RANKING ARRANGEMENT

Rule #1.

The total number of a person/objects in a group or class is equal to one less than the sum of the positions of the same person from both the ends (either right and left or top and bottom). Since the same person is counted twice in the sum, the final answer is one less than the total sum.

1. Total number of objects/persons

= [(sum of positions of the same person/object from both sides) – 1]

Example 1:

In a row of persons, the position of Saket from the left side of the row is 27th and position of Saket from the right side of the row is 34th. Find the total number of students in the row?

1. 60
2. 61
3. 62
4. 59

Solution:

Total number of students

= (Position of Saket from left + Position of Saket from right) -1

Total number of students = (27 + 34) – 1 = 61 – 1 = 60.

Hence the correct answer is option A.

Rule#2

The total number of person/object in a group is the sum of before or after the given person in a row and the position of the same person from the other side.

Total no. of persons/objects = No. of persons/objects before or after the given person in a row + Position of the same person from the other side.

An orderly arrangement of pencils in a linear way.

Example 2:

In a row of persons, the position of Aparna Nair from the left side of the row is 27th and there are 5 persons after her in the row. Find the total no. of persons in the row?

Solution:

No. of persons in the row = Position of Aparna from left + No. of persons after Aparna

⇒ Total no. of persons = 27 + 5 = 32

Rule#3

If the positions of two objects/persons are given from the opposite ends and also the total number of persons/objects, then the problem can be addressed in two different ways to determine the number of persons between these two persons/objects.

Case 1:

Overlapping:

The total number of objects or persons in a group is always lesser than the addition of the position of two objects or persons from ends.

Example 3:

The number of objects between two different persons = Total number of books − (Sum of positions of two different persons from opposite sides)

There are 24 students in dance class, and the teacher is planning for an arrangement of students on stage. Sampratha is 9th from the left side of the row and Supreetha is 22nd from the right side of the row. Find the number of dancers standing between the sisters Sampratha and Supreetha?

A.4

B.5

C.6

D.7

Solution:

Adding the position of Sampratha and Supreetha we get:

= 9 + 22 = 31

The result '31' is greater than the total number of students in a dance class.

Therefore the number of dancers standing between the sisters will be = [(Position of Sampratha from left + Position of Supreetha from right) − Total number of dancers − 2]

The number of dancers between Sampratha and Supreetha

= (9+22) − 24 − 2 = 31 − 24 − 2 = 5.

Case 2:

Non – overlapping:

The total number of objects or persons in a group is always greater than the addition of the position of two objects or persons from ends.

Example 4:

There are 64 history books arranged in a row at central library Bangalore. Ancient history is 25th from the left side of the row and Middivel history is 30th from the right side of the row. What is the total number of books between Ancient and Middivel history?

A.6

B.7

C.8

D.9

Solution:

Adding the position of ancient and midlevel history books, we get:

Ancient histroy+ Middivel history = 25 + 30 = 55

Hence the number '55' should be less than the total number of books.

∴ The number of books between ancient and midlevel history = Total number of books − (Place value of Ancient history book from left + Place value of Middivel history from right)

The number of books between ancient and midlevel history = 64 − (25+30) = 64 − 55 = 9

Hence the correct is option D.

Rule #4

Non-predictable order/ranking.

If the data in the question provides only then information of position different objects or persons then it is impossible to find the total number of objects or people in a group or class. As the cases can either be an overlapping or non-overlapping one. In such a situation, the final answer will always be found. Save the time by not trying to solve these type of questions.

Example 5:

Deepavali or Diwali a festival lights in India. One can find the row of lamps in every house these days. Chaitra lights a row of the lamp in her home. A square-shaped lamp is at 18th from left, and a circular-shaped lamp is at 25th position in a row from right. Find the total number of lamp Chaitra had lit?

A.27

B.30

C.43

D. Cannot be determined.

Solution:

The scenario can be either be of Overlapping or non-overlapping one. Hence the correct answer is option D.

Rule#5

Swapping of position to find the order/ ranking

In this section, the placement or the position of the two objects/persons are interchanged. The position of the two people or objects is examined before and after the interchanged.

The place value or the position of the second person from the same side as before interchanging

= Position of 2nd person from the same side before interchanging + (Position of 1st person after interchanging − position of 1st person before interchanging from the same side)

Example 6:

Soldiers Punita and Mitali and are standing in a row of female soldiers. Punita is 18th from the left side of the row, and Mitali is 24th from the right side of the row. If they interchange their positions, Punita becomes 31st from left. Find:

1. The new position of Mitali from the right side
2. The total number of female soldiers in a row.
3. Number of soldiers standing between Punita & Mitali

Solution:1

The new position of Mithali from right side = Position of Mithali from the right side before interchanging + (Position of Punita from the left side after interchanging − Position of Punita from the left side before interchanging)

New position of Mithali from right side = 24 + (31 − 18) = 24 + 13 = 37

The new position of Mithali is 37th.

Rule#6

If positions of two objects from opposite sides of the row are known there is a third object right in the middle of the two, then the total number of objects can be evaluated based on the position of the third object.

Case 1:

The position of the third object is known from both the sides

Case 2:

The position of the third object is known from either of the sides.

Example 7:

There is a pride of lions and its cubs in a row, the position of eldest lioness from the left side of the row is 9th & position of youngest lioness from the right side of the row is 8th. If the newborn cub is sitting just in the middle of eldest & youngest and position of cub from the left side of the row is 15th. Find the total number of lions the row?

Solution:

Position of a cub from left is 15th, and the eldest lioness from left is 9th so there are 15 − 9 − 1 = 5 lions are sitting between eldest and youngest lioness. As the cub is sitting in the middle of the eldest and youngest lioness so there must also be 5 persons sitting between the youngest lioness and a cub.

Thus position of a cub from right =

Position of youngest from right + 5 + 1 =

= 8 + 6 = 14

Total number of lions = (Sum of positions of cubs from both sides − 1)

= (15 + 14) − 1 = 29 − 1 = 28

Rule#7

To find the minimum number of members in the group.

The Minimum number of persons = Sum of positions of persons from both sides – Persons between them – 2.

Example 8:

If the position of A from the left side of a row is 15th and position of B from the right side of a row is 19th and only 1 person is sitting in the middle of A & B. Find the minimum number of persons that can be seated in this row?

Solution:

The total number of persons = 15 + 19 – 1 – 2 = 31.

Aspirants preparing for different competitive exams can out the video explanation of Sequencing, Order and Comparison below. It will help to understand the basing concept and strategies to take such questions in the examination even better.

RANKING ARRANGEMENT

Q 1. In a Queue Ram is 11th from top and 22th from bottom then total no. of students are?

(a) 34 **(b) 33** **(c) 32** **(d) 31**

RANKING ARRANGEMENT

Q 1. In a Queue Ram is 11th from top and 22th from bottom then total no. of students are?

(a) 34 (b) 33 (c) 32 (d) 31

RANKING ARRANGEMENT

Q 2. In a row of 57 boys mohan is 21th from left end then what is his position from right end.

(a) 36 **(b) 37** **(c) 35** **(d) 34**

RANKING ARRANGEMENT

Q 2. In a row of 57 boys mohan is 21th from left end then what is his position from right end.

(a) 36 (b) 37 (c) 35 (d) 34

RANKING ARRANGEMENT

Q 3. In a queue of 81 girls Vibha's position from end is 30th. What is Vibha's position from starting.

(a) 51 **(b) 52** **(c) 50** **(d) 60**

RANKING ARRANGEMENT

Q 3. In a queue of 81 girls Vibha's position from end is 30th. What is Vibha's position from starting.

(a) 51 **(b) 52** (c) 50 (d) 60

RANKING ARRANGEMENT

Q 4. Amar ranked sixteenth from the top and twenty-ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?

(a) 40 (b) 44 (c) 50 (d) 55

RANKING ARRANGEMENT

Q 4. Amar ranked sixteenth from the top and twenty-ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?

(a) 40 (b) 44 (c) 50 (d) 55

RANKING ARRANGEMENT

Q 5. If Vikash finds that he is twelfth from the right and fourth from the left, how many boys should be added to the queue so that there are 28 boys in the line?

(a) 12 (b) 13 (c) 14 (d) 20

RANKING ARRANGEMENT

Q 5. If Vikash finds that he is twelfth from the right and fourth from the left, how many boys should be added to the queue so that there are 28 boys in the line?

(a) 12 (b) 13 (c) 14 (d) 20

RANKING ARRANGEMENT

Q 6. In a row of boys, Jeevan is seventh from the start and eleventh from the end. In another row of boys, Vikas is tenth from the start and twelfth from the end. How many boys are there in both the rows together?

(a) 36 (b) 37 (c) 39 (d) none of these

RANKING ARRANGEMENT

Q 6. In a row of boys, Jeevan is seventh from the start and eleventh from the end. In another row of boys, Vikas is tenth from the start and twelfth from the end. How many boys are there in both the rows together?

(a) 36 (b) 37 (c) 39 (d) none of these

RANKING ARRANGEMENT

Q 7. In a class of 48 students Mona's position is 12th. If two new students join the class (they are more intelligent to Mona in study). Then what is Mona's position from opposite side.

(a)35 (b) 34 (c) 36 (d) 37

RANKING ARRANGEMENT

Q 7. In a class of 48 students Mona's position is 12th. If two new students join the class (they are more intelligent to Mona in study). Then what is Mona's position from opposite side.

(a)35 (b) 34 (c) 36 (d) 37

RANKING ARRANGEMENT

Q 8. In a row of boys, A is thirteenth from the left end, D is seventeenth from the right. If in this row A is eleventh from the right then what is the position of D from the left?

(a) 6^{th} (b) 7^{th} (c) 10^{th} (d) 12^{th}

RANKING ARRANGEMENT

Q 8. In a row of boys, A is thirteenth from the left end, D is seventeenth from the right. If in this row A is eleventh from the right then what is the position of D from the left?

(a) 6^{th} (b) 7^{th} (c) 10^{th} (d) 12^{th}

RANKING ARRANGEMENT

Q 9. Mohan is thirteenth from the left end in a row of children. Praveen is twelth from the right end and eighteenth from the left end. How many children are towards the right of Mohan in that row?

(a) 16 **(b) 18** **(c) 17** **(d) Can't be determined**

RANKING ARRANGEMENT

Q 9. Mohan is thirteenth from the left end in a row of children. Praveen is twelth from the right end and eighteenth from the left end. How many children are towards the right of Mohan in that row?

(a) 16 (b) 18 (c) 17 (d) Can't be determined

RANKING ARRANGEMENT

Q 10. In a row of girls, there are 16 girls between Priya and Natasha. priya is thirty-second from the left end of the row. If Priya is nearer than Natasha to the right end of the row, then how far away is natasha from the left end of the row?

(a) Data inadequate (b) 14th (c) 15th (d) 16th

RANKING ARRANGEMENT

Q 10. In a row of girls, there are 16 girls between Priya and Natasha. priya is thirty-second from the left end of the row. If Priya is nearer than Natasha to the right end of the row, then how far away is natasha from the left end of the row?

(a) Data inadequate (b) 14th (c) 15th (d) 16th

RANKING ARRANGEMENT

Q 11. In a row of boys , if A who is tenth from the left and B who is ninth from the right interchange their positions, A becomes fifteenth from the left. How many boys are there in the row?

(a) 23 (b) 27 (c) 28 (d) 31

RANKING ARRANGEMENT

Q 11. In a row of boys , if A who is tenth from the left and B who is ninth from the right interchange their positions, A becomes fifteenth from the left. How many boys are there in the row?

(a) 23 (b) 27 (c) 28 (d) 31

RANKING ARRANGEMENT

Q 12. In a row of children, Deepti is ninth from the left and kashish is thirteenth from the right. They exchange their positions and then Deepti becomes seventeenth from the left. Find the new position of Kashish from the right end of the row.

(a) 20 (b) 21 (c) 27 (d) 31

RANKING ARRANGEMENT

Q 12. In a row of children, Deepti is ninth from the left and kashish is thirteenth from the right. They exchange their positions and then Deepti becomes seventeenth from the left. Find the new position of Kashish from the right end of the row.

(a) 20 (b) 21 (c) 27 (d) 31

RANKING ARRANGEMENT

Q 13. In a queue of boy shailesh is 20th from starting and Anish is 15th from end. There are 14 person between them. What is the maximum number of person in queue?

(a) 44 (b) 43 (c) 49 (d) 45

RANKING ARRANGEMENT

Q 13. In a queue of boy shailesh is 20th from starting and Anish is 15th from end. There are 14 person between them. What is the maximum number of person in queue?

(a) 44 (b) 43 (c) 49 (d) 45

RANKING ARRANGEMENT

Q 14. In a row of girls Seema is 20th from starting and Rina is 25th from end. There are 8 girls between them. Total number of girls are?

(a) 35 (b) 53 (c) 55 (d) either 35 or 53

RANKING ARRANGEMENT

Q 14. In a row of girls Seema is 20th from starting and Rina is 25th from end. There are 8 girls between them. Total number of girls are?

(a) 35 (b) 53 (c) 55 (d) either 35 or 53

RANKING ARRANGEMENT

Q 15. In a queue of 20 boys, D is fourteenth from the front and F is ninth from the bottom. How many boy are there between D and F?

(a) 2 (b) 3 (c) 1 (d) Data inadequate

RANKING ARRANGEMENT

Q 15. In a queue of 20 boys, D is fourteenth from the front and F is ninth from the bottom. How many boy are there between D and F?

(a) 2 (b) 3 (c) 1 (d) Data inadequate

RANKING ARRANGEMENT

Q 16. In a row of students, Ramesh in 12th from the left and Kashi is 17th from the right. When Ramesh and Kashi interchange their positions, Kashi becomes 27th from the right. How many students are there between Kashi and Ramesh?

(a) 9 (b) 12 (c) 7 (d) 10

RANKING ARRANGEMENT

Q 16. In a row of students, Ramesh in 12th from the left and Kashi is 17th from the right. When Ramesh and Kashi interchange their positions, Kashi becomes 27th from the right. How many students are there between Kashi and Ramesh?

(a) 9 (b) 12 (c) 7 (d) 10

RANKING ARRANGEMENT

Q 17. In a class of 60, Where girls are twice to of boys, Kamal ranked sixteenth from top. If there are 9 girls ahead of Kamal, how many boys are after him in rank?

(a) 13 (b) 7 (c) 12 (d) 23

RANKING ARRANGEMENT

Q 17. In a class of 60, Where girls are twice to of boys, Kamal ranked sixteenth from top. If there are 9 girls ahead of Kamal, how many boys are after him in rank?

(a) 13 (b) 7 (c) 12 (d) 23

RANKING ARRANGEMENT

Q 18. Ravi is 7 ranks ahead of Sumit in a class of 39 students. If Sumit's rank is seventeenth from the last, what is Ravi's rank from the start?

(a) 14th **(b) 15th** **(c) 16th** **(d) 17th**

RANKING ARRANGEMENT

Q 18. Ravi is 7 ranks ahead of Sumit in a class of 39 students. If Sumit's rank is seventeenth from the last, what is Ravi's rank from the start?

(a) 14th (b) 15th (c) 16th (d) 17th

RANKING ARRANGEMENT

Q 19. In a row of boys, A is fifteenth from the left and B is 4th from the right. There are three boys between A and B. C is just left of A. What is C's position from the right?

(a) 9th (b) 10th (c) 12th (d) 13th

RANKING ARRANGEMENT

Q 19. In a row of boys, A is fifteenth from the left and B is 4th from the right. There are three boys between A and B. C is just left of A. What is C's position from the right?

(a) 9th (b) 10th (c) 12th (d) 13th

RANKING ARRANGEMENT

Q 20. In a row of forty children, P is thirteenth from the left end, Q is ninth from the right end. How many children are there between P and R if R is fourth to the left of Q

(a) 12 (b) 13 (c) 14 (d) 15

RANKING ARRANGEMENT

Q 20. In a row of forty children, P is thirteenth from the left end, Q is ninth from the right end. How many children are there between P and R if R is fourth to the left of Q

(a) 12 (b) 13 (c) 14 (d) 15

RANKING ARRANGEMENT

Q 21. In a queue, Shikhar is ninth from the back. Arun's place is eight from the front. Nikhil is standing between the two. What could be the minmum number of boys standing in the queue?

(a) 8 (b) 10 (c) 12 (d) 14

RANKING ARRANGEMENT

Q 21. In a queue, Shikhar is ninth from the back. Arun's place is eight from the front. Nikhil is standing between the two. What could be the minmum number of boys standing in the queue?

(a) 8 (b) 10 (c) 12 (d) 14

RANKING ARRANGEMENT

Q 22. In a row of 21 girls when Monika was shifted by 4 places towards the right, she became 12th from the left end. what was her earlier position from the right end of the row?

(a) 9th (b) 10th (c) 11th (d) 12th

(e) 14th

RANKING ARRANGEMENT

Q 22. In a row of 21 girls when Monika was shifted by 4 places towards the right, she became 12th from the left end. what was her earlier position from the right end of the row?

(a) 9th (b) 10th (c) 11th (d) 12th

(e) 14th

RANKING ARRANGEMENT

Q 23. In a queue of thirty boys, M is eighth from the end and J is twelfth from the front. If there are six boys between J and Q, How many boys are there between M and Q?

(a) 10 (b) 12 (c) 8 (d) data inadequate

RANKING ARRANGEMENT

Q 23. In a queue of thirty boys, M is eighth from the end and J is twelfth from the front. If there are six boys between J and Q, How many boys are there between M and Q?

(a) 10 (b) 12 (c) 8 (d) data inadequate

THANK YOU