b) R
(c) T or R (d) Data inadequate

Sol. (a) According to question,
 $M > P, T > R$

$T > R > M > P$ (\because M is older than only P)

Hence, T is the oldest.

Example 2. Suman is heavier than Alok but not as heavier as Rakesh. Alok is heavier than Jayesh. Kapil is heavier than Suman but not as heavier as Rakesh. Who is the heaviest?

- (a) Suman (b) Alok
(c) Rakesh (d) Kapil

Sol. (c) According to the question,
 $Rakesh > Suman > Alok$
 $Alok > Jayesh$
 $Rakesh > Kapil > Suman$

On arranging the above data, we get
 $Rakesh > Kapil > Suman > Alok > Jayesh$
Hence, Rakesh is the heaviest.

Number Test

In such test, generally you are given a long series of numbers. The candidate is required to find out how many times a number satisfying the conditions specified in the question occurs.

Example 3. How many 8s are there in the following number sequence which are immediately preceded by 5 but not immediately followed by 3?

3 8 5 8 4 5 8 3 9 8 8 5 8 8 8 9 3

- (a) 1 (b) 4 (c) 3 (d) 2
(e) None of these

Sol. (d) Let us see the following :

3 8 5 8 4 5 8 3 9 8 8 5 8 8 8 9 3

Clearly, two such 8s are there.

\therefore Option (d) is correct.

Ranking Test

In such problems, the ranks of a person or object both from the top and from the bottom are given and on the basis of this the total number of persons or objects is asked. Sometimes question is twisted also and position of a particular person or object is asked.

Shortcut Approach - 1

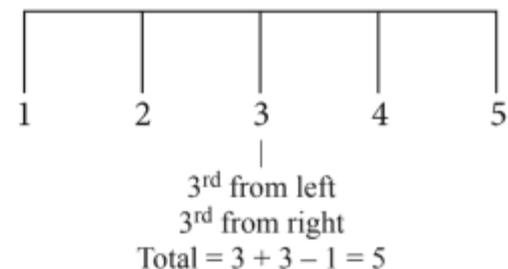
• **Formulas to determine the positioning**

- (1) $Left + Right = Total + 1$
- (2) $Left = Total + 1 - Right$
- (3) $Right = Total + 1 - Left$
- (4) $Total = Left + Right - 1$

Note

The above formula are only for a single person's or object's position

E.g.



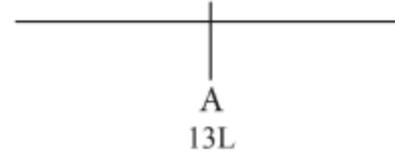
• **Same for vertical & Horizontal**

- (1) Total + 1 = Top + Bottom
- (2) Top = Total + 1 - Bottom
- (3) Bottom = Total + 1 - Top
- (4) Total = Top + Bottom - 1

Example  4. In a row of 40 students, A is 13th from the left end, find the rank from right end.

- (a) 27 (b) 28 (c) 29 (d) 30

Sol. (b) Total = 40



$$\begin{aligned} \text{A's rank from right side} &= \text{Total} + 1 - \text{left} \\ &= 40 - 13 + 1 \\ &= 27 + 1 \\ &= 28 \end{aligned}$$

EXERCISE

1. Anita ranks twelfth in a class of forty six. What will be her rank from the last?
(a) 34th (b) 35th (c) 36th (d) 37th
2. Rakesh ranks 7th from the top and 28th from the bottom in a class. How many students are there in the class?
(a) 34th (b) 35th (c) 36th (d) 37th
3. In a row of girls, Shilpa is eighth from the left and Reena is seventeenth from the right. If they interchange their positions, Shilpa becomes fourteenth from the left. How many girls are there in the row?
(a) 34th (b) 35th (c) 30th (d) 37th
4. In a row of children, Dipa is fifth from the left and Vijay is sixth from the right. When they interchange their places among themselves, Dipa becomes thirteenth from the left. Then what will be Vijay's position from the right?
(a) 4th (b) 14th (c) 8th (d) 12th
5. Mohan is older than Prabir, Suresh is younger than Prabir. Mihir is older than Suresh but younger than Prabir. Who among the four is the youngest?
(a) Prabir (b) Mihir (c) Mohan (d) Suresh
6. M is older than R. Q is younger than R and N. N is not as old as M. Who among M, N, R and Q is the oldest?
(a) M (b) R
(c) M or R (d) Data inadequate
7. Among five friends Mahesh is taller than Karan but not Yash. Hrithik is taller than Yash but not Abhishek. If they stand in increasing order of their heights, who will be first in line?
(a) Abhishek (b) Yash
(c) Karan (d) Data inadequate
8. Akshay is 16th from the left end in the row of boys and Vijay is 18th from the right end. Avinash is 11th from Akshay towards the right end and 3rd from Vijay towards the right end. How many boys are there in the row?
(a) Data inadequate (b) 42
(c) 40 (d) None of these
9. In a row of children facing North, Ritesh is twelfth from the left end. Sudhir who is twenty-second from the right end is fourth to the right of Ritesh. Total how many children are there in the row?
(a) 35 (b) 36 (c) 37 (d) 34
10. Among A, B, C, D and E, A is taller than B but shorter than C. B is taller than only E. C is not the tallest. Who among them will be in the middle if they stand in the order of their heights?
(a) A (b) C (c) E (d) Cannot be determined
11. Madhu is 18th from the left end and Sandhu is 11th from the right end of a row of 40 children. How many children are there between Madhu and Sandhu in the row?
(a) 10 (b) 9 (c) 12 (d) 11
12. In a class of 10 girls and 20 boys, Jaya's rank is '4' among the girls and '18' in the class. What is Jaya's rank among the boys in the class?
(a) Cannot be determined (b) 16
(c) 14 (d) 15
13. Among P, Q, R, S and T, S is older than R but not as old as T; Q is older than only P. Who among them is the youngest?
(a) P (b) Q
(c) R (d) Cannot be determined
14. Hemang is 16th from the top and twelfth from the bottom in merit in the class. How many students are there in the class?
(a) 29 (b) 28
(c) 27 (d) Cannot be determined
15. In a row of 40 students facing North, Kailash is 6th to the left of Soman. If Soman is 30th from the left end of the row, how far is Kailash from the right end of the row?
(a) 17th (b) 16th (c) 15th (d) 26th
16. Among M, N, P, R and T each one has secured different marks in an examination. R secured more marks than M and T. N secured less marks than P. Who among them secured third highest marks?
(a) N (b) R
(c) M (d) Data inadequate
17. In a class of 20 students, Alisha's rank is 15th from the top. Manav is 4 ranks above Alisha. What is Manav's rank from the bottom?
(a) 10th (b) 11th (c) 9th (d) 12th
18. Among A, B, C, D and E each having a different weight, D is heavier than A and E and B is lighter than C. Who among them is the heaviest?
(a) D (b) B
(c) C (d) Data inadequate
19. Among B, F, J, K and W each having a different weight, F is heavier than only J. B is heavier than F and W but not as heavy as K. Who is the third heaviest among them?
(a) B (b) F (c) K (d) W

20. In a row of thirty five children, M is fifteenth from the right end and there are ten children between M and R. What is R's position from the left end of the row?
 (a) 15th (b) 5th
 (c) 30th (d) Data inadequate
21. Among P, Q, T, A and B each having a different height, T is taller than P and B but shorter than A and Q. P is not the shortest. Who among them is the tallest?
 (a) A (b) Q
 (c) P (d) Data inadequate
22. In a queue of children, Kailash is fifth from the left and Mona is sixth from the right. When they interchange their places among themselves, Kailash becomes thirteenth from the left. Now what will be Mona's position from the right?
 (a) 4th (b) 14th (c) 8th (d) 15th
23. In a column of girls Kamal is 11th from the front. Leela is 3 places ahead of Sunita who is 22nd from the front. How many girls are there between Kamal and Leela in the column?
 (a) Six (b) Eight
 (c) Seven (d) Cannot be determined
24. The positions of the first and the fifth digits of the number 81943275 are interchanged. Similarly the positions of the second and the sixth digits are interchanged and so on till the fourth and the eighth digits. Which of the following will be the third digit from the right end after the rearrangement?
 (a) 1 (b) 9 (c) 2 (d) 4
25. If all the alphabets of the series are written in reverse order, then which of the following will be 8th to the right of the 7th from the left end of the series?
 (a) A (b) B (c) C (d) D
26. In a vertical row 13 persons are sitting. A is seventh from the beginning and two persons sits between G and A. Persons between A and L is same as persons between G and Q. Then what is the position of Q from the beginning?
 (a) Fourth (b) Eight
 (c) Sixth (d) Can't be determined
27. In a row of boys, Srinath is 7th from the left and Venkat is 12th from the right. If they interchange their positions, Srinath becomes 22nd from the left. How many boys are there in the row?
 (a) 19 (b) 31 (c) 33 (d) 34
28. There are 45 trees in a row. The lemon tree is 20th from right end. What is the rank of lemon tree from left end?
 (a) 26 (b) 24 (c) 25 (d) 27
29. In a row of 16 boys, when Prakash was shifted by two places towards the left, he became 7th from the left end. What was his earlier position from the right end of the row?
 (a) 7th (b) 8th (c) 9th (d) 10th
30. In a class Rajan got the 11th rank and he was 31st from the bottom of the list of boys passed. Three boys did not take the examination and one failed. What is the total strength of the class?
 (a) 32 (b) 42 (c) 45 (d) 46
31. A 2100 member team consisting of Team Leaders and Athletes is attending a National Athletic Meet. For every 20 Athletes, there is one Team Leader. How many Team Leaders would be there in the team?
 (a) 105 (b) 110 (c) 95 (d) 100
32. A, B, C and D have got some money with them. If A gives 8 rupees to B, B will have as much as C has and A will have 3 rupees less than what C has. Also if A takes 6 rupees from C, A will have twice as much money as D. If B and D together have 50 rupees, how much money does A and B have respectively?
 (a) 40, 27 (b) 29, 32 (c) 32, 29 (d) 27, 40
33. There were twelve dozens of chocolates with a shopkeeper. Ten chocolates were distributed by the shopkeeper to the children of his colony. The shopkeeper then added two more dozens of chocolates in his stock. If the shopkeeper divided the total chocolates equally in two different packets, then how many chocolates were there in each packet?
 (a) 158 (b) 89 (c) 152 (d) 79
34. In an archery match, Suresh's team got more scores than Mahesh's team but not as many as Yogesh's team. Yogesh's team got more scores than Mukesh's team. Mukesh's team got less score than Mahesh's team. Which team is in second place in the descending order of scores?
 (a) Yogesh's team (b) Mukesh's team
 (c) Suresh's team (d) Mahesh's team
35. In a queue, I am the last person while my friend is seventh from the front. If the person exactly between me and my friend is on the 23rd position from the front, what is my position in the queue?
 (a) 37 (b) 36 (c) 38 (d) 39

Hints & Solutions

1. (b) Rank of Anita from the last
 $= [\text{Total students} - \text{her rank from first}] + 1$
 $= (46 - 12) + 1 = 35^{\text{th}}$
2. (a) Total no. of students $= [7 + 28] - 1 = 34^{\text{th}}$
 $[\text{Rank from top} + \text{Rank from bottom} - 1]$
3. (c) Total no. of girls
 $= [\text{present position of Shilpa}$
 $+ \text{previous position of Reena}] - 1$
 $= (14 + 17) - 1 = 30$
4. (b) Present position of Vijay = Difference of the two positions of Dipa + previous position of Vijay
 $= (13 - 5) + 6 = 14^{\text{th}}$
5. (d) Mohan > Prabir > Suresh
 Prabir > Mihir > Suresh
 Hence, Mohan > Prabir > Mihir > Suresh
6. (a) $R < M; Q < R, N; N < M$
 $M > N / R > Q$
7. (c) Yash > Mahesh > Karan
 Abhishek > Hrithik > Yash
 Karan < Mahesh < Yash < Hrithik < Abhishek
8. (d) Total number of boys = 41.
9. (c) Total number of children in a row
 $= 12 + 4 + 22 - 1 = 37$

