

# Reasoning Data Sufficiency Questions for SBI Clerk Mains, IBPS Clerk Mains, SBI PO Pre and IBPS PO Pre Exams. 

Reasoning DS Quiz 18
Directions: The below mentioned question is to be answered using the statements I and II given below. You have to determine the statement(s) which is/are sufficient to answer the question and mark the option accordingly.

1. 8 persons viz. $B, D, K, F, H, J, L$ and $N$ are standing in a linear row facing towards the north. What is the position of H from the right end, if number of persons between H and E are 2?

Statement I: F is second to the left of G, who is on the immediate right of H. No person stands between $J$ and $B$. $B$ is second to the left of $E$.

Statement II: E is third to the right of B. J is not an immediate neighbor of $L$. $F$ and $L$ are not adjacent. $H$ is on the immediate right of $F$.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
2. How is the word 'season' coded?

Statement I : 'Season change by nature' is coded as '4 8129 ' and 'Change is law nature' is coded as '5 1224 4'.

Statement II : 'New season came today' is coded as '7 95135 ' and 'Today change came tomorrow' is coded as '21 3512 19'.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
3. In a 7 storey building where the bottomost floor is numbered as 1 and the topmost floor is numbered as 7 , no one lives at floor number 5 . Only one person among $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}, \mathrm{E}$ and $F$ lives at one floor. What is the floor number of $D$ and difference between the floor numbers of $D$ and $B$ ?

Statement I: D lives at a gap of two floors from C. B and E live on adjacent floors where $E$ is above $B$. Only A lives above $F$, who is at an even numbered floor.
Statement II : E lives two floors below the vacant floor. Only one floor is between the floors of $D$ and $B$. A lives above just above $F$. $B$ is adjacent to $E$.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
4. 7 boxes from $A$ to $G$ are placed (not necessarily in same order) in a linear row facing towards north direction. These boxes contain articles like - Ball, Pen, Paper and Cap such that one type of article is contained in two boxes. Only one of the articles is contained in one box only.

If the box containing Cap is placed exactly in the middle of the row then how many boxes are placed between both the boxes containing Balls?

Statement I: Box C, which contains Pen is placed second to the right of Box F. Box B contains Ball and is placed third from the right end. Box $E$ neither contains pen nor placed adjacent to Box A, which has Cap. No other box contains Cap. Box $G$ is on the immediate left of the box which contains Ball.
Statement II : Box E is third to the right of the box that contains cap. Only box A contains cap. Box D is adjacent to Box F, which contains Paper. Box G is placed second from the right end and is adjacent to the box that contains ball. The box containing pen is adjacent to the box containing cap.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
5. If the code for 'pain' is 20 then find the code for "loss pain no gain"?

Statement I : "loss money gain nothing" is coded as 25784163 and "nothing loss no profit" is coded as 58413625.
Statement II : "gain weight no health" is coded as 21783614 and "no exercise health loss" is coded as 57361425.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
6. In an almirah, there are 7 stacks such that the bottomost stack is numbered as 1 and the topmost stack is numbered as 7 , no book is placed at stack number 5 . Only one book among $\mathrm{U}, \mathrm{B}, \mathrm{M}, \mathrm{T}, \mathrm{S}$ and H is placed at one stack. What is the stack number of T and the difference of the stack numbers of $T$ and $B$ ?

Statement I: T is placed at a gap of two stacks from M. B and S are placed on adjacent stacks where $S$ is above $B$. Only $U$ is placed above $H$, which is at an even numbered stack.
Statement II : S is placed two stacks below the vacant stack. Only one stack is between the stacks of $T$ and $B . U$ is placed just above $H$. $B$ is adjacent to $S$.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
7. A six digit number was written somewhere such that it has only digit 2 appearing twice in the number. Which digit comes at the Hundreds place in the number?

Statement I : The digit at thousands place is 2 more than the digit at ones place. The sum of the digits at thousands and hundreds place is 9 . The number has equal number of odd and even digits. The digits at ones and ten thousands place is same.
Statement II : The numbers starts with an odd prime number but ends with an even prime number. The difference between the first and last digits is equal to the digit at hundreds place. The difference between the digits at hundreds place and at ones place is 3 .
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
8. 6 persons from A to F live in a 7-floored building such that the bottomost floor is numbered as 1 and the topmost floor is numbered as 7 , nobody lives at floor number 5. Only one person lives at one floor. How many persons live below B?

Statement I: F lives at an odd numbered floor. D lives at a gap of two floors from F. B and C live on adjacent floors where C is above B . Only A lives above E .
Statement II : C lives two floors below the vacant floor. Only one floor is between the floors of $D$ and $B$. A lives just above $E$. $B$ is adjacent to $C$.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
9. If the code for 'collapse' is mod then find the code for "without peace world collapse"?

Statement I : "without love world blank" is coded as kon cam eti vad and "blank without peace mind" is coded as nee eti per kon.
Statement II : "world dynamic peace country" is coded as nuv cam per mah and "peace environment country without" is coded as aka per mah kon.
A. If the data in statement I alone is sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question
C. If the data in statements I and II is necessary to answer the question
D. If the data in statements I and II is not sufficient to answer the question
E. If data in either statement I or II is sufficient to answer the question
10. Six persons $A, E, F, G, I$ and $B$ sit equidistant around a circular table such that 2 of them face towards centre while rest face away from centre. Find the persons that face towards centre?

Statement I: E sits second to the right of F. A is on the immediate left of E. D is one of the immediate neighbors of E .
Statement II: A sits adjacent to F, who is second to the left of E. I is second to the left of $F$. I is on the immediate right of $B$, who is not adjacent to $E$.
A. If the data in statement I alone is sufficient
B. If the data in statement II alone is sufficient
C. If the data in either statement I or II is sufficient
D. If the data in both the statements together is not sufficient

E . If the data in both the statements together is necessary

## Correct Answers:

| $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{7}$ | $\mathbf{8}$ | $\mathbf{9}$ | $\mathbf{1 0}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D | C | C | A | C | C | E | A | C | D |



## Explanations:

## 1. Checking statement I:

Statement I: F is second to the left of G, who is on the immediate right of H. No person stands between $J$ and $B$. $B$ is second to the left of $E$.

Case-1

| Persons | J/ | B | J/ | E |  | F | H | G |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Case-2

| Persons | B | J | E |  | F | H | G |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Thus we cannot determine whether H is third or second from right end.
Hence data in statement I is not sufficient.

## Checking statement II:

Statement II: E is third to the right of B. J is not an immediate neighbor of L. F and L are not adjacent. H is on the immediate right of $F$.

Case-1

| Persons | B |  |  |  | E |  | F | $H$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Case-2

| Persons | B |  |  | E |  | F | H |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Thus we cannot determine whether H is first or second from right end.
Hence data in statement II is not sufficient.

## Checking both the statements:

Hints " $E$ is third to the right of $B$ " and " $B$ is second to the left of $E$ " clash with each other, thus a single arrangement cannot be obtained using both the statements.

Hence data in neither statement I nor statement II is sufficient.
Hence option D is correct.
2. Checking statement I:

Statement I: 'Season change by nature' is coded as '4 8129 ' and 'Change is law nature' is coded as ' 5 $12244^{\prime}$.

Using this, code for the word season cannot be found.

Hence data in statement I is not sufficient.

## Checking statement II:

Statement II: 'New season came today' is coded as '7 95135 ' and 'Today change came tomorrow' is coded as '21 3512 19'.

Using this also, code for season cannot be found.

Hence data in statement II is not sufficient.

## Checking statements I and II:

Using both the statements we can say that the code for 'season' is 9 .
Therefore data in both the statements is necessary to answer the question.

Hence option C is correct.

## 3. Checking statement I:

Statement I: D lives at a gap of two floors from C . B and E live on adjacent floors where E is above B . Only A lives above $F$, who is at an even numbered floor.

| Floor <br> number | Persons |
| :---: | :---: |
| 7 | A |
| 6 | F |
| 5 | Vacant |
| 4 | $\mathrm{D} / \mathrm{C}$ |
| 3 | E |
| 2 | B |
| 1 | $\mathrm{C} / \mathrm{D}$ |

Here we cannot determine the floor number of $D$, thus the required difference cannot be found out. Hence data in statement I is not sufficient.

## Checking statement II:

Statement II: E lives two floors below the vacant floor. Only one floor is between the floors of D and B. A lives above just above $F$. $B$ is adjacent to $E$.

Following three cases are possible with the given hints.

| Floor <br> number | Case-1 | Case-2 | Case-3 |
| :---: | :---: | :---: | :---: |
| 7 | Persons | Persons | Persons |
| 6 | F | D | F |
| 5 | Vacant | Vacant | Vacant |
| 4 | D | B | B |
| 3 | E | E | E |
| 2 | B | A | D |
| 1 |  | F |  |

## Hence data in statement II is not sufficient.

## Checking statements I and II:

Statement I: D lives at a gap of two floors from C. B and Elive on adjacent floors where E is above B. Only A lives above $F$, who is at an even numbered floor.

Statement II: E lives two floors below the vacant floor. Only one floor is between the floors of D and B. A lives above just above $F$. $B$ is adjacent to $E$.

| Floor <br> number | Persons |
| :---: | :---: |
| 7 | A |
| 6 | F |
| 5 | Vacant |
| 4 | D |
| 3 | E |
| 2 | B |
| 1 | C |

Thus the difference between the floor numbers of $B$ and $D$ is 2 .
Hence data in both the statements is necessary to answer the question.
Hence option C is correct.
4. 7 boxes from $A$ to $G$ are placed (not necessarily in same order) in a linear row facing towards north direction. These boxes contain articles like - Ball, Pen, Paper and Cap such that one type of article is contained in two boxes. Only one of the articles is contained in one box only.

If the box containing Cap is placed exactly in the middle of the row then how many boxes are placed between both the boxes containing Balls?

Statement I: Box C, which contains Pen is placed second to the right of Box F. Box B contains Ball and is placed third from the right end. Box E neither contains pen nor placed adjacent to Box $A$, which has Cap. No other box contains Cap. Box $G$ is on the immediate left of the box which contains Ball.

Statement II: Box E is third to the right of the box that contains cap. Only box A contains cap. Box D is adjacent to Box F, which contains Paper. Box G is placed second from the right end and is adjacent to the box that contains ball. The box containing pen is adjacent to the box containing cap.

## Checking statement I:

As per the given hints, Box E may contain either Paper or Ball and is definitely not placed third from left end.
No other box except Box A contains Cap, thus pens, papers and balls are kept in two boxes. One of the boxes containing Ball is Box $B$, but box $G$ can't be placed to its left.

| Boxes |  |  | Pen | Cap | Ball |  | Ball |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Articles | F | $\mathrm{E} /$ | C | A | B | G | $\mathrm{E} /$ |

Thus only one box is placed between the two boxes that contain Ball.

## Hence data in statement $I$ is sufficient.

## Checking statement II:

As per the given hints, it is clear that only one box i.e. Box A contains cap, thus it will be placed exactly in the middle of the row.

| Boxes |  |  | Pen/ Cap | Pen/Ball/ |  | Ball/ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Articles |  |  |  | A |  | G | E |

Thus we cannot determine the second box that contains Ball.

Hence data in statement II is not sufficient.

Hence option A is correct.
5. If the code for 'pain' is 20 then find the code for "loss pain no gain"?

Statement I: "loss money gain nothing" is coded as 25784163 and "nothing loss no profit" is coded as 58413625.

Statement II: "gain weight no health" is coded as 21783614 and "no exercise health loss" is coded as 57361425.

## Checking statement I:

"loss money gain nothing" is coded as 25784163
"nothing loss no profit" is coded as 58413625

Thus code for loss, no and gain cannot be determined.
Hence data in statement $l$ is not sufficient.

## Checking statement II:

"gain weight no health" is coded as 21783614
"no exercise health loss" is coded as 57361425

Thus code for loss, no and gain cannot be determined.

## Hence data in statement II is not sufficient.

## Checking both statements I and II:

"loss money gain nothing" is coded as 25784163
"nothing loss no profit" is coded as 58413625
"gain weight no health" is coded as 21783614
"no exercise health loss" is coded as 57361425

Thus codes for 'no', 'loss' and 'gain' are 36,25 and 78 respectively.

Hence data in both the statements together is necessary to answer.

Hence option C is correct.
6. Checking statement I:

Statement I: T is placed at a gap of two stacks from M. B and S are placed on adjacent stacks where S is above $B$. Only U is placed above H , which is at an even numbered stack.

| Stack number | Books |
| :---: | :---: |
| 7 | U |
| 6 | H |
| 5 | Vacant |
| 4 | $\mathrm{D} / \mathrm{C}$ |
| 3 | S |
| 2 | B |
| 1 | C/D |

Here we cannot determine the stack number of T , thus the required difference cannot be found out.
Hence data in statement $I$ is not sufficient.

## Checking statement II:

Statement II: S is placed two stacks below the vacant stack. Only one stack is between the stacks of T and $B . U$ is placed just above $H$. $B$ is adjacent to $S$.

Following three cases are possible with the given hints.

| Stack | Case-1 | Case-2 | Case-3 |
| :---: | :---: | :---: | :---: |
| number | Books | Books | Books |
| 7 | U |  | U |
| 6 | H | T | H |
| 5 | Vacant | Vacant | Vacant |
| 4 | T | B | B |
| 3 | S | S | S |
| 2 | B | U | T |
| 1 |  | H |  |

Hence data in statement II is not sufficient.
Checking statements I and II:
Statement I: T is placed at a gap of two stacks from M. B and S are placed on adjacent stacks where S is above $B$. Only U is placed above H , which is at an even numbered stack.
Statement II: S is placed two stacks below the vacant stack. Only one stack is between the stacks of T and $B$. $U$ is placed just above $H$. $B$ is adjacent to $S$.

| Stack number | Books |
| :---: | :---: |
| 7 | U |
| 6 | H |
| 5 | Vacant |
| 4 | T |
| 3 | S |
| 2 | B |
| 1 | M |

Thus the difference between the stack numbers of $B$ and $T$ is 2 .
Hence data in both the statements is necessary to answer the question.
Hence option C is correct.

## 7. Checking statement I:

We know that only 2 is appearing twice, thus it would be at ones and ten thousands place.

Thus the digit at thousands place must be 4.
_ 245 _ 2
Thus we can say that 5 comes at hundreds place in the number.

Hence data in statement $I$ is sufficient.

## Checking statement II:

The odd prime numbers are 7, 5 and 3 and the only even prime number is 2 . We also know that 2 appears twice in the number.

If the number starts with 7 , then difference of first and last digit is 5 , which will be the hundreds place digit.
$7-{ }^{5}$ _ 2
This also justifies the last sentence of statement IIi.e. the difference between 5 and 2 is 3 .

If the number starts with 5 , then such difference is 3 and 3 will be at hundreds place.
$5 \_$_ $3 \_2$
But this does not justify the last sentence of the statement II.

And if the number starts with 3 , then such difference is 1 , which will be placed at hundreds place.
$3 \_$_ $1 \_2$
But this does not justify the last sentence of the statement II.

Therefore 5 comes at hundreds place.
Hence data in statement II is sufficient.
Thus data in either statement I or statement II is sufficient.

Hence option E is correct.

## 8. Checking statement I:

Statement I: F lives at an odd numbered floor. D lives at a gap of two floors from F . B and C live on adjacent floors where C is above B . Only A lives above E .

| Floor <br> number | Persons |
| :---: | :---: |
| 7 | A |
| 6 | E |
| 5 | Vacant |
| 4 | D |
| 3 | C |
| 2 | B |
| 1 | F |

Clearly, one person lives below B.

Hence data in statement $I$ is sufficient.

## Checking statement II:

Statement II: C lives two floors below the vacant floor. Only one floor is between the floors of D and B. A lives just above E . B is adjacent to C .

Following three cases are possible with the given hints.

| Floor number | Case-1 | Case-2 |
| :---: | :---: | :---: |
|  | Persons | Persons |
| 7 | A | A |
| 6 | E | E |
| 5 | Vacant | Vacant |
| 4 | B | D |
| 3 | C | C |
| 2 | D | B |
| 1 |  |  |

Here we cannot determine whether 1 or 3 persons live below $B$.

Hence data in statement II is not sufficient.

Hence option A is correct.
9. If the code for 'collapse' is mod then find the code for "without peace world collapse"?

Statement I: "without love world blank" is coded as kon cam eti vad and "blank without peace mind" is coded as nee eti per kon.

Statement II: "world dynamic peace country" is coded as nuv cam per mah and "peace environment country without" is coded as aka per mah kon.

## Checking statement I:

"without love world blank" is coded as 25784163
"blank without peace mind" is coded as 58413625
Thus code for without, peace and world cannot be determined.

## Hence data in statement $I$ is not sufficient.

## Checking statement II:

"world dynamic peace country" is coded as 21783614
"peace environment country without" is coded as 57361425
Thus code for without, peace and world cannot be determined.

## Hence data in statement II is not sufficient.

Checking both statements I and II:
"without love world blank" is coded as 25784163
"blank without peace mind" is coded as 58413625
"world dynamic peace country" is coded as 21783614
"peace environment country without" is coded as 57361425
Thus codes for 'peace', 'without' and 'world' are 36,25 and 78 respectively.
Hence data in both the statements together is necessary to answer.

Hence option C is correct.
10. Following 4 cases are possible with respect to the given hints.



But we cannot determine the persons who face towards centre.
Hence data in statement I alone is not sufficient.

## Checking statement II:

Following 2 cases are possible with respect to the given hints.



In one case we can see that Both F and E face towards centre but in another case we have only B facing towards the centre.
Thus data in statement II is also not sufficient.

## Checking both I and II:

Even after combining both the statements we get following 2 cases.


Thus still we can't determine the persons facing towards the centre.

Hence data in both the statements together is not sufficient.
Hence option D is correct.

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