Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

1) How many runs did Anil score in his partnership with Javagal?

- 6
- 7
- 8
- 3

Video Explanation:

Explanation:

The first two wickets fell at 7. Since Sachin scored 90 runs, clearly the first two wickets to fall were Ajay and Vinod. After the fall of the second wicket, Azhar came out to bat with Sachin. Since the third wicket fell at 70, the third player to get out was Azhar.

The 4^{th} wicket fell at 143 and the 5^{th} wicket fell at 147. Clearly the 5^{th} wicket to fall was Manoj. We have to figure out if the 4^{th} wicket to fall was Sachin or Sanjay. However, it is given that Sanjay scored maximum possible runs in the partnership with Nayan and Anil both. If Sanjay was the 4^{th} wicket to fall, there would be no partnership between Sanjay and Nayan or Anil in that case. Therefore the 4^{th} wicket to fall was Sachin.

After Manoj got out, Nayan came out to bat with Sanjay. Since Sanjay also made a partnership with Anil later, the 6^{th} wicket to fall was Nayan. The partnership for the 7^{th} wicket was between Sanjay and Anil. Since Anil was the last player to get out, the 7^{th} wicket to fall was Sanjay. Subsequently, the 8^{th} wicket to fall was Javagal and the 9^{th} wicket to fall was Venkatesh.

Given: Sanjay scored maximum possible runs in his partnerships with Nayan and Anil. That means there were no extra runs in Sanjay's partnership with Nayan as well as with Anil.

Using the conditions that there were no extras after Javagal got out . Now we have the following:

Partnership	First player	Second player	Extras	Total partnership	Cumulative score	Player who got out
1^{st}	Ajay (1)	Sachin		7	7	Ajay
2^{nd}	Vinod (0)	Sachin (0)	0	0	7	Vinod
3^{rd}	Azhar (10)	Sachin		63	70	Azhar
4^{th}	Sanjay	Sachin		73	143	Sachin
5^{th}	Sanjay	Manoj (3)		4	147	Manoj
6^{th}	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7^{th}	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8^{th}	Javagal (7)	Anil		19	224	Javagal
9^{th}	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10^{th}	Raju (3)	Anil (8)	0	11	238	Anil

Anil must have scored 17 – 8 – 3 = 6 runs in his partnership with Javagal for the 8^{th} wicket.

So for partnership of 4 runs for the fifth wicket with Manoj (3), Sanjay must have scored 1 run(from point 3).

The number of runs scored by Sanjay in his partnership with Sachin for the 4^{th} wicket = 62 – 1 – 27 – 4 = 30. We have yet to account for 18 – 6 = 12 extra runs out of 22.

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

We have the following:

Partnership	First player	Second player	Extras	Total partnership	Cumulative score	Player who got out
1st	Ajay (1)	Sachin (6 – a)	(a)	7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin (53 – b)	(b)	63	70	Azhar
4th	Sanjay (30)	Sachin (31 + a + b)	(12 – a – b)	73	143	Sachin
5th	Sanjay (1)	Manoj (3)	0	4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil (6)	6	19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

Anil scored 6 runs in his partnership with Javagal. Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **334 secs**

Your Attempt: **Skipped**

% Students got it correct: **47 %**

2) Out of the ten partnerships, how many partnerships had zero extra runs?

- 6
- 7
- 5
- Cannot be determined

Video Explanation:

Explanation:

The first two wickets fell at 7. Since Sachin scored 90 runs, clearly the first two wickets to fall were Ajay and Vinod. After the fall of the second wicket, Azhar came out to bat with Sachin. Since the third wicket fell at 70, the third player to get out was Azhar.

The 4^{th} wicket fell at 143 and the 5^{th} wicket fell at 147. Clearly the 5^{th} wicket to fall was Manoj. We have to figure out if the 4^{th} wicket to fall was Sachin or Sanjay. However, it is given that Sanjay scored maximum possible runs in the partnership with Nayan and Anil both. If Sanjay was the 4^{th} wicket to fall, there would be no partnership between Sanjay and Nayan or Anil in that case. Therefore the 4^{th} wicket to fall was Sachin.

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

After Manoj got out, Nayan came out to bat with Sanjay. Since Sanjay also made a partnership with [illegible] fall was Nayan. The partnership for the 7th wicket was between Sanjay and Anil. Since Anil was the last player to get out, the 7th wicket to fall was Sanjay. Subsequently, the 8th wicket to fall was Javagal and the 9th wicket to fall was Venkatesh.

Given: Sanjay scored maximum possible runs in his partnerships with Nayan and Anil. That means there were no extra runs in Sanjay's partnership with Nayan as well as with Anil.

Using the conditions that there were no extras after Javagal got out . Now we have the following:

Partnership	First player	Second player	Extras	Total partnership	Cumulative score	Player who got out
1st	Ajay (1)	Sachin		7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin		63	70	Azhar
4th	Sanjay	Sachin		73	143	Sachin
5th	Sanjay	Manoj (3)		4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil		19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

Anil must have scored 17 – 8 – 3 = 6 runs in his partnership with Javagal for the 8th wicket.

So for partnership of 4 runs for the fifth wicket with Manoj (3), Sanjay must have scored 1 run(from point 3).

The number of runs scored by Sanjay in his partnership with Sachin for the 4th wicket = 62 – 1 – 27 – 4 = 30. We have yet to account for 18 – 6 = 12 extra runs out of 22.

We have the following:

Partnership	First player	Second player	Extras	Total partnership	Cumulative score	Player who got out
1st	Ajay (1)	Sachin (6 – a)	(a)	7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin (53 – b)	(b)	63	70	Azhar
4th	Sanjay (30)	Sachin (31 + a + b)	(12 – a – b)	73	143	Sachin
5th	Sanjay (1)	Manoj (3)	0	4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil (6)	6	19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

Number of partnerships having zero extra runs depends on values of 'a' and 'b', which are not known.

Hence, [4].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **101 secs**

Your Attempt: **Skipped**

% Students got it correct: **67 %**

3) If Sachin had scored exactly 50 runs when the third wicket fell, what was the contribution of extra runs to the partnership for the 4th wicket? (Write 19 if your answer is 'Cannot be determined')

Enter your response (as an integer) using the virtual keyboard in the box provided.

Video Explanation:

Explanation:

The first two wickets fell at 7. Since Sachin scored 90 runs, clearly the first two wickets to fall were Ajay and Vinod. After the fall of the second wicket, Azhar came out to bat with Sachin. Since the third wicket fell at 70, the third player to get out was Azhar.

The 4th wicket fell at 143 and the 5th wicket fell at 147. Clearly the 5th wicket to fall was Manoj. We have to figure out if the 4th wicket to fall was Sachin or Sanjay. However, it is given that Sanjay scored maximum possible runs in the partnership with Nayan and Anil both. If Sanjay was the 4th wicket to fall, there would be no partnership between Sanjay and Nayan or Anil in that case. Therefore the 4th wicket to fall was Sachin.

After Manoj got out, Nayan came out to bat with Sanjay. Since Sanjay also made a partnership with Anil later, the 6th wicket to fall was Nayan. The partnership for the 7th wicket was between Sanjay and Anil. Since Anil was the last player to get out, the 7th wicket to fall was Sanjay. Subsequently, the 8th wicket to fall was Javagal and the 9th wicket to fall was Venkatesh.

Given: Sanjay scored maximum possible runs in his partnerships with Nayan and Anil. That means there were no extra runs in Sanjay's partnership with Nayan as well as with Anil.

Using the conditions that there were no extras after Javagal got out . Now we have the following:

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

Partnership	First player	Second player	Extras	Tot	score	got out
1st	Ajay (1)	Sachin		7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin		63	70	Azhar
4th	Sanjay	Sachin		73	143	Sachin
5th	Sanjay	Manoj (3)		4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil		19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

Anil must have scored 17 – 8 – 3 = 6 runs in his partnership with Javagal for the 8th wicket.

So for partnership of 4 runs for the fifth wicket with Manoj (3), Sanjay must have scored 1 run(from point 3).

The number of runs scored by Sanjay in his partnership with Sachin for the 4th wicket = 62 – 1 – 27 – 4 = 30. We have yet to account for 18 – 6 = 12 extra runs out of 22.

We have the following:

Partnership	First player	Second player	Extras	Total partnership	Cumulative score	Player who got out
1st	Ajay (1)	Sachin (6 – a)	(a)	7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin (53 – b)	(b)	63	70	Azhar
4th	Sanjay (30)	Sachin (31 + a + b)	(12 – a – b)	73	143	Sachin
5th	Sanjay (1)	Manoj (3)	0	4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil (6)	6	19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

The number of runs scored by Sachin when the third wicket fell = (6 – a) + (53 – b) = 50
⇒ 59 – (a + b) = 50.

⇒ (a + b) = 9.

Therefore, the required answer = 12 – (a + b) = 12 – 9 = 3.

Therefore, the required answer is 3.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **27 secs**

Change Section here

Your Attempt: **Skipped**

% Students got it correct: **18 %**

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

4) Suppose we define two numbers 'x' and 'y' as follows:

x = The total score of 'Team India' when Sanjay came to bat after the fall of the previous wicket

y = The total score of 'Team India' when Sanjay got out

What is the value of (y – x)? (Write 239 if your answer is 'Cannot be determined')

Enter your response (as an integer) using the virtual keyboard in the box provided.

Video Explanation:

Explanation:

The first two wickets fell at 7. Since Sachin scored 90 runs, clearly the first two wickets to fall were Ajay and Vinod. After the fall of the second wicket, Azhar came out to bat with Sachin. Since the third wicket fell at 70, the third player to get out was Azhar.

The 4^{th} wicket fell at 143 and the 5^{th} wicket fell at 147. Clearly the 5^{th} wicket to fall was Manoj. We have to figure out if the 4^{th} wicket to fall was Sachin or Sanjay. However, it is given that Sanjay scored maximum possible runs in the partnership with Nayan and Anil both. If Sanjay was the 4^{th} wicket to fall, there would be no partnership between Sanjay and Nayan or Anil in that case. Therefore the 4^{th} wicket to fall was Sachin.

After Manoj got out, Nayan came out to bat with Sanjay. Since Sanjay also made a partnership with Anil later, the 6^{th} wicket to fall was Nayan. The partnership for the 7^{th} wicket was between Sanjay and Anil. Since Anil was the last player to get out, the 7^{th} wicket to fall was Sanjay. Subsequently, the 8^{th} wicket to fall was Javagal and the 9^{th} wicket to fall was Venkatesh.

Given: Sanjay scored maximum possible runs in his partnerships with Nayan and Anil. That means there were no extra runs in Sanjay's partnership with Nayan as well as with Anil.

Using the conditions that there were no extras after Javagal got out . Now we have the following:

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

Partnership	First player	Second player	Extras	Tot	score	got out
1st	Ajay (1)	Sachin		7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin		63	70	Azhar
4th	Sanjay	Sachin		73	143	Sachin
5th	Sanjay	Manoj (3)		4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil		19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

Anil must have scored 17 – 8 – 3 = 6 runs in his partnership with Javagal for the 8th wicket.

So for partnership of 4 runs for the fifth wicket with Manoj (3), Sanjay must have scored 1 run(from point 3).

The number of runs scored by Sanjay in his partnership with Sachin for the 4th wicket = 62 – 1 – 27 – 4 = 30. We have yet to account for 18 – 6 = 12 extra runs out of 22.

We have the following:

Partnership	First player	Second player	Extras	Total partnership	Cumulative score	Player who got out
1st	Ajay (1)	Sachin (6 – a)	(a)	7	7	Ajay
2nd	Vinod (0)	Sachin (0)	0	0	7	Vinod
3rd	Azhar (10)	Sachin (53 – b)	(b)	63	70	Azhar
4th	Sanjay (30)	Sachin (31 + a + b)	(12 – a – b)	73	143	Sachin
5th	Sanjay (1)	Manoj (3)	0	4	147	Manoj
6th	Sanjay (27)	Nayan (27)	0	54	201	Nayan
7th	Sanjay (4)	Anil (0)	0	4	205	Sanjay
8th	Javagal (7)	Anil (6)	6	19	224	Javagal
9th	Venkatesh (0)	Anil (3)	0	3	227	Venkatesh
10th	Raju (3)	Anil (8)	0	11	238	Anil

Sanjay came to bat after the fall of the third wicket and his was the seventh wicket to fall.

Therefore, x = 70 and y = 205.

Therefore, (y – x) = 135.

Therefore, the required answer is 135.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **55 secs**

Refer to the data below and answer the questions that follow.

In a one day international cricket match, a team of 11 players plays against another team of 11 players. At any given point of time, two players bat in a partnership and score certain number of runs. When one of the two players in a partnership gets out, he is replaced by another player. This is continued till ten players get out and one player finally remains 'not out'. In addition to the runs scored by the players, there are also some 'extra' runs that do not accrue to any player but are counted towards the total score of the team.

Table 1 shows the number of runs scored by each of the 11 players (in the order in which they came out to bat) as well as the extra runs accrued to the total score of 'Team India' in a one day international cricket match between India and Australia:

Loading...

Player name	Runs scored
Ajay	1
Sachin	90
Vinod	0
Azhar	10
Sanjay	62
Manoj	3
Nayan	27
Anil	17
Javagal	7
Venkatesh	0
Raju	3
Extras	18
Total	**238**

The following table shows the total score of 'Team India' when different players got out (so called 'Fall of Wickets'):

1	2	3	4	5	6	7	8	9	10
7	7	70	143	147	201	205	224	227	238

Following points are known:

1. There were no extra runs accrued to the total score of 'Team India' after Javagal got out.

2. Sanjay scored maximum possible runs he could in his partnerships with Nayan and Anil both.

3. Sanjay scored at least one run in all the partnerships he was part of.

4. Anil was the last player to get out and Raju remained 'not out' in the end.

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

1) What is the total amount with the businessman from Gujarat?

- Rs. 27,000
- Rs. 25,000 ✗
- Rs. 23,000
- Rs. 19,000

Video Explanation:

Change Section here

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

Explanation:

The total amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). Let the common difference be 'd'. 'd' must be a multiple of 1000. Also, the number of Rs. 500 notes with each businessman must be even.

Businessman from Maharashtra: From 2(least total amount), 4(do not have 10 notes of Rs. 500), 5(cannot have 20 or 11 notes) and 6, the number of Rs. 500 notes with him = 12 or 14 and the number of Rs. 1,000 notes with him = 13 i.e., total amount = Rs. 19,000 or Rs. 20,000. As the maximum amount is Rs. 29,000, 29000 – 5d = 19000 or 20000. As 'd' is a multiple of 1000, 29000 – 5d = 20000 is not possible. **Therefore, 12 notes of Rs. 500 + 13 notes of Rs. 1000 amounts to Rs. 19,000.** Also, d = 2000

Thus, the businessmen have Rs. 19,000, Rs. 21,000, Rs. 23,000, Rs. 25,000, Rs. 27,000 and Rs. 29,000.

Therefore from 4, number of Rs. 500 notes with the businessmen from Gujarat, Kerala and Punjab must be 10, 14 and 16 respectively.

Now from 7, **businessman from Punjab has Rs. 23,000 (i.e., 16 and 15 notes of Rs. 500 and Rs. 1,000 respectively)**.

Businessman from Gujarat has 10 notes of Rs. 500. So for Rs. 25,000 he needs 20 notes of Rs. 1,000. But this is not possible from 5. So, he **has Rs. 27,000 with 22 notes of Rs. 1,000**.

Now as **businessman from Karnataka** cannot have 22 notes of Rs. 1,000, his **total amount must be Rs. 25,000 with 14 notes of Rs. 500 and 18 notes of Rs. 1,000.**

Therefore, **businessman from Rajasthan has Rs. 29,000 with 24 notes of Rs. 500 and 17 notes of Rs. 1,000**.

State	Rs. 500 notes	Rs. 1,000 notes	Total (Rs.)
Gujarat	x 10 = 5,000	x 22 = 22,000	27,000
Maharashtra	x 12 = 6,000	x 13 = 13,000	19,000
Kerala	x 14 = 7,000	x 18 = 18,000	25,000
Punjab	x 16 = 8,000	x 15 = 15,000	23,000
Manipur	x 20 = 10,000	x 11 = 11,000	21,000
Rajasthan	x 24 = 12,000	x 17 = 17,000	29,000

Total amount with the businessman from Gujarat Rs. 27,000. Hence, [1].

Correct Answer:

Time taken by you: **353 secs**

Avg Time taken by all students: **596 secs**

Your Attempt: **Wrong**

Change Section here

% Students got it correct: **66 %**

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

2) What is the average number of notes of Rs. 1,000 with all the six businessmen?

- 15
- 16 ✓
- 17
- None of these

Video Explanation:

Change Section here ▼

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

Explanation:

The total amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). Let the common difference be 'd'. 'd' must be a multiple of 1000. Also, the number of Rs. 500 notes with each businessman must be even.

Businessman from Maharashtra: From 2(least total amount), 4(do not have 10 notes of Rs. 500), 5(cannot have 20 or 11 notes) and 6, the number of Rs. 500 notes with him = 12 or 14 and the number of Rs. 1,000 notes with him = 13 i.e., total amount = Rs. 19,000 or Rs. 20,000. As the maximum amount is Rs. 29,000, 29000 – 5d = 19000 or 20000. As 'd' is a multiple of 1000, 29000 – 5d = 20000 is not possible. **Therefore, 12 notes of Rs. 500 + 13 notes of Rs. 1000 amounts to Rs. 19,000.** Also, d = 2000

Thus, the businessmen have Rs. 19,000, Rs. 21,000, Rs. 23,000, Rs. 25,000, Rs. 27,000 and Rs. 29,000. Therefore from 4, number of Rs. 500 notes with the businessmen from Gujarat, Kerala and Punjab must be 10, 14 and 16 respectively.

Now from 7, **businessman from Punjab has Rs. 23,000 (i.e., 16 and 15 notes of Rs. 500 and Rs. 1,000 respectively)**.

Businessman from Gujarat has 10 notes of Rs. 500. So for Rs. 25,000 he needs 20 notes of Rs. 1,000. But this is not possible from 5. So, he **has Rs. 27,000 with 22 notes of Rs. 1,000**.

Now as **businessman from Karnataka** cannot have 22 notes of Rs. 1,000, his **total amount must be Rs. 25,000 with 14 notes of Rs. 500 and 18 notes of Rs. 1,000.**

Therefore, **businessman from Rajasthan has Rs. 29,000 with 24 notes of Rs. 500 and 17 notes of Rs. 1,000**.

State	Rs. 500 notes	Rs. 1,000 notes	Total (Rs.)
Gujarat	x 10 = 5,000	x 22 = 22,000	27,000
Maharashtra	x 12 = 6,000	x 13 = 13,000	19,000
Kerala	x 14 = 7,000	x 18 = 18,000	25,000
Punjab	x 16 = 8,000	x 15 = 15,000	23,000
Manipur	x 20 = 10,000	x 11 = 11,000	21,000
Rajasthan	x 24 = 12,000	x 17 = 17,000	29,000

The average number of notes of Rs. 1,000 with all the six businessmen

$$= \frac{22 + 13 + 18 + 15 + 11 + 17}{6} = 16$$

Hence, [2].

Correct Answer:

Time taken by you: **32 secs**

Avg Time taken by all students

Change Section here ▼

Your Attempt: **Correct**

% Students got it correct: **72 %**

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

3) The businessman from Kerala spends 4 notes of Rs. 500 and 2 notes of Rs. 1,000 and the businessman from Punjab spends 2 notes of Rs. 500 and 3 notes of Rs. 1,000 to buy new products in the 'MAKE IN INDIA' Forum. What is the overall percentage decrease in the total of the amount with both the businessmen had initially?

- 10%
- 16.67%
- 20%
- 24%

Video Explanation:

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

The total amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). Let the common difference be 'd'. 'd' must be a multiple of 1000. Also, the number of Rs. 500 notes with each businessman must be even.

Businessman from Maharashtra: From 2(least total amount), 4(do not have 10 notes of Rs. 500), 5(cannot have 20 or 11 notes) and 6, the number of Rs. 500 notes with him = 12 or 14 and the number of Rs. 1,000 notes with him = 13 i.e., total amount = Rs. 19,000 or Rs. 20,000. As the maximum amount is Rs. 29,000, 29000 – 5d = 19000 or 20000. As 'd' is a multiple of 1000, 29000 – 5d = 20000 is not possible. **Therefore, 12 notes of Rs. 500 + 13 notes of Rs. 1000 amounts to Rs. 19,000.** Also, d = 2000

Thus, the businessmen have Rs. 19,000, Rs. 21,000, Rs. 23,000, Rs. 25,000, Rs. 27,000 and Rs. 29,000. Therefore from 4, number of Rs. 500 notes with the businessmen from Gujarat, Kerala and Punjab must be 10, 14 and 16 respectively.

Now from 7, **businessman from Punjab has Rs. 23,000 (i.e., 16 and 15 notes of Rs. 500 and Rs. 1,000 respectively)**.

Businessman from Gujarat has 10 notes of Rs. 500. So for Rs. 25,000 he needs 20 notes of Rs. 1,000. But this is not possible from 5. So, he **has Rs. 27,000 with 22 notes of Rs. 1,000**.

Now as **businessman from Karnataka** cannot have 22 notes of Rs. 1,000, his **total amount must be Rs. 25,000 with 14 notes of Rs. 500 and 18 notes of Rs. 1,000.**

Therefore, **businessman from Rajasthan has Rs. 29,000 with 24 notes of Rs. 500 and 17 notes of Rs. 1,000**.

State	Rs. 500 notes	Rs. 1,000 notes	Total (Rs.)
Gujarat	x 10 = 5,000	x 22 = 22,000	27,000
Maharashtra	x 12 = 6,000	x 13 = 13,000	19,000
Kerala	x 14 = 7,000	x 18 = 18,000	25,000
Punjab	x 16 = 8,000	x 15 = 15,000	23,000
Manipur	x 20 = 10,000	x 11 = 11,000	21,000
Rajasthan	x 24 = 12,000	x 17 = 17,000	29,000

Businessman from Kerala spent = 2000 + 2000 = Rs. 4,000
Businessman from Punjab spent = 1000 + 3000 = Rs. 4,000

The percentage decrease $= \frac{(4000 + 4000)}{(25000 + 23000)} \times 100 = 16.67\%$

Hence, [2].

Correct Answer:

Avg Time taken by all students

Change Section here ▼

Your Attempt: **Skipped**

% Students got it correct: **88 %**

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

4) The businessman from Maharashtra lent 10 notes of Rs. 500 to the businessman from Rajasthan. But later he need to borrow 10 notes of Rs. 1,000 from him. If he spent the entire amount, how much was his total spending?

- Rs. 24,000
- Rs. 25,000
- Rs. 26,000
- Rs. 27,000

Video Explanation:

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

Explanation:

The total amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). Let the common difference be 'd'. 'd' must be a multiple of 1000. Also, the number of Rs. 500 notes with each businessman must be even.

Businessman from Maharashtra: From 2(least total amount), 4(do not have 10 notes of Rs. 500), 5(cannot have 20 or 11 notes) and 6, the number of Rs. 500 notes with him = 12 or 14 and the number of Rs. 1,000 notes with him = 13 i.e., total amount = Rs. 19,000 or Rs. 20,000. As the maximum amount is Rs. 29,000, 29000 – 5d = 19000 or 20000. As 'd' is a multiple of 1000, 29000 – 5d = 20000 is not possible. **Therefore, 12 notes of Rs. 500 + 13 notes of Rs. 1000 amounts to Rs. 19,000.** Also, d = 2000

Thus, the businessmen have Rs. 19,000, Rs. 21,000, Rs. 23,000, Rs. 25,000, Rs. 27,000 and Rs. 29,000. Therefore from 4, number of Rs. 500 notes with the businessmen from Gujarat, Kerala and Punjab must be 10, 14 and 16 respectively.

Now from 7, **businessman from Punjab has Rs. 23,000 (i.e., 16 and 15 notes of Rs. 500 and Rs. 1,000 respectively)**.

Businessman from Gujarat has 10 notes of Rs. 500. So for Rs. 25,000 he needs 20 notes of Rs. 1,000. But this is not possible from 5. So, he **has Rs. 27,000 with 22 notes of Rs. 1,000**.

Now as **businessman from Karnataka** cannot have 22 notes of Rs. 1,000, his **total amount must be Rs. 25,000 with 14 notes of Rs. 500 and 18 notes of Rs. 1,000.**

Therefore, **businessman from Rajasthan has Rs. 29,000 with 24 notes of Rs. 500 and 17 notes of Rs. 1,000**.

State	Rs. 500 notes	Rs. 1,000 notes	Total (Rs.)
Gujarat	x 10 = 5,000	x 22 = 22,000	27,000
Maharashtra	x 12 = 6,000	x 13 = 13,000	19,000
Kerala	x 14 = 7,000	x 18 = 18,000	25,000
Punjab	x 16 = 8,000	x 15 = 15,000	23,000
Manipur	x 20 = 10,000	x 11 = 11,000	21,000
Rajasthan	x 24 = 12,000	x 17 = 17,000	29,000

Initial amount with the businessman from Maharashtra = Rs. 19,000

He gave Rs. 5,000 to the businessman from Maharashtra. Later he borrowed Rs. 10,000 from him.

Therefore, total spending = 19000 – 5000 + 10000 = Rs. 24,000

Hence, [1].

Correct Answer:

Time taken by you: **42 secs**

Change Section here ▼

Avg Time taken by all students: **78 secs**

Your Attempt: **Skipped**

% Students got it correct: **87 %**

Refer to the data below and answer the questions that follow.

Six businessmen from six different states meet at an annual meet of 'MAKE IN INDIA' Forum. Each of them has a different number of notes of Rs. 500 and Rs. 1,000. For example, if one has 'n' number of notes of any denomination then no other businessman has 'n' number of notes of any denomination. The amount with each one is a multiple of 1000 and it is in Arithmetic Progression (AP). The minimum and maximum number of notes of any denomination with any one is 10 and 24 respectively.

Further the following information is known:

1. The businessman from Gujarat does not have the maximum amount which is Rs. 29,000.
2. The businessman from Maharashtra has the least amount.
3. The businessman from Rajasthan has 24 notes of Rs. 500.
4. Number of Rs. 500 notes with the businessmen from Gujarat, Maharashtra, Kerala and Punjab is in Arithmetic Progression in same order.
5. The businessman from Manipur has 20 notes of Rs. 500 and 11 notes of Rs. 1,000.
6. Number of notes of Rs. 500 and Rs. 1,000 with the businessman from Maharashtra is consecutive integers.
7. The businessman from Punjab has the least amount among Gujarat, Punjab, Kerala and Rajasthan.

Loading...

Refer to the data below and answer the questions that follow.

To get admission into class X^{th}, students have to clear three tests of English, Mathematics and History.

1. 37 students passed the English test.
2. 33 students passed the History test.
3. 39 students passed the Mathematics test.
4. 32 students passed only in one subject.
5. 7 students passed in all the three subjects.
6. No student failed in all the three subjects.
7. Number of students who passed in both History and Mathematics but not English was one less than the number of students who passed in both English and History but not Mathematics.
8. The sum of the number of students who passed in both English and Mathematics but not in History and in both Mathematics and History but not English was one greater than twice the number of students who passed in both English and History but not Mathematics.

1) How many students appeared for the examination?

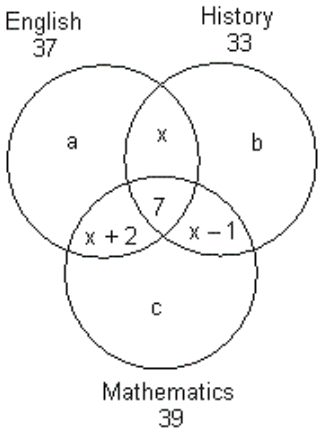
Enter your response (as an integer) using the virtual keyboard in the box provided.

67

Video Explanation:

Explanation:

From the data given we get,



$a + b + c = 32$

$a + 2x + 9 = 37 \Rightarrow a + 2x = 28$ … (i)

$b + 2x + 6 = 33 \Rightarrow b + 2x = 27$ … (ii)

$c + 2x + 8 = 39 \Rightarrow c + 2x = 31$ … (iii)

Adding (i), (ii) and (iii)

$a + b + c + 6x = 86 \Rightarrow 6x = 86 - 32 \Rightarrow x = 9$

$\Rightarrow a = 10, b = 9$ and $c = 13$

Number of students who appeared for the examination

$= (a + b + c) + 3x + 8 = 32 + 27 + 8 = 67.$

Therefore, the required answer is 67.

Correct Answer:

Time taken by you: **928 secs**

Avg Time taken by all students: **392 secs**

Your Attempt: **Correct**

% Students got it correct: **69 %**

Refer to the data below and answer the questions that follow.

To get admission into class X^{th}, students have to clear three tests of English, Mathematics and History.

1. 37 students passed the English test.
2. 33 students passed the History test.
3. 39 students passed the Mathematics test.
4. 32 students passed only in one subject.
5. 7 students passed in all the three subjects.
6. No student failed in all the three subjects.
7. Number of students who passed in both History and Mathematics but not English was one less than the number of students who passed in both English and History but not Mathematics.
8. The sum of the number of students who passed in both English and Mathematics but not in History and in both Mathematics and History but not English was one greater than twice the number of students who passed in both English and History but not Mathematics.

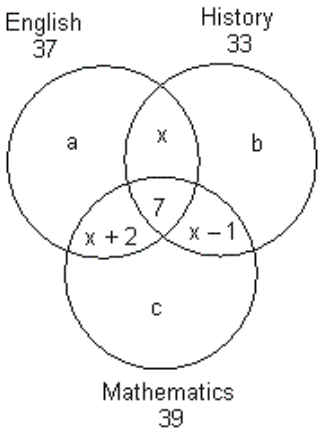
2) How many students passed in both English and Mathematics but not in History?

- 11 ✓
- 12
- 1
- 9

Video Explanation:

Explanation:

From the data given we get,



a + b + c = 32

a + 2x + 9 = 37 ⇒ a + 2x = 28 … (i)

b + 2x + 6 = 33 ⇒ b + 2x = 27 … (ii)

c + 2x + 8 = 39 ⇒ c + 2x = 31 … (iii)

Adding (i), (ii) and (iii)

a + b + c + 6x = 86 ⇒ 6x = 86 – 32 ⇒ x = 9

⇒ a = 10, b = 9 and c = 13

Number of students who passed in both English and Mathematics, but not History = x + 2 = 11.

Hence, [1].

Correct Answer:

Time taken by you: **9 secs**

Avg Time taken by all students: **81 secs**

Your Attempt: **Correct**

% Students got it correct: **83 %**

3) How many students passed in History or English or

Refer to the data below and answer the questions that follow.

To get admission into class Xth, students have to clear three tests of English, Mathematics and History.

1. 37 students passed the English test.
2. 33 students passed the History test.
3. 39 students passed the Mathematics test.
4. 32 students passed only in one subject.
5. 7 students passed in all the three subjects.
6. No student failed in all the three subjects.
7. Number of students who passed in both History and Mathematics but not English was one less than the number of students who passed in both English and History but not Mathematics.
8. The sum of the number of students who passed in both English and Mathematics but not in History and in both Mathematics and History but not English was one greater than twice the number of students who passed in both English and History but not Mathematics.

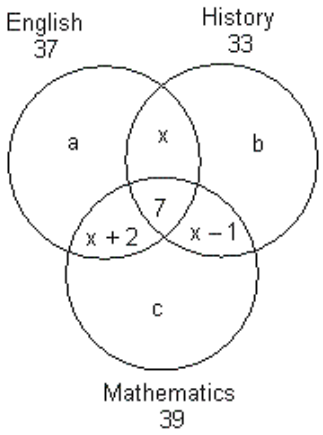
both, but not Mathematics?

- 28 ✓
- 12
- 21
- 26

Video Explanation:

Explanation:

From the data given we get,



$a + b + c = 32$

$a + 2x + 9 = 37 \Rightarrow a + 2x = 28$ ... (i)

$b + 2x + 6 = 33 \Rightarrow b + 2x = 27$ ... (ii)

$c + 2x + 8 = 39 \Rightarrow c + 2x = 31$ ... (iii)

Adding (i), (ii) and (iii)

$a + b + c + 6x = 86 \Rightarrow 6x = 86 - 32 \Rightarrow x = 9$

$\Rightarrow a = 10, b = 9$ and $c = 13$

Required number of students $a + b + x = 10 + 9 + 9 = 28$. Hence, [1].

Correct Answer:

Time taken by you: **27 secs**

Avg Time taken by all students: **61 secs**

Your Attempt: **Correct**

% Students got it correct: **90 %**

4) How many students who passed in History, also passed in Mathematics or English or all three papers?

- 26

16

24 ✓

32

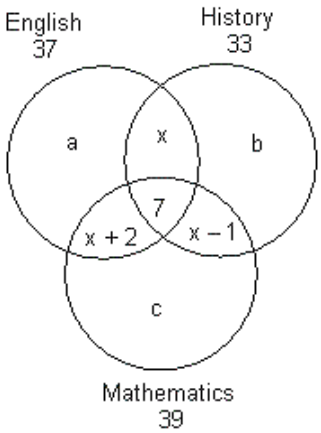
Refer to the data below and answer the questions that follow.

To get admission into class Xth, students have to clear three tests of English, Mathematics and History.

1. 37 students passed the English test.
2. 33 students passed the History test.
3. 39 students passed the Mathematics test.
4. 32 students passed only in one subject.
5. 7 students passed in all the three subjects.
6. No student failed in all the three subjects.
7. Number of students who passed in both History and Mathematics but not English was one less than the number of students who passed in both English and History but not Mathematics.
8. The sum of the number of students who passed in both English and Mathematics but not in History and in both Mathematics and History but not English was one greater than twice the number of students who passed in both English and History but not Mathematics.

Video Explanation:

Explanation:



$a + b + c = 32$

$a + 2x + 9 = 37 \Rightarrow a + 2x = 28$ … (i)

$b + 2x + 6 = 33 \Rightarrow b + 2x = 27$ … (ii)

$c + 2x + 8 = 39 \Rightarrow c + 2x = 31$ … (iii)

Adding (i), (ii) and (iii)

$a + b + c + 6x = 86 \Rightarrow 6x = 86 - 32 \Rightarrow x = 9$

$\Rightarrow a = 10, b = 9$ and $c = 13$

Required number of students = $x + 7 + x - 1$

$= 9 + 7 + 9 - 1 = 24$. Hence, [3].

Correct Answer:

Time taken by you: **30 secs**

Avg Time taken by all students: **44 secs**

Your Attempt: **Correct**

% Students got it correct: **84 %**

Refer to the data below and answer the questions that follow.

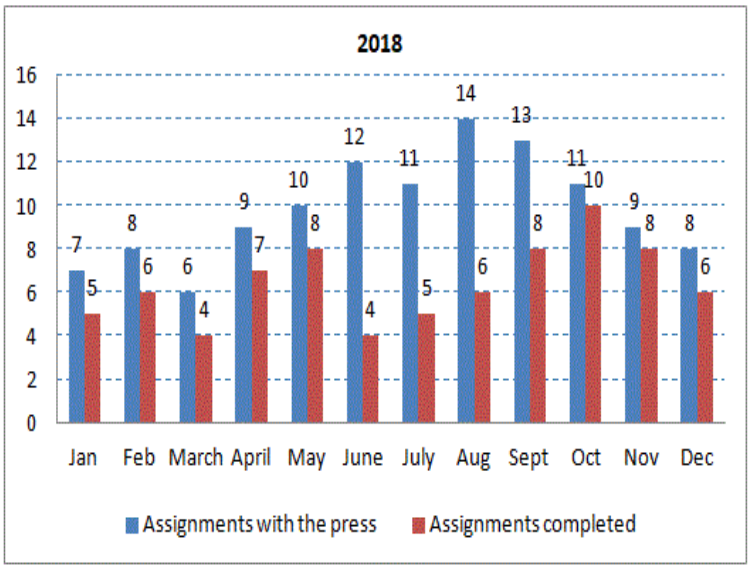
To get admission into class X^{th}, students have to clear three tests of English, Mathematics and History.

1. 37 students passed the English test.
2. 33 students passed the History test.
3. 39 students passed the Mathematics test.
4. 32 students passed only in one subject.
5. 7 students passed in all the three subjects.
6. No student failed in all the three subjects.
7. Number of students who passed in both History and Mathematics but not English was one less than the number of students who passed in both English and History but not Mathematics.
8. The sum of the number of students who passed in both English and Mathematics but not in History and in both Mathematics and History but not English was one greater than twice the number of students who passed in both English and History but not Mathematics.

Refer to the data below and answer the questions that follow.

Avinash is responsible for managing all the assignments his printing press receives. The graph below gives the number of assignments with the press (pending since last month/s or new) in each month and the number of assignments completed by the press in each month, in 2018.

Since it was not possible to complete all the assignments immediately, some assignments were postponed by one or more months. But, while doing so, Avinash made sure that the assignment received first got completed first.



It is also known that 2 assignments, that were pending since December 2017 completed in January 2018. No other assignments carried forward to January 2018.

1) In all, how many assignments were postponed by one or more months, in 2018?

Enter your response (as an integer) using the virtual keyboard in the box provided.

41

Video Explanation:

Explanation:

In Jan 2018, there were 7 assignments with the press, out of them 2 were pending from Dec 2017 i.e., 5 new assignments were received in Jan 2018.

In Jan 2018, 5 assignments were completed, out of them 2 must be the ones pending from Dec 2017 i.e., 5 – 2 = 3 assignments were received in Feb 2018.

Also, out of 6 assignments completed in Feb 2018, 2 were received in Jan 2018 i.e., 6 – 2 = 4 assignments completed in Feb 2018 were received in Feb 2018 itself and the remaining 2 assignments were postponed to March 2018. Continuing in this manner, we get the table below:

Assignments	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
With the press	7	8	6	9	10	12	11	14	13	11	9	8
Completed	5	6	4	7	8	4	5	6	8	10	8	6
Received (in same month)	5	6	4	7	8	10	3	8	5	6	8	7
Completed (received in same month)	3	4	2	5	6	2	0	0	0	5	7	5
Completed (received in pre month)	2	2	2	2	2	2	5	3	8	5	1	1
Not completed (received in same month)	2	2	2	2	2	8	3	8	5	1	1	2
Not completed (received in pre month)	0	0	0	0	0	0	3	0	0	0	0	0

The number of assignments postponed by one or more months, in 2018

= 2 + 2 + 2 + 2 + 2 + 8 + 3 + 8 + 5 + 1 + 1 + 2 = 38.

Therefore, the required answer is 38.

Correct Answer:

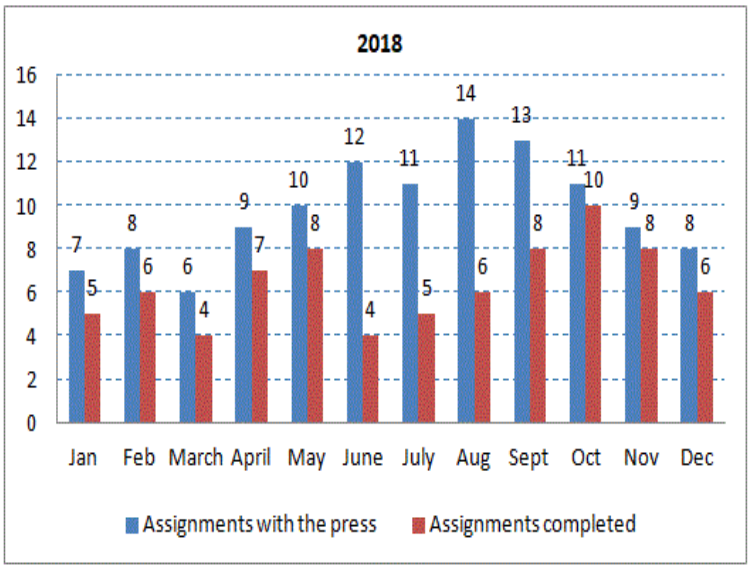
Time taken by you: **485 secs**

Avg Time taken by all students: **50 secs**

Refer to the data below and answer the questions that follow.

Avinash is responsible for managing all the assignments his printing press receives. The graph below gives the number of assignments with the press (pending since last month/s or new) in each month and the number of assignments completed by the press in each month, in 2018.

Since it was not possible to complete all the assignments immediately, some assignments were postponed by one or more months. But, while doing so, Avinash made sure that the assignment received first got completed first.



It is also known that 2 assignments, that were pending since December 2017 completed in January 2018. No other assignments carried forward to January 2018.

2) In 2018, it happened only once that some assignments with the press in a particular month could not be completed even in the next month. Which is that particular month?

- August
- September
- June ✔
- July

Video Explanation:

Explanation:

In Jan 2018, there were 7 assignments with the press, out of them 2 were pending from Dec 2017 i.e., 5 new assignments were received in Jan 2018.

In Jan 2018, 5 assignments were completed, out of them 2 must be the ones pending from Dec 2017 i.e., 5 – 2 = 3 assignments were received in Feb 2018.

Also, out of 6 assignments completed in Feb 2018, 2 were received in Jan 2018 i.e., 6 – 2 = 4 assignments completed in Feb 2018 were received in Feb 2018 itself and the remaining 2 assignments were postponed to March 2018. Continuing in this manner, we get the table below:

Assignments	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
With the press	7	8	6	9	10	12	11	14	13	11	9	8
Completed	5	6	4	7	8	4	5	6	8	10	8	6
Received (in same month)	5	6	4	7	8	10	3	8	5	6	8	7
Completed (received in same month)	3	4	2	5	6	2	0	0	0	5	7	5
Completed (received in pre month)	2	2	2	2	2	2	5	3	8	5	1	1
Not completed (received in same month)	2	2	2	2	2	8	3	8	5	1	1	2
Not completed (received in pre month)	0	0	0	0	0	0	3	0	0	0	0	0

In June 2018, there were 12 assignments to be completed. Of these 12, it could complete only 4. So, 12 – 4 = 8 pending assignments were postponed. Of these 8 assignments, the press could complete only 5 and again 3 were postponed. Therefore, that particular month was June. Hence, [3].

Correct Answer:

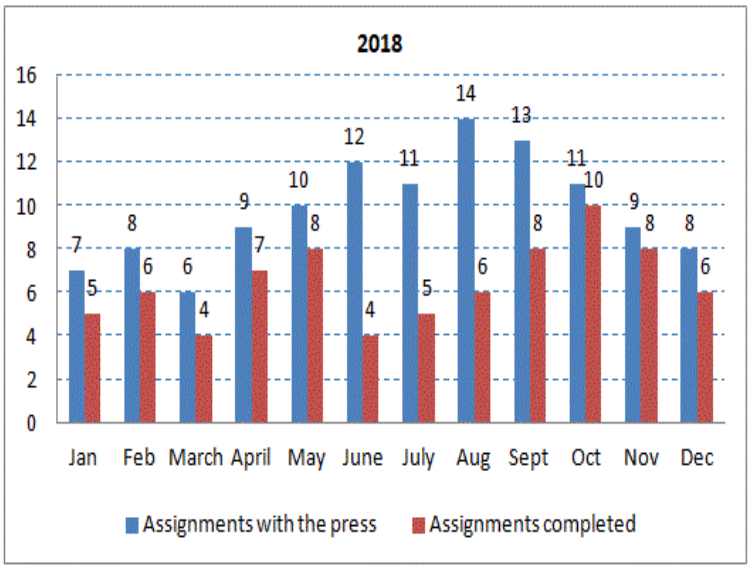
Your Attempt: **Correct**

% Students got it correct: **63 %**

Refer to the data below and answer the questions that follow.

Avinash is responsible for managing all the assignments his printing press receives. The graph below gives the number of assignments with the press (pending since last month/s or new) in each month and the number of assignments completed by the press in each month, in 2018.

Since it was not possible to complete all the assignments immediately, some assignments were postponed by one or more months. But, while doing so, Avinash made sure that the assignment received first got completed first.



It is also known that 2 assignments, that were pending since December 2017 completed in January 2018. No other assignments carried forward to January 2018.

3) For how many months could not a single assignment received in the month be completed in that same month?

- None
- 1
- 2
- 3

Video Explanation:

Explanation:

In Jan 2018, there were 7 assignments with the press, out of them 2 were pending from Dec 2017 i.e., 5 new assignments were received in Jan 2018.

In Jan 2018, 5 assignments were completed, out of them 2 must be the ones pending from Dec 2017 i.e., 5 – 2 = 3 assignments were received in Feb 2018.

Also, out of 6 assignments completed in Feb 2018, 2 were received in Jan 2018 i.e., 6 – 2 = 4 assignments completed in Feb 2018 were received in Feb 2018 itself and the remaining 2 assignments were postponed to March 2018. Continuing in this manner, we get the table below:

Assignments	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
With the press	7	8	6	9	10	12	11	14	13	11	9	8
Completed	5	6	4	7	8	4	5	6	8	10	8	6
Received (in same month)	5	6	4	7	8	10	3	8	5	6	8	7
Completed (received in same month)	3	4	2	5	6	2	0	0	0	5	7	5
Completed (received in pre month)	2	2	2	2	2	2	5	3	8	5	1	1
Not completed (received in same month)	2	2	2	2	2	8	3	8	5	1	1	2
Not completed (received in pre month)	0	0	0	0	0	0	3	0	0	0	0	0

In July, August and September, not a single assignment received was completed in those same months.
Hence, [4].

Correct Answer:

Time taken by you: **28 secs**

Avg Time taken by all students: **53 secs**

Your Attempt: **Skipped**

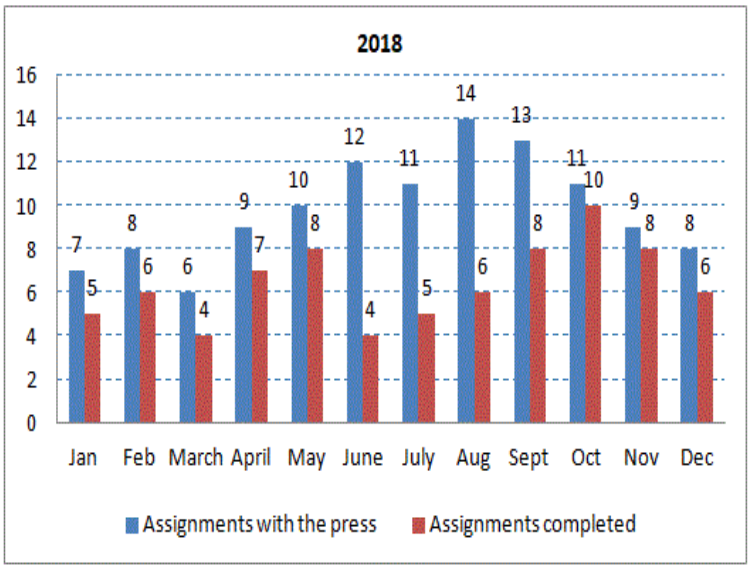
Change Section here

% Students got it correct: **57 %**

Refer to the data below and answer the questions that follow.

Avinash is responsible for managing all the assignments his printing press receives. The graph below gives the number of assignments with the press (pending since last month/s or new) in each month and the number of assignments completed by the press in each month, in 2018.

Since it was not possible to complete all the assignments immediately, some assignments were postponed by one or more months. But, while doing so, Avinash made sure that the assignment received first got completed first.



It is also known that 2 assignments, that were pending since December 2017 completed in January 2018. No other assignments carried forward to January 2018.

4) In which of the following months did the press have the maximum number of new assignments?

- June ✓
- May
- November
- April

Video Explanation:

Explanation:

In Jan 2018, there were 7 assignments with the press, out of them 2 were pending from Dec 2017 i.e., 5 new assignments were received in Jan 2018.

In Jan 2018, 5 assignments were completed, out of them 2 must be the ones pending from Dec 2017 i.e., 5 – 2 = 3 assignments were received in Feb 2018.

Also, out of 6 assignments completed in Feb 2018, 2 were received in Jan 2018 i.e., 6 – 2 = 4 assignments completed in Feb 2018 were received in Feb 2018 itself and the remaining 2 assignments were postponed to March 2018. Continuing in this manner, we get the table below:

Assignments	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
With the press	7	8	6	9	10	12	11	14	13	11	9	8
Completed	5	6	4	7	8	4	5	6	8	10	8	6
Received (in same month)	5	6	4	7	8	10	3	8	5	6	8	7
Completed (received in same month)	3	4	2	5	6	2	0	0	0	5	7	5
Completed (received in pre month)	2	2	2	2	2	2	5	3	8	5	1	1
Not completed (received in same month)	2	2	2	2	2	8	3	8	5	1	1	2
Not completed (received in pre month)	0	0	0	0	0	0	3	0	0	0	0	0

The press had maximum number of new assignments i.e., 10 new assignments in the month of June. Hence, [1].

Correct Answer:

Time taken by you: **11 secs**

Avg Time taken by all students: **62 secs**

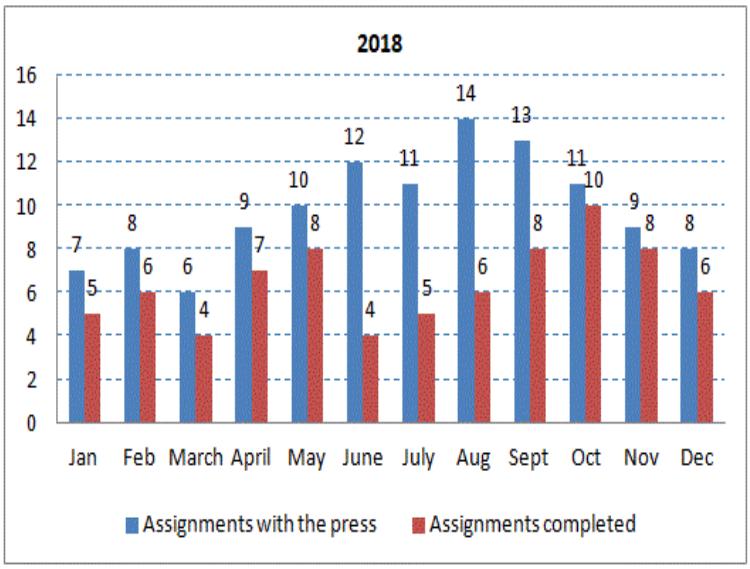
Your Attempt: **Correct**

Refer to the data below and answer the questions that follow.

Avinash is responsible for managing all the assignments his printing press receives. The graph below gives the number of assignments with the press (pending since last month/s or new) in each month and the number of assignments completed by the press in each month, in 2018.

Since it was not possible to complete all the assignments immediately, some assignments were postponed by one or more months. But, while doing so, Avinash made sure that the assignment received first got completed first.

Loading...



It is also known that 2 assignments, that were pending since December 2017 completed in January 2018. No other assignments carried forward to January 2018.

Refer to the data below and answer the questions that follow.

A to Z letters were assigned to 26 Robots of 4 categories – Johnny 5, Lego Mindstorm, Tachikomas and Mega Man. These Robots assigned to perform the line duty in the Chernobyl nuclear plant in the alphabetical order of the codes assigned from front to the rear end. The entire jobline has 3 Zones, Zone X – (1^{st} to 10^{th}) Zone Y – (11^{th} to 19^{th}) and Zone Z – (20^{th} to 26^{th}). The jobline started with a Lego Mindstorm Robot. There were four Lego Mindstorms and three Johnny 5 Robots in Zone X. No two Johnny 5 Robots were placed adjacent. Mega Man Robots supervise Lego Mindstorm Robots, so every Lego Mindstorm Robot was immediately followed by a Mega Man Robot. The number of Tachikomas Robots was more than that of Mega Man Robots, which in turn was more than that of Lego Mindstorm Robots, which in turn was more than that of Johnny 5 Robots. There were maximum possible Johnny 5 Robots. Tachikomas were assigned only in Zone Y.

1) How many total Mega Man Robots were assigned in the plant?

Enter your response (as an integer) using the virtual keyboard in the box provided.

Video Explanation:

Explanation:

There are maximum possible Johnny 5 Robots and (Number of Tachikomas Robots > Mega Man Robots > Lego Mindstorm Robots > Johnny 5 Robots) ⇒ Number of Tachikomas Robots = 8, Number of Mega Man Robots = 7, Number of Lego Mindstorm Robots = 6 and Number of Johnny 5 Robots = 5

There were 3 Johnny 5 Robots and 4 Lego Mindstorm Robots in Zone X, the remaining robots in this zone must be of the Mega Man category.

The position of Robots in Zone X can be determined as follows:

A	B	C	D	E	F	G	H	I	J
Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm

The first robot in Zone Y has to be a Mega Man Robot, thus code K is assigned to a Mega Man Robot. Codes L to S were assigned to Tachikomas Robots.

Therefore, the required answer is 7.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **230 secs**

Your Attempt: **Skipped**

% Students got it correct: **49 %**

2) If the letter T was the code for a Lego Mindstorm Robot, then in how many ways can the robots be assigned in the plant?

Refer to the data below and answer the questions that follow.

A to Z letters were assigned to 26 Robots of 4 categories – Johnny 5, Lego Mindstorm, Tachikomas and Mega Man. These Robots assigned to perform the line duty in the Chernobyl nuclear plant in the alphabetical order of the codes assigned from front to the rear end. The entire jobline has 3 Zones, Zone X – (1^{st} to 10^{th}) Zone Y – (11^{th} to 19^{th}) and Zone Z – (20^{th} to 26^{th}). The jobline started with a Lego Mindstorm Robot. There were four Lego Mindstorms and three Johnny 5 Robots in Zone X. No two Johnny 5 Robots were placed adjacent. Mega Man Robots supervise Lego Mindstorm Robots, so every Lego Mindstorm Robot was immediately followed by a Mega Man Robot. The number of Tachikomas Robots was more than that of Mega Man Robots, which in turn was more than that of Lego Mindstorm Robots, which in turn was more than that of Johnny 5 Robots. There were maximum possible Johnny 5 Robots. Tachikomas were assigned only in Zone Y.

Video Explanation:

Explanation:

There are maximum possible Johnny 5 Robots and (Number of Tachikomas Robots > Mega Man Robots > Lego Mindstorm Robots > Johnny 5 Robots) ⇒ Number of Tachikomas Robots = 8, Number of Mega Man Robots = 7, Number of Lego Mindstorm Robots = 6 and Number of Johnny 5 Robots = 5

There were 3 Johnny 5 Robots and 4 Lego Mindstorm Robots in Zone X, the remaining robots in this zone must be of the Mega Man category.

The position of Robots in Zone X can be determined as follows:

A	B	C	D	E	F	G	H	I	J
Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm

The first robot in Zone Y has to be a Mega Man Robot, thus code K is assigned to a Mega Man Robot. Codes L to S were assigned to Tachikomas Robots.

The Robot coded T was a Lego Mindstorm Robot. Here we will have 6 cases listed below :

Let the Lego Mindstorm Robot be LM, Johnny 5 be J-5 and Mega Man be MM.

20	T	LM	LM	LM	LM	LM	LM
21	U	MM	MM	MM	MM	MM	MM
22	V	LM	J-5	J-5	J-5	J-5	MM
23	W	MM	MM	MM	LM	LM	J-5
24	X	J-5	LM	J-5	MM	MM	LM
25	Y	MM	MM	LM	J-5	MM	MM
26	Z	J-5	J-5	MM	MM	J-5	J-5

Therefore, the required answer is 6.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **20 secs**

Your Attempt: **Skipped**

% Students got it correct: **13 %**

Refer to the data below and answer the questions that follow.

A to Z letters were assigned to 26 Robots of 4 categories – Johnny 5, Lego Mindstorm, Tachikomas and Mega Man. These Robots assigned to perform the line duty in the Chernobyl nuclear plant in the alphabetical order of the codes assigned from front to the rear end. The entire jobline has 3 Zones, Zone X – (1^{st} to 10^{th}) Zone Y – (11^{th} to 19^{th}) and Zone Z – (20^{th} to 26^{th}). The jobline started with a Lego Mindstorm Robot. There were four Lego Mindstorms and three Johnny 5 Robots in Zone X. No two Johnny 5 Robots were placed adjacent. Mega Man Robots supervise Lego Mindstorm Robots, so every Lego Mindstorm Robot was immediately followed by a Mega Man Robot. The number of Tachikomas Robots was more than that of Mega Man Robots, which in turn was more than that of Lego Mindstorm Robots, which in turn was more than that of Johnny 5 Robots. There were maximum possible Johnny 5 Robots. Tachikomas were assigned only in Zone Y.

3) If the letter T was the code for a Mega Man Robot then which category Robo

Change Section here

- Mega Man
- Lego Mindstorm
- Johnny 5
- Either Mega Man or Lego Mindstorm

Video Explanation:

Explanation:

There are maximum possible Johnny 5 Robots and (Number of Tachikomas Robots > Mega Man Robots > Lego Mindstorm Robots > Johnny 5 Robots) ⇒ Number of Tachikomas Robots = 8, Number of Mega Man Robots = 7, Number of Lego Mindstorm Robots = 6 and Number of Johnny 5 Robots = 5

There were 3 Johnny 5 Robots and 4 Lego Mindstorm Robots in Zone X, the remaining robots in this zone must be of the Mega Man category.

The position of Robots in Zone X can be determined as follows:

A	B	C	D	E	F	G	H	I	J
Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm

The first robot in Zone Y has to be a Mega Man Robot, thus code K is assigned to a Mega Man Robot. Codes L to S were assigned to Tachikomas Robots.

If the Robot coded T was a Mega Man Robot.

20	T	MM	MM	MM
21	U	LM	J-5	J-5
22	V	MM	LM	LM
23	W	J-5	MM	MM
24	X	LM	LM	J-5
25	Y	MM	MM	LM
26	Z	J-5	J-5	MM

Either a Mega Man or a Lego Mindstorm Robot was coded as Y.

Hence, [4].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **77 secs**

Your Attempt: **Skipped**

% Students got it correct: **60 %**

Refer to the data below and answer the questions that follow.

A to Z letters were assigned to 26 Robots of 4 categories – Johnny 5, Lego Mindstorm, Tachikomas and Mega Man. These Robots assigned to perform the line duty in the Chernobyl nuclear plant in the alphabetical order of the codes assigned from front to the rear end. The entire jobline has 3 Zones, Zone X – (1^{st} to 10^{th}) Zone Y – (11^{th} to 19^{th}) and Zone Z – (20^{th} to 26^{th}). The jobline started with a Lego Mindstorm Robot. There were four Lego Mindstorms and three Johnny 5 Robots in Zone X. No two Johnny 5 Robots were placed adjacent. Mega Man Robots supervise Lego Mindstorm Robots, so every Lego Mindstorm Robot was immediately followed by a Mega Man Robot. The number of Tachikomas Robots was more than that of Mega Man Robots, which in turn was more than that of Lego Mindstorm Robots, which in turn was more than that of Johnny 5 Robots. There were maximum possible Johnny 5 Robots. Tachikomas were assigned only in Zone Y.

4) If the letters W and Z were the codes for Johnny 5 Robots then which category Robot was coded as letter V?

- Mega Man
- Lego Mindstorm
- Johnny 5
- Either Mega Man or Lego Mindstorm

Video Explanation:

Explanation:

There are maximum possible Johnny 5 Robots and (Number of Tachikomas Robots > Mega Man Robots > Lego Mindstorm Robots > Johnny 5 Robots) ⇒ Number of Tachikomas Robots = 8, Number of Mega Man Robots = 7, Number of Lego Mindstorm Robots = 6 and Number of Johnny 5 Robots = 5

There were 3 Johnny 5 Robots and 4 Lego Mindstorm Robots in Zone X, the remaining robots in this zone must be of the Mega Man category.

The position of Robots in Zone X can be determined as follows:

A	B	C	D	E	F	G	H	I	J
Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm	Mega Man	Johnny 5	Lego Mindstorm

The first robot in Zone Y has to be a Mega Man Robot, thus code K is assigned to a Mega Man Robot. Codes L to S were assigned to Tachikomas Robots.

If the letters W and Z were the codes for Johnny 5 Robots, then we have following cases:

20	T	MM	LM
21	U	LM	MM
22	V	MM	MM
23	W	J-5	J-5
24	X	LM	LM
25	Y	MM	MM
26	Z	J-5	J-5

Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **58 secs**

Your Attempt: **Skipped**

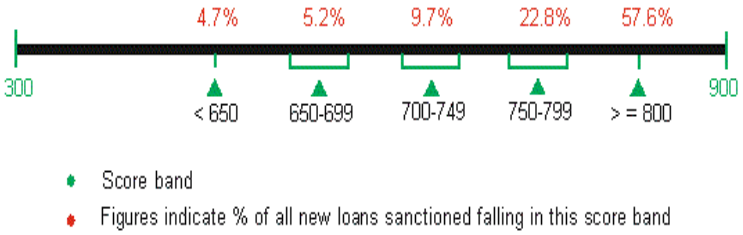
Refer to the data below and answer the questions that follow.

A to Z letters were assigned to 26 Robots of 4 categories – Johnny 5, Lego Mindstorm, Tachikomas and Mega Man. These Robots assigned to perform the line duty in the Chernobyl nuclear plant in the alphabetical order of the codes assigned from front to the rear end. The entire jobline has 3 Zones, Zone X – (1^{st} to 10^{th}) Zone Y – (11^{th} to 19^{th}) and Zone Z – (20^{th} to 26^{th}). The jobline started with a Lego Mindstorm Robot. There were four Lego Mindstorms and three Johnny 5 Robots in Zone X. No two Johnny 5 Robots were placed adjacent. Mega Man Robots supervise Lego Mindstorm Robots, so every Lego Mindstorm Robot was immediately followed by a Mega Man Robot. The number of Tachikomas Robots was more than that of Mega Man Robots, which in turn was more than that of Lego Mindstorm Robots, which in turn was more than that of Johnny 5 Robots. There were maximum possible Johnny 5 Robots. Tachikomas were assigned only in Zone Y.

Loading...

Refer to the data below and answer the questions that follow.

A credit score of a person is a three digit numeric summary of his/her credit history. The value ranges between 300-900. It indicates the 'probability of default' of a borrower based on his/her credit history. A CIBIL score is one of the first checks that a lender does while evaluating a loan application.



Dattu has six applications of six persons with him. Out of which five of the applications cleared first check of the CIBIL score.

CIBIL scores of these five persons fall in the five different score bands. Arun's CIBIL score is 620. CIBIL score of Varun is at least 700. The same is true for Priyanka and Suraj. Upendra's loan was sanctioned by the bank. One of the applicants is Anand. The application of the person with the least CIBIL score was not sanctioned.

1) Which of the following cannot be CIBIL score of Upendra?

- 600
- 625
- 660
- Cannot be determined

Video Explanation:

Explanation:

CIBIL score of each of Varun, Priyanka and Suraj is at least 700.

It is given that Upendra's loan was sanctioned by the bank and the application of the person with the least CIBIL score was not sanctioned. Therefore, if Upendra's score is less than 620, Anand's score must also be less than Upendra's CIBIL score.

But then we get two persons in score band '

Thus, Upendra's CIBIL score cannot be 600. Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **202 secs**

Your Attempt: **Skipped**

% Students got it correct: **52 %**

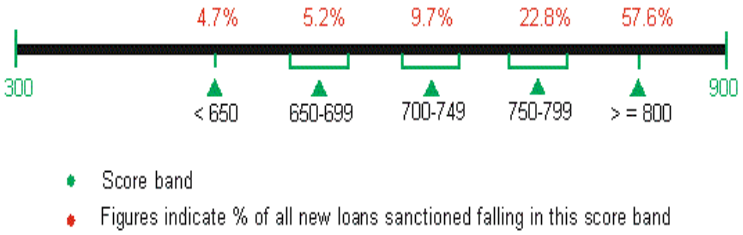
2) The maximum possible difference between Upendra and Suraj is X. Then,

- X < 280
- X < 250
- X < 230
- X < 180

Video Explanation:

Refer to the data below and answer the questions that follow.

A credit score of a person is a three digit numeric summary of his/her credit history. The value ranges between 300-900. It indicates the 'probability of default' of a borrower based on his/her credit history. A CIBIL score is one of the first checks that a lender does while evaluating a loan application.



Dattu has six applications of six persons with him. Out of which five of the applications cleared first check of the CIBIL score.

CIBIL scores of these five persons fall in the five different score bands. Arun's CIBIL score is 620. CIBIL score of Varun is at least 700. The same is true for Priyanka and Suraj. Upendra's loan was sanctioned by the bank. One of the applicants is Anand. The application of the person with the least CIBIL score was not sanctioned.

Explanation:

CIBIL score of each of Varun, Priyanka and Suraj is at least 700.

It is given that Upendra's loan was sanctioned by the bank and the application of the person with the least CIBIL score was not sanctioned. Therefore, if Upendra's score is less than 620, Anand's score must also be less than Upendra's CIBIL score.

But then we get two persons in score band '

Thus, Upendra's CIBIL Score is greater than 620. The maximum CIBIL score Suraj can have is 900.

Thus, X < 900 – 620 = 280

Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **48 secs**

Your Attempt: **Skipped**

% Students got it correct: **43 %**

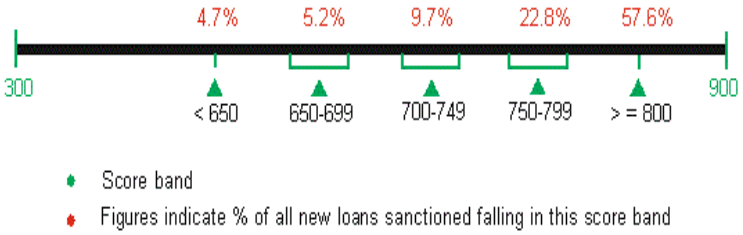
3) If the difference between CIBIL scores of Upendra and Priyanka was the least, the maximum difference between CIBIL scores of Varun and Suraj must be:

- 150
- 175
- 200
- 250

Video Explanation:

Refer to the data below and answer the questions that follow.

A credit score of a person is a three digit numeric summary of his/her credit history. The value ranges between 300-900. It indicates the 'probability of default' of a borrower based on his/her credit history. A CIBIL score is one of the first checks that a lender does while evaluating a loan application.



Dattu has six applications of six persons with him. Out of which five of the applications cleared first check of the CIBIL score.

CIBIL scores of these five persons fall in the five different score bands. Arun's CIBIL score is 620. CIBIL score of Varun is at least 700. The same is true for Priyanka and Suraj. Upendra's loan was sanctioned by the bank. One of the applicants is Anand. The application of the person with the least CIBIL score was not sanctioned.

Explanation:

CIBIL score of each of Varun, Priyanka and Suraj is at least 700.

It is given that Upendra's loan was sanctioned by the bank and the application of the person with the least CIBIL score was not sanctioned. Therefore, if Upendra's score is less than 620, Anand's score must also be less than Upendra's CIBIL score.

But then we get two persons in score band '

Thus, Upendra's CIBIL Score is greater than 620. Thus, Upendra's CIBIL score must be in the score band '

For the least difference between CIBIL scores of Upendra and Priyanka, Upendra's score has to be maximum possible and Priyanka's least possible. Thus, in this case Upendra's CIBIL score = 699 and Priyanka's CIBIL score = 700

For the maximum score difference, the scores of Varun and Suraj must be 750 and 900 in any order.

∴ The maximum score difference = 900 – 750 = 150

Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **55 secs**

Your Attempt: **Skipped**

% Students got it correct: **71 %**

4) How many of the following statement/s is/are definitely true?

A: Upendra's CIBIL score > Anand's CIBIL score

B: Arun's CIBIL score > Anand's CIBIL score

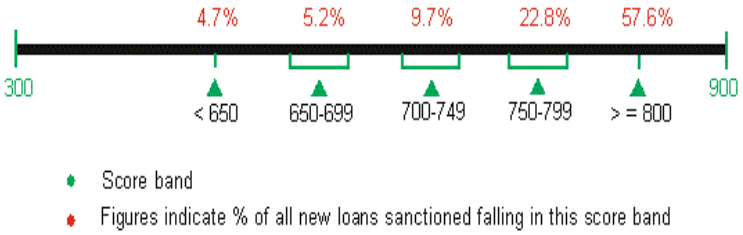
C: Upendra's CIBIL score < Arun's CIBIL score

- 0
- 1
- 2
- 3

Video Explanation:

Refer to the data below and answer the questions that follow.

A credit score of a person is a three digit numeric summary of his/her credit history. The value ranges between 300-900. It indicates the 'probability of default' of a borrower based on his/her credit history. A CIBIL score is one of the first checks that a lender does while evaluating a loan application.



Dattu has six applications of six persons with him. Out of which five of the applications cleared first check of the CIBIL score.

CIBIL scores of these five persons fall in the five different score bands. Arun's CIBIL score is 620. CIBIL score of Varun is at least 700. The same is true for Priyanka and Suraj. Upendra's loan was sanctioned by the bank. One of the applicants is Anand. The application of the person with the least CIBIL score was not sanctioned.

Explanation:

CIBIL score of each of Varun, Priyanka and Suraj is at least 700.

It is given that Upendra's loan was sanctioned by the bank and the application of the person with the least CIBIL score was not sanctioned. Therefore, if Upendra's score is less than 620, Anand's score must also be less than Upendra's CIBIL score.

But then we get two persons in score band '

But no relation between Anand's CIBIL score and Arun's CIBIL score could be established. Also, no relation between Anand's CIBIL score and Upendra's CIBIL score could be established. Thus, A and B may not be true.

Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **40 secs**

Your Attempt: **Skipped**

% Students got it correct: **43 %**

Loading...

Refer to the data below and answer the questions that follow.

Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy are the ten film reviewers who have reviewed eight recently launched movies, namely A, B, C, D, E, F, G and H. Each reviewer gave either a positive or a negative rating to each of the eight movies. It is known that the number of movies which were rated 'positive' by Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy were 6, 2, 8, 4, 3, 7, 2, 1, 0 and 0 respectively. It is known that the movies A, B, C, D, E, F, G and H received negative reviews from 7, 5, 3, 6, 4, 7, 9 and 6 reviewers out of these ten reviewers respectively.

Following points are known:

1. Nixon gave a negative rating to movie C.
2. Ford gave a positive rating to movie E.
3. Trump gave a positive rating to movie F.
4. Obama gave a positive rating to movie D.

1) All the ratings given by how many of the ten reviewers can be uniquely determined?

- 3
- 4
- 5
- More than 5 ✔

Video Explanation:

Explanation:

It can be seen the movies A, B, C, D, E, F, G and H received positive reviews from 3, 5, 7, 4, 6, 3, 1 and 4 reviewers respectively. Using the information given in the set, we get the following (P denotes Positive review and N denotes Negative review):

	Trump	Obama	Bush	Clinton	Reagan	Carter	Ford	Nixon	Johnson	Kennedy
A		N	P			P	N		N	N
B		N	P			P	N		N	N
C	P	P	P	P	P	P	P	N	N	N
D		P	P			P	N		N	N
E		N	P			P	P		N	N
F	P	N	P	N	N	P	N	N	N	N
G	N	N	P	N	N	N	N	N	N	N
H		N	P			P	N		N	N

Hence, [4].

Correct Answer:

Time taken by you: **835 secs**

Avg Time taken by all students: **323 secs**

Your Attempt: **Correct**

% Students got it correct: **47 %**

2) For how many movies out of 8, can all the ratings given by the ten reviewers be uniquely determined?

- 1

Change Section here

Refer to the data below and answer the questions that follow.

Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy are the ten film reviewers who have reviewed eight recently launched movies, namely A, B, C, D, E, F, G and H. Each reviewer gave either a positive or a negative rating to each of the eight movies. It is known that the number of movies which were rated 'positive' by Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy were 6, 2, 8, 4, 3, 7, 2, 1, 0 and 0 respectively. It is known that the movies A, B, C, D, E, F, G and H received negative reviews from 7, 5, 3, 6, 4, 7, 9 and 6 reviewers out of these ten reviewers respectively.

Following points are known:

1. Nixon gave a negative rating to movie C.
2. Ford gave a positive rating to movie E.
3. Trump gave a positive rating to movie F.
4. Obama gave a positive rating to movie D.

2
3 ✓
More than 3

Video Explanation:

Explanation:

It can be seen the movies A, B, C, D, E, F, G and H received positive reviews from 3, 5, 7, 4, 6, 3, 1 and 4 reviewers respectively. Using the information given in the set, we get the following (P denotes Positive review and N denotes Negative review):

	Trump	Obama	Bush	Clinton	Reagan	Carter	Ford	Nixon	Johnson	Kennedy
A		N	P			P	N		N	N
B		N	P			P	N		N	N
C	P	P	P	P	P	P	P	N	N	N
D		P	P			P	N		N	N
E		N	P			P	P		N	N
F	P	N	P	N	N	P	N	N	N	N
G	N	N	P	N	N	N	N	N	N	N
H		N	P			P	N		N	N

Hence, [3].

Correct Answer:

Time taken by you: **22 secs**

Avg Time taken by all students: **41 secs**

Your Attempt: **Correct**

% Students got it correct: **39 %**

3) Additional information for questions 27 and 28

Nixon gave a positive rating to movie D.

All the reviews given by how many of the ten reviewers can be uniquely determined?

Enter your response (as an integer) using the virtual keyboard in the box provided below.

Refer to the data below and answer the questions that follow.

Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy are the ten film reviewers who have reviewed eight recently launched movies, namely A, B, C, D, E, F, G and H. Each reviewer gave either a positive or a negative rating to each of the eight movies. It is known that the number of movies which were rated 'positive' by Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy were 6, 2, 8, 4, 3, 7, 2, 1, 0 and 0 respectively. It is known that the movies A, B, C, D, E, F, G and H received negative reviews from 7, 5, 3, 6, 4, 7, 9 and 6 reviewers out of these ten reviewers respectively.

Following points are known:

1. Nixon gave a negative rating to movie C.
2. Ford gave a positive rating to movie E.
3. Trump gave a positive rating to movie F.
4. Obama gave a positive rating to movie D.

Video Explanation:

Explanation:

It can be seen the movies A, B, C, D, E, F, G and H received positive reviews from 3, 5, 7, 4, 6, 3, 1 and 4 reviewers respectively. Using the information given in the set, we get the following (P denotes Positive review and N denotes Negative review):

	Trump	Obama	Bush	Clinton	Reagan	Carter	Ford	Nixon	Johnson	Kennedy
A		N	P			P	N		N	N
B		N	P			P	N		N	N
C	P	P	P	P	P	P	P	N	N	N
D		P	P			P	N		N	N
E		N	P			P	P		N	N
F	P	N	P	N	N	P	N	N	N	N
G	N	N	P	N	N	N	N	N	N	N
H		N	P			P	N		N	N

Using the additional information given, we can fill the table as follows:

	Trump	Obama	Bush	Clinton	Reagan	Carter	Ford	Nixon	Johnson	Kennedy
A	P	N	P	N	N	P	N	N	N	N
B	P	N	P	P	P	P	N	N	N	N
C	P	P	P	P	P	P	P	N	N	N
D	N	P	P	N	N	P	N	P	N	N
E	P	N	P	P	P	P	P	N	N	N
F	P	N	P	N	N	P	N	N	N	N
G	N	N	P	N	N	N	N	N	N	N
H	P	N	P	P	N	P	N	N	N	N

Reviews given by all the ten reviewers can be uniquely determined. Therefore, the required answer is 10.

Correct Answer:

Time taken by you: **135 secs**

Avg Time taken by all students: **88 secs**

Your Attempt: **Correct**

Refer to the data below and answer the questions that follow.

Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy are the ten film reviewers who have reviewed eight recently launched movies, namely A, B, C, D, E, F, G and H. Each reviewer gave either a positive or a negative rating to each of the eight movies. It is known that the number of movies which were rated 'positive' by Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy were 6, 2, 8, 4, 3, 7, 2, 1, 0 and 0 respectively. It is known that the movies A, B, C, D, E, F, G and H received negative reviews from 7, 5, 3, 6, 4, 7, 9 and 6 reviewers out of these ten reviewers respectively.

Following points are known:

1. Nixon gave a negative rating to movie C.
2. Ford gave a positive rating to movie E.
3. Trump gave a positive rating to movie F.
4. Obama gave a positive rating to movie D.

4) Additional information for questions 27 and 28

Nixon gave a positive rating to movie D.

For how many movies out of 8, can all the reviews given by the ten reviewers be uniquely determined?

Enter your response (as an integer) using the virtual keyboard in the box provided below.

10

Video Explanation:

Change Section here

Refer to the data below and answer the questions that follow.

Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy are the ten film reviewers who have reviewed eight recently launched movies, namely A, B, C, D, E, F, G and H. Each reviewer gave either a positive or a negative rating to each of the eight movies. It is known that the number of movies which were rated 'positive' by Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy were 6, 2, 8, 4, 3, 7, 2, 1, 0 and 0 respectively. It is known that the movies A, B, C, D, E, F, G and H received negative reviews from 7, 5, 3, 6, 4, 7, 9 and 6 reviewers out of these ten reviewers respectively.

Following points are known:

1. Nixon gave a negative rating to movie C.
2. Ford gave a positive rating to movie E.
3. Trump gave a positive rating to movie F.
4. Obama gave a positive rating to movie D.

Explanation:

It can be seen the movies A, B, C, D, E, F, G and H received positive reviews from 3, 5, 7, 4, 6, 3, 1 and 4 reviewers respectively. Using the information given in the set, we get the following (P denotes Positive review and N denotes Negative review):

	Trump	Obama	Bush	Clinton	Reagan	Carter	Ford	Nixon	Johnson	Kennedy
A		N	P			P	N		N	N
B		N	P			P	N		N	N
C	P	P	P	P	P	P	P	N	N	N
D		P	P			P	N		N	N
E		N	P			P	P		N	N
F	P	N	P	N	N	P	N	N	N	N
G	N	N	P	N	N	N	N	N	N	N
H		N	P			P	N		N	N

Using the additional information given, we can fill the table as follows:

	Trump	Obama	Bush	Clinton	Reagan	Carter	Ford	Nixon	Johnson	Kennedy
A	P	N	P	N	N	P	N	N	N	N
B	P	N	P	P	P	P	N	N	N	N
C	P	P	P	P	P	P	P	N	N	N
D	N	P	P	N	N	P	N	P	N	N
E	P	N	P	P	P	P	P	N	N	N
F	P	N	P	N	N	P	N	N	N	N
G	N	N	P	N	N	N	N	N	N	N
H	P	N	P	P	N	P	N	N	N	N

All the reviews given by the ten reviewers can be uniquely determined for all the eight movies. Therefore, the required answer is 8.

Correct Answer:

Time taken by you: **8 secs**

Avg Time taken by all students: **16 secs**

Your Attempt: **Wrong**

% Students got it correct: **50 %**

Refer to the data below and answer the questions that follow.

Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy are the ten film reviewers who have reviewed eight recently launched movies, namely A, B, C, D, E, F, G and H. Each reviewer gave either a positive or a negative rating to each of the eight movies. It is known that the number of movies which were rated 'positive' by Trump, Obama, Bush, Clinton, Reagan, Carter, Ford, Nixon, Johnson and Kennedy were 6, 2, 8, 4, 3, 7, 2, 1, 0 and 0 respectively. It is known that the movies A, B, C, D, E, F, G and H received negative reviews from 7, 5, 3, 6, 4, 7, 9 and 6 reviewers out of these ten reviewers respectively.

Following points are known:

1. Nixon gave a negative rating to movie C.
2. Ford gave a positive rating to movie E.
3. Trump gave a positive rating to movie F.
4. Obama gave a positive rating to movie D.

Refer to the data below and answer the questions that follow.

Ten members of an adventure club – A, B, C, D, E, F, G, H, I and J plan to go rock climbing this weekend. The ten members were divided into two groups – Group Alpha and Group Beta with five participants each. Out of the ten members, A, C and I were doctors, while A, B, E, H and J had prior rock climbing experience. Each group had at least one doctor and two members with prior rock climbing experience. Also, B and G were in different groups.

1) Group Beta took two doctors. If no person (other than doctors) of Group Beta was without prior rock climbing experience, then who among the following was definitely a member of Group Alpha?

- G ✓
- E
- B
- H

Video Explanation:

Explanation:

D, F and G had no prior rock climbing experience. The three were not doctors. Hence D, F and G were definitely part of Group Alpha. Group Alpha had at least one doctor and two members with prior rock climbing experience. As G was part of Group Alpha, B must be part of Group Beta. Other than doctors, remaining two members of Group Beta must be (E, H), (E, J) or (H, J). Thus, one among E, H or J was part of Group Alpha. So, A has to be part of Group Alpha.

Thus,

Group Alpha: A, (E/H/J), D, F, G

Hence, [1].

Correct Answer:

Time taken by you: **173 secs**

Avg Time taken by all students: **342 secs**

Your Attempt: **Correct**

% Students got it correct: **78 %**

2) If C, B and I were in Group Alpha and Group Alpha had exactly two experienced climbers, which of the following must be false?

- A and F were in the same group
- I and D were in the same group
- C and G were in the same group ✓
- A and E are in the same group

Refer to the data below and answer the questions that follow.

Ten members of an adventure club – A, B, C, D, E, F, G, H, I and J plan to go rock climbing this weekend. The ten members were divided into two groups – Group Alpha and Group Beta with five participants each. Out of the ten members, A, C and I were doctors, while A, B, E, H and J had prior rock climbing experience. Each group had at least one doctor and two members with prior rock climbing experience. Also, B and G were in different groups.

Video Explanation:

Change Section here

Explanation:

B and G were in different groups. As C was in Group Alpha with B; C and G could not in same group. Hence, [3].

Correct Answer:

Time taken by you: **127 secs**

Avg Time taken by all students: **148 secs**

Your Attempt: **Correct**

% Students got it correct: **89 %**

3) If F, B and I were in Group Alpha and Group Alpha had exactly one doctor and more experienced climbers than Beta, then in how many ways Group Beta could have been formed?

- 3 ways ✔
- 2 ways
- 4 ways
- No such group is possible

Video Explanation:

Explanation:

From the given conditions A, C, D and G were definitely a part of Group Beta. So now only one of E/H/J could join and complete the group. Hence, [1].

Correct Answer:

Time taken by you: **111 secs**

Avg Time taken by all students: **144 secs**

Your Attempt: **Correct**

% Students got it correct: **80 %**

4) If A was the only doctor and also one of the two experienced climbers in his group, then which of the

Refer to the data below and answer the questions that follow.

Ten members of an adventure club – A, B, C, D, E, F, G, H, I and J plan to go rock climbing this weekend. The ten members were divided into two groups – Group Alpha and Group Beta with five participants each. Out of the ten members, A, C and I were doctors, while A, B, E, H and J had prior rock climbing experience. Each group had at least one doctor and two members with prior rock climbing experience. Also, B and G were in different groups.

following is necessarily false?

- H and D were in the same group.
- F and D were in different groups. ✓
- A and E were in the same group.
- H and D were in different groups.

Video Explanation:

Explanation:

From the conditions we know the other group consists of 3 experienced climbers and 2 doctors. Therefore D, F and G could all be in the same group as A. Hence [2].

Correct Answer:

Time taken by you: **187 secs**

Avg Time taken by all students: **161 secs**

Your Attempt: **Correct**

% Students got it correct: **74 %**

Loading...