

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

The following partially filled table shows the marks scored by 6 students in 5 different subjects.

	Trump	Obama	Bush	Clinton	Reagan	Carter
Mathematics	9		4		5	
English	5	8		7		4
Science	2	4	5			
Hindi			8	5		7
History		3		8	7	9

Further, it is known that the marks given in the table constitute 60%, 80%, 55%, 80% and 90% of total marks scored by these six students in Mathematics, English, Science, Hindi, and History respectively. No two students got the same marks in any subject and no student got the same marks in any two subjects. The maximum and minimum marks in each of the subject are 9 and 0 respectively. Clinton and Reagan got total marks 24 and 21 respectively in the five subjects. Obama did not get 7 marks in any subject. No student got 0 in Mathematics.

1) What is the best that can be said about the marks _ scored by Obama in Hindi?

- ☐ 1
☐ 0
☐ At least 1
☐ At least 2

Video Explanation:



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

The following partially filled table shows the marks scored by 6 students in 5 different subjects.

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Using the condition that the marks given in the chart constitute 60%, 80%, 55%, 80% and 90% in Mathematics, English, Science, Hindi, and History respectively, the total marks and the remaining marks in each of the subjects can be calculated as follows:

	Trump	Obama	Bush	Clinton	Reagan	Carter			Total marks
Mathematics	9		4		5		18	12	30
English	5	8		7		4	24	6	30
Science	2	4	5				11	9	20
Hindi			8	5		7	20	5	25
History		3		8	7	9	27	3	30

Using the following conditions:

Each of the students got different marks in any particular subject. The maximum and minimum marks in each of the subject are 9 and 0 respectively and each student got distinct marks in each subject, remaining marks in Mathematics = 12. Since no one got 0 in Mathematics, $12 = (1 + 3 + 8)$ or $(2 + 3 + 7)$. Clinton and Carter got 7 marks in English & Hindi respectively and Obama did not get 7 marks in any subject, possibility $12 = (2 + 3 + 7)$ is ruled out.

Thus, $12 = (1 + 3 + 8)$. Since Obama and Clinton got 8 marks in English and History respectively, Carter got 8 marks in Mathematics. Thus, Obama got 1 and Clinton got 3 marks.

Clinton got 24 marks in total, thus he got 1 mark in Science. In Science, remaining 8 marks can be obtained by $(0 + 8)$. Thus Reagan got 8 marks and Carter got 0 marks in Science.

In English the remaining 6 marks can be obtained by $(0 + 6)$. Reagan got total 21 marks, thus, he got 0 marks and Bush got 6 marks in English. Also Reagan must have got 1 mark in Hindi. Now the remaining 4 marks in Hindi can be obtained by $(0 + 4)$. Since Obama got 4 marks in Science, he got 0 marks in Hindi and Trump got 4 marks in Hindi.

In History the remaining 3 marks can be obtained by $(1 + 2)$, where Bush got 2 marks and Trump got 1 mark.

The final table of marks:

	Trump	Obama	Bush	Clinton	Reagan	Carter	Total marks
Mathematics	9	1	4	3	5	8	30
English	5	8	6	7	0	4	30
Science	2	4	5	1	8	0	20
Hindi	4	0	8	5	1	7	25
History	1	3	2	8	7	9	30
Total	21	16	25	24	21	28	135

Obama scored 0 marks in Hindi. Hence, [2].

Correct Answer:



Time taken by you: **0 secs**

Avg Time taken by all students: **376 secs**

% Students got it correct: **41 %**

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

The following partially filled table shows the marks scored by 6 students in 5 different subjects.

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2) What is the best that can be said about the total marks scored by Carter? —

- ☐ 27
- ☐ 28
- ☐ At most 27
- ☐ At least 26

Video Explanation: ▼

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

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Mathematics	9		4		5	
English	5	8		7		4
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History		3		8	7	9

Further, it is known that the marks given in the table constitute 60%, 80%, 55%, 80% and 90% of total marks scored by these six students in Mathematics, English, Science, Hindi, and History respectively. No two students got the same marks in any subject and no student got the same marks in any two subjects. The maximum and minimum marks in each of the subject are 9 and 0 respectively. Clinton and Reagan got total marks 24 and 21 respectively in the five subjects. Obama did not get 7 marks in any subject. No student got 0 in Mathematics.

Explanation:

Using the condition that the marks given in the chart constitute 60%, 80%, 55%, 80% and 90% in Mathematics, English, Science, Hindi, and History respectively, the total marks and the remaining marks in each of the subjects can be calculated as follows:

	Trump	Obama	Bush	Clinton	Reagan	Carter			Total marks
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History		3		8	7	9	27	3	30

Using the following conditions:

Each of the students got different marks in any particular subject. The maximum and minimum marks in each of the subject are 9 and 0 respectively and each student got distinct marks in each subject, remaining marks in Mathematics = 12. Since no one got 0 in Mathematics, $12 = (1 + 3 + 8)$ or $(2 + 3 + 7)$. Clinton and Carter got 7 marks in English & Hindi respectively and Obama did not get 7 marks in any subject, possibility $12 = (2 + 3 + 7)$ is ruled out.

Thus, $12 = (1 + 3 + 8)$. Since Obama and Clinton got 8 marks in English and History respectively, Carter got 8 marks in Mathematics. Thus, Obama got 1 and Clinton got 3 marks.

Clinton got 24 marks in total, thus he got 1 mark in Science. In Science, remaining 8 marks can be obtained by $(0 + 8)$. Thus Reagan got 8 marks and Carter got 0 marks in Science.

In English the remaining 6 marks can be obtained by $(0 + 6)$. Reagan got total 21 marks, thus, he got 0 marks and Bush got 6 marks in English. Also Reagan must have got 1 mark in Hindi. Now the remaining 4 marks in Hindi can be obtained by $(0 + 4)$. Since Obama got 4 marks in Science, he got 0 marks in Hindi and Trump got 4 marks in Hindi.

In History the remaining 3 marks can be obtained by $(1 + 2)$, where Bush got 2 marks and Trump got 1 mark.

The final table of marks:

	Trump	Obama	Bush	Clinton	Reagan	Carter	Total marks
Mathematics	9	1	4	3	5	8	30
English	5	8	6	7	0	4	30
Science	2	4	5	1	8	0	20
Hindi	4	0	8	5	1	7	25
History	1	3	2	8	7	9	30
Total	21	16	25	24	21	28	135

Carter scored $8 + 4 + 0 + 7 + 9 = 28$ marks in all. Hence, [2].

Correct Answer:



Time taken by you: 0 secs

% Students got it correct: 47 %

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

The following partially filled table shows the marks scored by 6 students in 5 different subjects.

	Trump	Obama	Bush	Clinton	Reagan	Carter
Mathematics	9		4		5	
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3) What is the best that can be said about the marks _ scored by Reagan in Science?

- ☐ 0
- ☐ 1
- ☐ 8
- ☐ At most 6

Video Explanation:

▼

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Explanation:

Using the condition that the marks given in the chart constitute 60%, 80%, 55%, 80% and 90% in Mathematics, English, Science, Hindi, and History respectively, the total marks and the remaining marks in each of the subjects can be calculated as follows:

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Each of the students got different marks in any particular subject. The maximum and minimum marks in each of the subject are 9 and 0 respectively and each student got distinct marks in each subject, remaining marks in Mathematics = 12. Since no one got 0 in Mathematics, $12 = (1 + 3 + 8)$ or $(2 + 3 + 7)$. Clinton and Carter got 7 marks in English & Hindi respectively and Obama did not get 7 marks in any subject, possibility $12 = (2 + 3 + 7)$ is ruled out.

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Clinton got 24 marks in total, thus he got 1 mark in Science. In Science, remaining 8 marks can be obtained by $(0 + 8)$. Thus Reagan got 8 marks and Carter got 0 marks in Science.

In English the remaining 6 marks can be obtained by $(0 + 6)$. Reagan got total 21 marks, thus, he got 0 marks and Bush got 6 marks in English. Also Reagan must have got 1 mark in Hindi. Now the remaining 4 marks in Hindi can be obtained by $(0 + 4)$. Since Obama got 4 marks in Science, he got 0 marks in Hindi and Trump got 4 marks in Hindi.

In History the remaining 3 marks can be obtained by $(1 + 2)$, where Bush got 2 marks and Trump got 1 mark.

The final table of marks:

	Trump	Obama	Bush	Clinton	Reagan	Carter	Total marks
Mathematics	9	1	4	3	5	8	30
English	5	8	6	7	0	4	30
Science	2	4	5	1	8	0	20
Hindi	4	0	8	5	1	7	25
History	1	3	2	8	7	9	30
Total	21	16	25	24	21	28	135

In Science, Reagan scored 8 marks. Hence, [3].

Correct Answer:



Time taken by you: 0 secs

Avg Time taken by all students: 46 secs

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

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

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4) What is the average marks scored by Trump in all the subjects? —

- ☐ 4.2
- ☐ 4.4
- ☐ 4.6
- ☐ Cannot be determined

Video Explanation: ▼

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Each of the students got different marks in any particular subject. The maximum and minimum marks in each of the subject are 9 and 0 respectively and each student got distinct marks in each subject, remaining marks in Mathematics = 12. Since no one got 0 in Mathematics, $12 = (1 + 3 + 8)$ or $(2 + 3 + 7)$. Clinton and Carter got 7 marks in English & Hindi respectively and Obama did not get 7 marks in any subject, possibility $12 = (2 + 3 + 7)$ is ruled out.

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In English the remaining 6 marks can be obtained by $(0 + 6)$. Reagan got total 21 marks, thus, he got 0 marks and Bush got 6 marks in English. Also Reagan must have got 1 mark in Hindi. Now the remaining 4 marks in Hindi can be obtained by $(0 + 4)$. Since Obama got 4 marks in Science, he got 0 marks in Hindi and Trump got 4 marks in Hindi.

In History the remaining 3 marks can be obtained by $(1 + 2)$, where Bush got 2 marks and Trump got 1 mark.

The final table of marks:

	Trump	Obama	Bush	Clinton	Reagan	Carter	Total marks
Mathematics	9	1	4	3	5	8	30
English	5	8	6	7	0	4	30
Science	2	4	5	1	8	0	20
Hindi	4	0	8	5	1	7	25
History	1	3	2	8	7	9	30
Total	21	16	25	24	21	28	135

Total marks scored by Trump = $9 + 5 + 2 + 4 + 1 = 21$

$$\therefore \text{Average} = \frac{21}{5} = 4.2$$

Hence, [1].

Correct Answer:

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Avg Time taken by all students: 83 secs

Your Attempt: Skipped

% Students got it correct: 51 %

Loading...

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

1. The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
2. Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
3. There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

1. The numbers of questions correctly attempted by the given five students were different non-negative numbers.
2. Only one student did not get any question incorrect, all others got exactly one question incorrect.
3. Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

1. Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
2. The total score of exactly one student in the exam was a

1) Who among the following scored total marks (marks in section A + marks in section B) less than that scored in section A?

- ☐ Ajay
- ☐ Bharat
- ☐ Chandan
- ☐ Dinesh

Video Explanation:

Explanation:

Consider section A:

From point 1, the number of questions correct attempts by the five students in Section A were 2, 3, 4, 5 and 6. There were two students who got two answers incorrect while the remaining three students did not answer any question incorrectly. We have the following:

Student					
Correct attempts	2	3	4	5	6
If all answers are correct	24	36	48	60	72
If 2 answers are incorrect	18	30	42		

From point 3, the scores of the five students in Section A were 18, 36, 42, 60 and 72.

Consider section B:

From point 1, the number of correct attempts by the five students in Section B were 0, 1, 2, 3 and 4. One student did not attempt any question incorrectly. That student must have been the student who got 4 answers correct (as there are 4 questions in the section) and all others got exactly one answer incorrect. We have the following:

Correct attempts	0	1	2	3	4
If all answers are correct					32
If one answer is incorrect	-2	6	14	22	

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

- The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
- Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
- There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

- The numbers of questions correctly attempted by the given five students were different non-negative numbers.
- Only one student did not get any question incorrect, all others got exactly one question incorrect.
- Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

- Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
- The total score of exactly one student in the exam was a

From point 3, the scores of the five students in Section B were -2, 6, 14, 22 and 32.

Consider both sections:

Using points 2 and 4, the student who scored 60 (Correct = 5, Incorrect = 0, Attempts = 5) in Section A must have scored 6 (Correct = 1, Incorrect = 1, Attempts = 2) in Section B and the student who scored 72 (Correct = 6, Incorrect = 0, Attempts = 6) in section A must have scored 22 (Correct = 3, Incorrect = 1, Attempts = 4) in Section B (because there is one student who scored 94). Thus, these two students attempted 7 and 10 questions respectively. Using point 1, the numbers of questions attempted by the five students were 7, 7, 7, 7 and 10.

The scores of the three students who scored 18, 36 and 42 in Section A could be -2, 14 and 32 in Section B. We have the following:

		Section A		
		18 (4 attempts)	36 (3 attempts)	42 (6 attempts)
Section B	-2 (1 attempt)	16 (5 attempts)	34 (4 attempts)	40 (7 attempts)
	14 (3 attempts)	32 (7 attempts)	50 (6 attempts)	56 (9 attempts)
	32 (4 attempts)	50 (8 attempts)	68 (7 attempts)	74 (10 attempts)

The entries marked in bold font are the valid entries that satisfy the given conditions on the total score and attempts.

We have the following:

	Section A			Section B			Total		
	Correct	Incorrect	Score	Correct	Incorrect	Score	Correct	Incorrect	Score
Ajay	2	2	18	2	1	14	4	3	32
Bharat	4	2	42	0	1	-2	4	3	40
Chandan	5	0	60	1	1	6	6	1	66
Dinesh	3	0	36	4	0	32	7	0	68
Eknath	6	0	72	3	1	22	9	1	94

Bharat's total marks in both the sections combined = 40, while his marks in Section A = 42. Hence, [2].

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

1. The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
2. Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
3. There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

1. The numbers of questions correctly attempted by the given five students were different non-negative numbers.
2. Only one student did not get any question incorrect, all others got exactly one question incorrect.
3. Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

1. Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
2. The total score of exactly one student in the exam was a

Time taken by you: **0 secs**

Avg Time taken by all students: **464 secs**

Your Attempt: **Skipped**

% Students got it correct: **51 %**

2) Performance Index Score is defined as total marks scored in both the sections divided by total number of questions attempted in both the sections. Whose Performance Index Score is the highest among the five students?

- ☐ Bharat
- ☐ Chandan
- ☐ Dinesh
- ☐ Eknath

Video Explanation:

Explanation:

Consider section A:

From point 1, the number of questions correct attempts by the five students in Section A were 2, 3, 4, 5 and 6. There were two students who got two answers incorrect while the remaining three students did not answer any question incorrectly. We have the following:

Student					
Correct attempts	2	3	4	5	6
If all answers are correct	24	36	48	60	72
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From point 3, the scores of the five students in Section A were 18, 36, 42, 60 and 72.

Consider section B:

From point 1, the number of correct attempts by the five students in Section B were 0, 1, 2, 3 and 4. One

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

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Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

- 1. The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
- 2. Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
- 3. There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

- 1. The numbers of questions correctly attempted by the given five students were different non-negative numbers.
- 2. Only one student did not get any question incorrect, all others got exactly one question incorrect.
- 3. Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

- 1. Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
- 2. The total score of exactly one student in the exam was a

Student					
Correct attempts	0	1	2	3	4
If all answers are correct					32
If one answer is incorrect	-2	6	14	22	

From point 3, the scores of the five students in Section B were -2, 6, 14, 22 and 32.

Consider both sections:

Using points 2 and 4, the student who scored 60(Correct = 5, Incorrect = 0, Attempts = 5) in Section A must have scored 6(Correct = 1, Incorrect = 1, Attempts = 2) in Section B and the student who scored 72 (Correct = 6, Incorrect = 0, Attempts = 6) in section A must have scored 22 (Correct = 3, Incorrect = 1, Attempts = 4) in Section B (because there is one student who scored 94). Thus, these two students attempted 7 and 10 questions respectively. Using point 1, the numbers of questions attempted by the five students were 7, 7, 7, 7 and 10.

The scores of the three students who scored 18, 36 and 42 in Section A could be -2, 14 and 32 in Section B. We have the following:

		Section A		
		18 (4 attempts)	36 (3 attempts)	42 (6 attempts)
Section B	-2 (1 attempt)	16 (5 attempts)	34 (4 attempts)	40 (7 attempts)
	14 (3 attempts)	32 (7 attempts)	50 (6 attempts)	56 (9 attempts)
	32 (4 attempts)	50 (8 attempts)	68 (7 attempts)	74 (10 attempts)

The entries marked in bold font are the valid entries that satisfy the given conditions on the total score and attempts.

We have the following:

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

- 1. The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
- 2. Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
- 3. There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

- 1. The numbers of questions correctly attempted by the given five students were different non-negative numbers.
- 2. Only one student did not get any question incorrect, all others got exactly one question incorrect.
- 3. Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

- 1. Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
- 2. The total score of exactly one student in the exam was a

Section A									
	Correct	Incorrect	Score	Correct	Incorrect	Score	Correct	Incorrect	Score
Ajay	2	2	18	2	1	14	4	3	32
Bharat	4	2	42	0	1	-2	4	3	40
Chandan	5	0	60	1	1	6	6	1	66
Dinesh	3	0	36	4	0	32	7	0	68
Eknath	6	0	72	3	1	22	9	1	94

We can see that Ajay, Bharat, Chandan and Dinesh attempted total 7 questions and Dinesh's total score is highest among these four, thus, we need to compare Dinesh's and Eknath's Performance Index Score.

Dinesh's Performance Index Score = $\frac{68}{7} = 9.71$

Eknath's Performance Index Score = $\frac{94}{10} = 9.4$

Hence, [3].

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 38 secs

Your Attempt: Skipped

% Students got it correct: 52 %

3) What is the difference between Bharat's score in Section A and Ajay's score in Section B?

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

Video Explanation:

Explanation:

Consider section A:

From point 1, the number of questions correct attempts by the five students in Section A were 2, 3, 4, 5 and 6. There were two students who got two answers incorrect while the remaining three students did not answer any question incorrectly. We have the following:

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

1. The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
2. Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
3. There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

1. The numbers of questions correctly attempted by the given five students were different non-negative numbers.
2. Only one student did not get any question incorrect, all others got exactly one question incorrect.
3. Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

1. Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
2. The total score of exactly one student in the exam was a

Student	2	3	4	5	6
Correct attempts					
If all answers are correct	24	36	48	60	72
If 2 answers are incorrect	18	30	42		

From point 3, the scores of the five students in Section A were 18, 36, 42, 60 and 72.

Consider section B:

From point 1, the number of correct attempts by the five students in Section B were 0, 1, 2, 3 and 4. One student did not attempt any question incorrectly. That student must have been the student who got 4 answers correct (as there are 4 questions in the section) and all others got exactly one answer incorrect. We have the following:

Student					
Correct attempts	0	1	2	3	4
If all answers are correct					32
If one answer is incorrect	-2	6	14	22	

From point 3, the scores of the five students in Section B were -2, 6, 14, 22 and 32.

Consider both sections:

Using points 2 and 4 the student who scored 60 (Correct = 5, Incorrect = 0, Attempts = 5) in Section A must have scored 6 (Correct = 1, Incorrect = 1, Attempts = 2) in Section B and the student who scored 72 (Correct = 6, Incorrect = 0, Attempts = 6) in section A must have scored 22 (Correct = 3, Incorrect = 1, Attempts = 4) in Section B (because there is one student who scored 94). Thus, these two students attempted 7 and 10 questions respectively. Using point 1, the numbers of questions attempted by the five students were 7, 7, 7, 7 and 10.

The scores of the three students who scored 18, 36 and 42 in Section A could be -2, 14 and 32 in Section B. We have the following:

		Section A		
		18 (4 attempts)	36 (3 attempts)	42 (6 attempts)
Section B	-2 (1 attempt)	16 (5 attempts)	34 (4 attempts)	40 (7 attempts)
	14 (3 attempts)	32 (7 attempts)	50 (6 attempts)	56 (9 attempts)
	32 (4 attempts)	50 (8 attempts)	68 (7 attempts)	74 (10 attempts)

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

- 1. The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
- 2. Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
- 3. There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

- 1. The numbers of questions correctly attempted by the given five students were different non-negative numbers.
- 2. Only one student did not get any question incorrect, all others got exactly one question incorrect.
- 3. Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

- 1. Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
- 2. The total score of exactly one student in the exam was a

We have the following:

	Section A			Section B			Total		
	Correct	Incorrect	Score	Correct	Incorrect	Score	Correct	Incorrect	Score
Ajay	2	2	18	2	1	14	4	3	32
Bharat	4	2	42	0	1	-2	4	3	40
Chandan	5	0	60	1	1	6	6	1	66
Dinesh	3	0	36	4	0	32	7	0	68
Eknath	6	0	72	3	1	22	9	1	94

Bharat’s score in Section A = 42 and Ajay’s score in Section B = 14
The required difference = $42 - 14 = 28$
Therefore, the required answer is 28.

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 5 secs

Your Attempt: Skipped

% Students got it correct: 18 %

4) What is Chandan’s total score in both the sections combined?

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

Video Explanation:

Explanation:

Consider section A:

From point 1, the number of questions correct attempts by the five students in Section A were 2, 3, 4, 5 and 6. There were two students who got two

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

- The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
- Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
- There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

- The numbers of questions correctly attempted by the given five students were different non-negative numbers.
- Only one student did not get any question incorrect, all others got exactly one question incorrect.
- Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

- Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
- The total score of exactly one student in the exam was a

answers incorrect while the remaining three students did not answer any question incorrectly. We have the following:

Student					
Correct attempts	2	3	4	5	6
If all answers are correct	24	36	48	60	72
If 2 answers are incorrect	18	30	42		

From point 3, the scores of the five students in Section A were 18, 36, 42, 60 and 72.

Consider section B:

From point 1, the number of correct attempts by the five students in Section B were 0, 1, 2, 3 and 4. One student did not attempt any question incorrectly. That student must have been the student who got 4 answers correct (as there are 4 questions in the section) and all others got exactly one answer incorrect. We have the following:

Student					
Correct attempts	0	1	2	3	4
If all answers are correct					32
If one answer is incorrect	-2	6	14	22	

From point 3, the scores of the five students in Section B were -2, 6, 14, 22 and 32.

Consider both sections:

Using points 2 and 4 the student who scored 60 (Correct = 5, Incorrect = 0, Attempts = 5) in Section A must have scored 6 (Correct = 1, Incorrect = 1, Attempts = 2) in Section B and the student who scored 72 (Correct = 6, Incorrect = 0, Attempts = 6) in section A must have scored 22 (Correct = 3, Incorrect = 1, Attempts = 4) in Section B (because there is one student who scored 94). Thus, these two students attempted 7 and 10 questions respectively. Using point 1, the numbers of questions attempted by the five students were 7, 7, 7, 7 and 10.

The scores of the three students who scored 18, 36 and 42 in Section A could be -2, 14 and 32 in Section B. We have the following:

Section B	-2 (1 attempt)	16 (5 attempts)	34 (4 attempts)	40 (7 attempts)
	14 (3 attempts)	32 (7 attempts)	50 (6 attempts)	56 (9 attempts)
	32 (4 attempts)	50 (8 attempts)	68 (7 attempts)	74 (10 attempts)

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

Ajay, Bharat, Chandan, Dinesh and Eknath are five students who appeared for Social Awareness test of National Institute of Rural Management Amreli (NIRMA). The test consisted of 10 multiple choice questions, divided into two sections: Section A (6 questions of 12 marks each) and Section B (4 questions of 8 marks each). There was no penalty of skipped questions but there was a negative marking of 3 marks and 2 marks respectively for the questions incorrectly attempted in Section A and Section B.

Total scores of Ajay, Bharat, Chandan, Dinesh and Eknath in the exam (i.e. the sum of their scores in the two sections of the exam) were in the ascending order.

Information only for the questions in Section A

- The numbers of questions correctly attempted by the given five students were different natural numbers, the minimum of which was 2.
- Only two students got two questions incorrect. The remaining three students did not get any question incorrect.
- There were three students, out of which exactly one student scored marks equal to the square of a natural number (say n^2), the second student scored twice as many marks (i.e. $2n^2$) and the third student scored half as many marks (i.e. $\frac{n^2}{2}$). The difference in the marks scored by two other students was 18.

Information only for the questions in Section B

- The numbers of questions correctly attempted by the given five students were different non-negative numbers.
- Only one student did not get any question incorrect, all others got exactly one question incorrect.
- Only one student scored marks less than 0, while only one other student scored marks equal to twice of the square of a natural number. The marks scored by three other students were natural numbers in an Arithmetic Progression with common difference = 8.

Information on the performance of the students in both sections taken together

- Four students attempted equal number of questions (say m). The number of questions attempted by the fifth student was $(m + 3)$.
- The total score of exactly one student in the exam was a

The entries marked in bold font are the valid entries that satisfy the given conditions on the total score and attempts.

We have the following:

	Section A			Section B			Total		
	Correct	Incorrect	Score	Correct	Incorrect	Score	Correct	Incorrect	Score
Ajay	2	2	18	2	1	14	4	3	32
Bharat	4	2	42	0	1	-2	4	3	40
Chandan	5	0	60	1	1	6	6	1	66
Dinesh	3	0	36	4	0	32	7	0	68
Eknath	6	0	72	3	1	22	9	1	94

Chandan's total score in both the section combined is 66.

Therefore, the required answer is 66.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **8 secs**

Your Attempt: **Skipped**

% Students got it correct: **21 %**

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

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

- Only Thumri & Qawwali are taught at the same time.
- In all 100 students are enrolled in exactly two courses.
- The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
- The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
- The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
- The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
- The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

1) How many students enrolled in Bhajan?

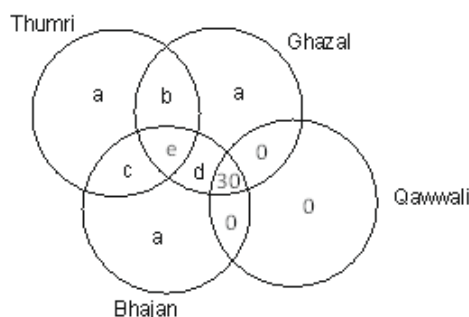
- ☐ 146
- ☐ 197
- ☐ 153
- ☐ Cannot be determined

Video Explanation: ▼

Explanation: ▼

Using point 1, 4 and 6, the Venn diagram can be drawn as follows:

Diagram 1



Given: $3a + b + c + d + e + 30 = 220$

From point 2: $b + c + d = 100$

Thus, $3a + e = 90$

Using point 3: $3a < e + 30 < b + c + d = 100$; therefore, $e < 70$.

$\therefore 3a + e + 30 < 3a + 100 \Rightarrow 90 + 30 < 3a + 100 \Rightarrow 6 < a$

Using point 6 & 7: $3a < 30 \Rightarrow a < 10$

Thus, $(a, e) = (7, 69)$ or $(8, 66)$ or $(9, 63)$

Point 5 : $(2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$

It can be concluded that $(6a + 100 + 30 = 6a + 130)$ is a multiple of 8 and $a = 9$ satisfies this.

Therefore, $(a, e) = (9, 63)$

Now, substituting $a = 9$ in $(2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$,

we get $(d + 48) : (c + 18) : (b + 18) = 4 : 3 : 1$

Solving this, we get $c = 3b + 36$ and $d = 4b + 24$

Substituting these in $b + c + d = 100$; $b + 3b + 36 + 4b + 24 = 100$, thus, $b = 5$, $c = 51$ and $d = 44$

Thus, $a = 9$; $b = 5$, $c = 51$, $d = 44$, $e = 63$

$a + c + e + d + 30 = 9 + 51 + 63 + 44 + 30 = 197$

Hence, [2].

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

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

1. Only Thumri & Qawwali are taught at the same time.
2. In all 100 students are enrolled in exactly two courses.
3. The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
4. The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
5. The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
6. The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
7. The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

Time taken by you: 0 secs

Avg Time taken by all students: 315 secs

Your Attempt: Skipped

% Students got it correct: 44 %

2) The number of students enrolled in exactly one singing stream is: —

- ☐ 9
- ☐ 21
- ☐ 27
- ☐ 39

Video Explanation: ▼

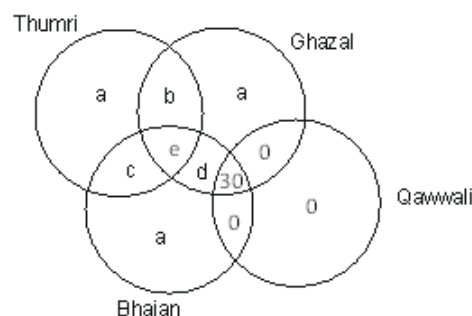
Refer to the data below and answer the questions that follow.

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

- Only Thumri & Qawwali are taught at the same time.
- In all 100 students are enrolled in exactly two courses.
- The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
- The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
- The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
- The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
- The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

Using point 1, 4 and 6, the Venn diagram can be drawn as follows:

Diagram 1



Given: $3a + b + c + d + e + 30 = 220$

From point 2: $b + c + d = 100$

Thus, $3a + e = 90$

Using point 3: $3a < e + 30 < b + c + d = 100$; therefore, $e < 70$.

$\therefore 3a + e + 30 < 3a + 100 \Rightarrow 90 + 30 < 3a + 100 \Rightarrow 6 < a$

Using point 6 & 7: $3a < 30 \Rightarrow a < 10$

Thus, $(a, e) = (7, 69)$ or $(8, 66)$ or $(9, 63)$

Point 5 : $(2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$

It can be concluded that $(6a + 100 + 30 = 6a + 130)$ is a multiple of 8 and $a = 9$ satisfies this.

Therefore, $(a, e) = (9, 63)$

Now, substituting $a = 9$ in $(2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$,

we get $(d + 48) : (c + 18) : (b + 18) = 4 : 3 : 1$

Solving this, we get $c = 3b + 36$ and $d = 4b + 24$

Substituting these in $b + c + d = 100$; $b + 3b + 36 + 4b + 24 = 100$, thus, $b = 5$, $c = 51$ and $d = 44$

Thus, $a = 9$; $b = 5$, $c = 51$, $d = 44$, $e = 63$

The number of students enrolled in exactly one singing stream = $3a = 27$

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **216 secs**

Your Attempt: **Skipped**

% Students got it correct: **58 %**

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

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

- Only Thumri & Qawwali are taught at the same time.
- In all 100 students are enrolled in exactly two courses.
- The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
- The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
- The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
- The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
- The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

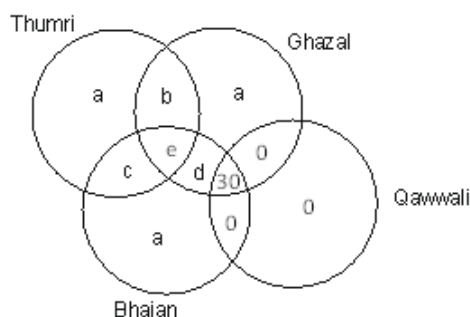
Enter your response (as an integer) using the virtual keyboard in the box provided.

Video Explanation: ▼

Explanation: ▼

Using point 1, 4 and 6, the Venn diagram can be drawn as follows:

Diagram 1



$$\text{Given: } 3a + b + c + d + e + 30 = 220$$

$$\text{From point 2: } b + c + d = 100$$

$$\text{Thus, } 3a + e = 90$$

Using point 3: $3a < e + 30 < b + c + d = 100$; therefore, $e < 70$.

$$\therefore 3a + e + 30 < 3a + 100 \Rightarrow 90 + 30 < 3a + 100 \Rightarrow 6 < a$$

$$\text{Using point 6 \& 7: } 3a < 30 \Rightarrow a < 10$$

$$\text{Thus, } (a, e) = (7, 69) \text{ or } (8, 66) \text{ or } (9, 63)$$

$$\text{Point 5 : } (2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$$

It can be concluded that $(6a + 100 + 30 = 6a + 130)$ is a multiple of 8 and $a = 9$ satisfies this.

$$\text{Therefore, } (a, e) = (9, 63)$$

$$\text{Now, substituting } a = 9 \text{ in } (2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1,$$

$$\text{we get } (d + 48) : (c + 18) : (b + 18) = 4 : 3 : 1$$

$$\text{Solving this, we get } c = 3b + 36 \text{ and } d = 4b + 24$$

$$\text{Substituting these in } b + c + d = 100; b + 3b + 36 + 4b + 24 = 100, \text{ thus, } b = 5, c = 51 \text{ and } d = 44$$

$$\text{Thus, } a = 9; b = 5, c = 51, d = 44, e = 63$$

The number of students enrolled in both Ghazal and Thumri = $b + e = 5 + 63 = 68$

Therefore, the required answer is 68.

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

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

1. Only Thumri & Qawwali are taught at the same time.
2. In all 100 students are enrolled in exactly two courses.
3. The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
4. The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
5. The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
6. The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
7. The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

Time taken by you: 0 secs

Avg Time taken by all students: 9 secs

Your Attempt: Skipped

% Students got it correct: 18 %

4) How many students did not enroll in Thumri? —

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

Video Explanation: ▼

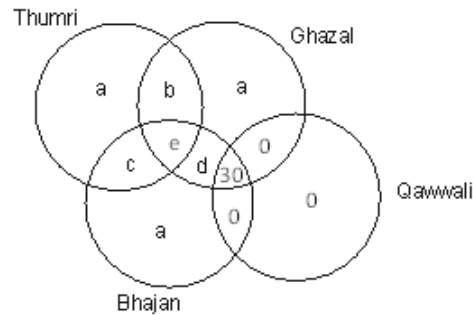
Refer to the data below and answer the questions that follow.

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

- Only Thumri & Qawwali are taught at the same time.
- In all 100 students are enrolled in exactly two courses.
- The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
- The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
- The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
- The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
- The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

Using point 1, 4 and 6, the Venn diagram can be drawn as follows:

Diagram 1



Given: $3a + b + c + d + e + 30 = 220$

From point 2: $b + c + d = 100$

Thus, $3a + e = 90$

Using point 3: $3a < e + 30 < b + c + d = 100$; therefore, $e < 70$.

$\therefore 3a + e + 30 < 3a + 100 \Rightarrow 90 + 30 < 3a + 100 \Rightarrow 6 < a$

Using point 6 & 7: $3a < 30 \Rightarrow a < 10$

Thus, $(a, e) = (7, 69) \text{ or } (8, 66) \text{ or } (9, 63)$

Point 5 : $(2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$

It can be concluded that $(6a + 100 + 30 = 6a + 130)$ is a multiple of 8 and $a = 9$ satisfies this.

Therefore, $(a, e) = (9, 63)$

Now, substituting $a = 9$ in $(2a + d + 30) : (2a + c) : (2a + b) = 4 : 3 : 1$,
we get $(d + 48) : (c + 18) : (b + 18) = 4 : 3 : 1$

Solving this, we get $c = 3b + 36$ and $d = 4b + 24$

Substituting these in $b + c + d = 100$; $b + 3b + 36 + 4b + 24$

$= 100$, thus, $b = 5$, $c = 51$ and $d = 44$

Thus, $a = 9$; $b = 5$, $c = 51$, $d = 44$, $e = 63$

Number of students not enrolled in Thumri $= 2a + d + 30$
 $= 18 + 44 + 30 = 92$

Therefore, the required answer is 92.

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 13 secs

Your Attempt: Skipped

% Students got it correct: 25 %

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

XYZ Art Society offers courses in vocal singing in four main streams, Thumri, Ghazal, Bhajan and Qawwali. Currently, there are 220 students enrolled. One student can enrol in any number of streams. No student can enrol in two streams, which are taught at the same time.

1. Only Thumri & Qawwali are taught at the same time. Loading...
2. In all 100 students are enrolled in exactly two courses.
3. The number of students enrolled in exactly one course is less than that enrolled in exactly three courses, which in turn is less than that enrolled in exactly two courses.
4. The number of students enrolled only in Thumri is same as those enrolled only in Ghazal which in turn is same as the number of students enrolled only in Bhajan.
5. The number of students not enrolled in Thumri, the number of students not enrolled in Ghazal, the number of students not enrolled in Bhajan are in the ratio 4 : 3 : 1.
6. The number of students enrolled in Qawwali is 30 and they all are enrolled in exactly three courses.
7. The number of students enrolled in exactly one course is less than the number of students enrolled in Qawwali.

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

1) At the end of each level, success percentage of Starks/White Walkers for that level is defined as:

$$\frac{\text{The number of army men of the opposite side killed in that level}}{\text{The number of army men of the opposite side at the beginning of that level}} \times 100$$

What was the success percentage of Starks in level 4?

- ☐ 27.66%
- ☐ 28.67%
- ☐ 29.33%
- ☐ 29.85%

Video Explanation:



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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other's army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

Explanation:

Given: At the beginning of each level, the number of Starks and White Walkers become $\frac{6}{5}$ th of the number of Starks and White Walkers at the end of the previous level respectively. So we can find the number of Starks at the end of any nth level = number of Starks at the beginning of (n + 1)th level $\times \frac{5}{6}$

$$\text{Number of Starks at the end of 1}^{\text{st}} \text{ level} = 18000 \times \frac{5}{6} = 15,000$$

$$\text{Number of Starks at the end of 2}^{\text{nd}} \text{ level} = 16800 \times \frac{5}{6} = 14,000$$

$$\text{Number of Starks at the end of 3}^{\text{rd}} \text{ level} = 17280 \times \frac{5}{6} = 14,400$$

$$\text{Number of Starks at the end of 4}^{\text{th}} \text{ level} = 18144 \times \frac{5}{6} = 15,120$$

Number of Starks turning into White Walkers at the end of 1st level = 18000 – 15000 = 3,000

Number of Starks turning into White Walkers at the end of 2nd level = 18000 – 14000 = 4,000

Number of Starks turning into White Walkers at the end of 3rd level = 16800 – 14400 = 2,400

Number of Starks turning into White Walkers at the end of 4th level = 17280 – 15120 = 2,160

Number of White Walkers at the end of each level can be calculated as follows:

$$\text{Number of White Walkers at the end of 1}^{\text{st}} \text{ level} = 18000 \times \frac{5}{6} = 15,000$$

$$\text{Number of White Walkers at the end of 2}^{\text{nd}} \text{ level} = 14400 \times \frac{5}{6} = 12,000$$

$$\text{Number of White Walkers at the end of 3}^{\text{rd}} \text{ level} = 18000 \times \frac{5}{6} = 15,000$$

$$\text{Number of White Walkers at the end of 4}^{\text{th}} \text{ level} = 18000 \times \frac{5}{6} = 15,000$$

Number of White Walkers killed in nth level = Number of White Walkers at the beginning of nth level + number of Starks turned White Walkers at the end of nth level – number of White Walkers at the end of nth level

Number of White Walkers killed in 1st level = 18000 + 3000 – 15000 = 6,000

Number of White Walkers killed in 2nd level = 18000 + 4000 – 12000 = 10,000

Number of White Walkers killed in 3rd level = 14400 + 2400 – 15000 = 1,800

Number of White Walkers killed in 4th level = 18000 + 2160 – 15000 = 5,160

$$\text{The required percentage} = \left(\frac{5160}{18000} \right) \times 100 = 28.67\%$$

Hence, [2].

Correct Answer:

Time taken by you: **1204 secs**

Avg Time taken by all students: **734 secs**

Your Attempt: **Skipped**

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

2) What is the average of the number of White Walkers killed in level 1, 2, 3 and 4?

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

Video Explanation:

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

Given: At the beginning of each level, the number of Starks and White Walkers become 6/5th of the number of Starks and White Walkers at the end of the previous level respectively. So we can find the number of Starks at the end of any nth level = number of Starks at the beginning of (n + 1)th level × 5/6

Number of Starks at the end of 1st level = 18000 × $\frac{5}{6}$ = 15,000

Number of Starks at the end of 2nd level = 16800 × $\frac{5}{6}$ = 14,000

Number of Starks at the end of 3rd level = 17280 × $\frac{5}{6}$ = 14,400

Number of Starks at the end of 4th level = 18144 × $\frac{5}{6}$ = 15,120

Number of Starks turning into White Walkers at the end of 1st level = 18000 – 15000 = 3,000

Number of Starks turning into White Walkers at the end of 2nd level = 18000 – 14000 = 4,000

Number of Starks turning into White Walkers at the end of 3rd level = 16800 – 14400 = 2,400

Number of Starks turning into White Walkers at the end of 4th level = 17280 – 15120 = 2,160

Number of White Walkers at the end of each level can be calculated as follows:

Number of White Walkers at the end of 1st level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers at the end of 2nd level = 14400 × $\frac{5}{6}$ = 12,000

Number of White Walkers at the end of 3rd level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers at the end of 4th level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers killed in nth level = Number of White Walkers at the beginning of nth level + number of Starks turned White Walkers at the end of nth level – number of White Walkers at the end of nth level

Number of White Walkers killed in 1st level = 18000 + 3000 – 15000 = 6,000

Number of White Walkers killed in 2nd level = 18000 + 4000 – 12000 = 10,000

Number of White Walkers killed in 3rd level = 14400 + 2400 – 15000 = 1,800

Number of White Walkers killed in 4th level = 18000 + 2160 – 15000 = 5,160

The average of the Number of White Walkers killed in level 1, 2, 3 and 4
= $\frac{(6000 + 10000 + 1800 + 5160)}{4}$ = 5740

Therefore, the required answer is 5740.

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 64 secs

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

% Students got it correct: 46 %

3) If the number of Starks was 1872 more than the number of White Walkers at the end of level 5, then find the number of Starks killed in level 5.

- ☐ 4536
- ☐ 4656
- ☐ 4856
- ☐ Cannot be determined

Video Explanation:

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

Given: At the beginning of each level, the number of Starks and White Walkers become 6/5th of the number of Starks and White Walkers at the end of the previous level respectively. So we can find the number of Starks at the end of any nth level = number of Starks at the beginning of (n + 1)th level × 5/6

Number of Starks at the end of 1st level = 18000 × $\frac{5}{6}$ = 15,000

Number of Starks at the end of 2nd level = 16800 × $\frac{5}{6}$ = 14,000

Number of Starks at the end of 3rd level = 17280 × $\frac{5}{6}$ = 14,400

Number of Starks at the end of 4th level = 18144 × $\frac{5}{6}$ = 15,120

Number of Starks turning into White Walkers at the end of 1st level = 18000 – 15000 = 3,000

Number of Starks turning into White Walkers at the end of 2nd level = 18000 – 14000 = 4,000

Number of Starks turning into White Walkers at the end of 3rd level = 16800 – 14400 = 2,400

Number of Starks turning into White Walkers at the end of 4th level = 17280 – 15120 = 2,160

Number of White Walkers at the end of each level can be calculated as follows:

Number of White Walkers at the end of 1st level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers at the end of 2nd level = 14400 × $\frac{5}{6}$ = 12,000

Number of White Walkers at the end of 3rd level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers at the end of 4th level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers killed in nth level = Number of White Walkers at the beginning of nth level + number of Starks turned White Walkers at the end of nth level – number of White Walkers at the end of nth level

Number of White Walkers killed in 1st level = 18000 + 3000 – 15000 = 6,000

Number of White Walkers killed in 2nd level = 18000 + 4000 – 12000 = 10,000

Number of White Walkers killed in 3rd level = 14400 + 2400 – 15000 = 1,800

Number of White Walkers killed in 4th level = 18000 + 2160 – 15000 = 5,160

Let the number of Starks killed or turned into White Walkers be ‘a’ and the number of White Walker killed be ‘b’ in the level 5th.

Given, 18144 – a = 18000 – b + a + 1872

Solving this, b – 2a = 1728

Hence, [4].

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 149 secs

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

% Students got it correct: 90 %

4) In which round were maximum number of White Walkers killed?

- First
- Second
- Third
- Fourth

Video Explanation:

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

Given: At the beginning of each level, the number of Starks and White Walkers become 6/5th of the number of Starks and White Walkers at the end of the previous level respectively. So we can find the number of Starks at the end of any nth level = number of Starks at the beginning of (n + 1)th level × 5/6

Number of Starks at the end of 1st level = 18000 × $\frac{5}{6}$ = 15,000

Number of Starks at the end of 2nd level = 16800 × $\frac{5}{6}$ = 14,000

Number of Starks at the end of 3rd level = 17280 × $\frac{5}{6}$ = 14,400

Number of Starks at the end of 4th level = 18144 × $\frac{5}{6}$ = 15,120

Number of Starks turning into White Walkers at the end of 1st level = 18000 – 15000 = 3,000

Number of Starks turning into White Walkers at the end of 2nd level = 18000 – 14000 = 4,000

Number of Starks turning into White Walkers at the end of 3rd level = 16800 – 14400 = 2,400

Number of Starks turning into White Walkers at the end of 4th level = 17280 – 15120 = 2,160

Number of White Walkers at the end of each level can be calculated as follows:

Number of White Walkers at the end of 1st level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers at the end of 2nd level = 14400 × $\frac{5}{6}$ = 12,000

Number of White Walkers at the end of 3rd level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers at the end of 4th level = 18000 × $\frac{5}{6}$ = 15,000

Number of White Walkers killed in nth level = Number of White Walkers at the beginning of nth level + number of Starks turned White Walkers at the end of nth level – number of White Walkers at the end of nth level

Number of White Walkers killed in 1st level = 18000 + 3000 – 15000 = 6,000

Number of White Walkers killed in 2nd level = 18000 + 4000 – 12000 = 10,000

Number of White Walkers killed in 3rd level = 14400 + 2400 – 15000 = 1,800

Number of White Walkers killed in 4th level = 18000 + 2160 – 15000 = 5,160

It can be seen that the maximum number of White Walkers killed = 10000 in the second round.
Hence, [2].

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 80 secs

Your Attempt: Skipped

% Students got it correct: 86 %

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

In a video game, called Game of Thrones, there are two armies, Starks and White Walkers. There are five levels of the game. In every level, Starks and White Walkers kill each other’s army men. When a Stark kills a White Walker, the White Walker dies but when a White Walker kills a Stark, Stark turns into a White Walker and added to the army of White Walkers in the same level.

The number of Starks at the end of any level = The number of Starks at the beginning of the level – The number of Starks killed in the same level.

The number of White Walkers at the end of any level = The number of White Walkers at the beginning of the level – The number of White Walkers killed in the same level + The number of Starks killed in the same level.

At the beginning of each level, the number of Starks and White Walkers increases by 20% of the number of Starks and White Walkers at the end of the previous level. The number of Starks at the beginning of 1st, 2nd, 3rd, 4th and 5th level were 18000, 18000, 16800, 17280 and 18144 respectively. The number of White Walkers at the beginning of each level were 18000 except at the beginning of 3rd level, where it is 14400.

Loading...

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

Seven contestants, named P1, P2, P3, P4, P5, P6 and P7 participated in a singing contest organized on the campus of National Institute of Management Ahmedabad (NIMA) during the annual cultural fest, named Chaos. Seven judges (named A, B, C, D, E, F and G) evaluated the contestants on their performance. Each judge awarded whole number points between 0 and 10 (both included) to each contestant. Each judge awarded distinct points to each contestant.

The following table shows the information on the top four points awarded by each judge to the contestants. The rightmost column shows the sum of the points awarded by each judge to the remaining three contestants. For example, judge A awarded 10, 7, 6 and 4 points respectively to P1, P4, P5 and P7 and these were the top 4 scores awarded by judge A, while the sum of the points awarded to the remaining three contestants was 4.

Judge	Contestants				Sum
A	P1 (10)	P4(7)	P5(6)	P7(4)	4
B	P3(10)	P4(9)	P7(6)	P2(5)	9
C	P7(8)	P2(7)	P6(6)	P5(5)	7
D	P2(9)	P6(8)	P3(7)	P1(5)	5
E	P5(9)	P3(8)	P1(7)	P6(5)	6
F	P2(10)	P6(9)	P5(7)	P7(3)	3
G	P7(9)	P4(6)	P3(5)	P2(4)	4

Total score of a contestant in the singing contest was equal to the sum of the points awarded by the seven judges.

1) What can be the maximum possible score of a contestant in the singing contest?

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

42

Video Explanation:

▼

Explanation:

▼

Using the information given in the table, we have the following:

	P1	P2	P3	P4	P5	P6	P7	Sum of the other three	Possible combination of points of the other three
A	10			7	6		4	4	0 + 1 + 3
B		5	10	9			6	9	2 + 3 + 4
C			7		5	6	8	7	0 + 3 + 4 or 1 + 2 + 4
D	5	9	7			8		5	0 + 1 + 4 or 0 + 2 + 3
E	7		8		9	5		6	0 + 2 + 4 or 1 + 2 + 3
F			10		7	9	3	3	0 + 1 + 2
G		4	5	6			9	4	0 + 1 + 3
Sum	22	35	30	22	27	28	30		
Remaining	4	2	3	4	3	3	2		

Consider P1. If P1 is awarded maximum possible points by the judges B, C, F and G, P1’s score will be $22 + 4 + 4 + 2 + 3 = 35$. On similar lines, the maximum possible scores of other contestants can be as follows:
P2: $35 + 3 + 4 = 42$
P3: $30 + 3 + 4 + 2 = 39$
P4: $22 + 4 + 4 + 4 + 2 = 36$
P5: $27 + 4 + 4 + 3 = 38$
P6: $28 + 3 + 4 + 3 = 38$
P7: $30 + 4 + 4 = 38$
Therefore, the required answer is 42.

Correct Answer:

▼

Time taken by you: 477 secs

Avg Time taken by all students: 233 secs

Your Attempt: Correct

% Students got it correct: 30 %

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

Seven contestants, named P1, P2, P3, P4, P5, P6 and P7 participated in a singing contest organized on the campus of National Institute of Management Ahmedabad (NIMA) during the annual cultural fest, named Chaos. Seven judges (named A, B, C, D, E, F and G) evaluated the contestants on their performance. Each judge awarded whole number points between 0 and 10 (both included) to each contestant. Each judge awarded distinct points to each contestant.

The following table shows the information on the top four points awarded by each judge to the contestants. The rightmost column shows the sum of the points awarded by each judge to the remaining three contestants. For example, judge A awarded 10, 7, 6 and 4 points respectively to P1, P4, P5 and P7 and these were the top 4 scores awarded by judge A, while the sum of the points awarded to the remaining three contestants was 4.

Judge	Contestants				Sum
A	P1 (10)	P4(7)	P5(6)	P7(4)	4
B	P3(10)	P4(9)	P7(6)	P2(5)	9
C	P7(8)	P2(7)	P6(6)	P5(5)	7
D	P2(9)	P6(8)	P3(7)	P1(5)	5
E	P5(9)	P3(8)	P1(7)	P6(5)	6
F	P2(10)	P6(9)	P5(7)	P7(3)	3
G	P7(9)	P4(6)	P3(5)	P2(4)	4

Total score of a contestant in the singing contest was equal to the sum of the points awarded by the seven judges.

2) What can be the minimum possible score of a contestant in the singing contest? —

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

22

Video Explanation: ▼

Explanation: ▼

Using the information given in the table, we have the following:

	P1	P2	P3	P4	P5	P6	P7	Sum of the other three	Possible combination of points of the other three
A	10			7	6		4	4	0 + 1 + 3
B		5	10	9			6	9	2 + 3 + 4
C		7			5	6	8	7	0 + 3 + 4 or 1 + 2 + 4
D	5	9	7			8		5	0 + 1 + 4 or 0 + 2 + 3
E	7		8		9	5		6	0 + 2 + 4 or 1 + 2 + 3
F		10			7	9	3	3	0 + 1 + 2
G		4	5	6			9	4	0 + 1 + 3
Sum	22	35	30	22	27	28	30		
Remaining	4	2	3	4	3	3	2		

On similar lines as the answer to the previous question, we have the following minimum possible scores of the contestants:

- P1: $22 + 2 + 0 + 0 + 0 = 24$
- P2: $35 + 0 + 0 = 35$
- P3: $30 + 0 + 0 + 0 = 30$
- P4: $22 + 0 + 0 + 0 + 0 = 22$
- P5: $27 + 2 + 0 + 0 = 29$
- P6: $28 + 0 + 2 + 0 = 30$
- P7: $30 + 0 + 0 = 30$

Therefore, the required answer is 22.

Correct Answer: ▼

Time taken by you: **71 secs**

Avg Time taken by all students: **49 secs**

Your Attempt: **Correct**

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

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

Seven contestants, named P1, P2, P3, P4, P5, P6 and P7 participated in a singing contest organized on the campus of National Institute of Management Ahmedabad (NIMA) during the annual cultural fest, named Chaos. Seven judges (named A, B, C, D, E, F and G) evaluated the contestants on their performance. Each judge awarded whole number points between 0 and 10 (both included) to each contestant. Each judge awarded distinct points to each contestant.

The following table shows the information on the top four points awarded by each judge to the contestants. The rightmost column shows the sum of the points awarded by each judge to the remaining three contestants. For example, judge A awarded 10, 7, 6 and 4 points respectively to P1, P4, P5 and P7 and these were the top 4 scores awarded by judge A, while the sum of the points awarded to the remaining three contestants was 4.

Judge	Contestants				Sum
A	P1 (10)	P4(7)	P5(6)	P7(4)	4
B	P3(10)	P4(9)	P7(6)	P2(5)	9
C	P7(8)	P2(7)	P6(6)	P5(5)	7
D	P2(9)	P6(8)	P3(7)	P1(5)	5
E	P5(9)	P3(8)	P1(7)	P6(5)	6
F	P2(10)	P6(9)	P5(7)	P7(3)	3
G	P7(9)	P4(6)	P3(5)	P2(4)	4

Total score of a contestant in the singing contest was equal to the sum of the points awarded by the seven judges.

3) What can be the maximum possible difference between the scores of P2 and P7?

- ☐ 10
- ☐ 13
- ☒ 12
- ☐ 15

Video Explanation:

Explanation:

Using the information given in the table, we have the following:

	P1	P2	P3	P4	P5	P6	P7	Sum of the other three	Possible combination of points of the other three
A	10			7	6		4	4	0 + 1 + 3
B		5	10	9			6	9	2 + 3 + 4
C			7		5	6	8	7	0 + 3 + 4 or 1 + 2 + 4
D	5	9	7			8		5	0 + 1 + 4 or 0 + 2 + 3
E	7		8		9	5		6	0 + 2 + 4 or 1 + 2 + 3
F		10			7	9	3	3	0 + 1 + 2
G		4	5	6			9	4	0 + 1 + 3
Sum	22	35	30	22	27	28	30		
Remaining	4	2	3	4	3	3	2		

From the explanatory answers to the previous two questions, it can be seen that the maximum possible score of P2 is 42 and the minimum possible score of P7 is 30. Therefore the maximum possible difference = $42 - 30 = 12$.

Hence, [3].

Correct Answer:

Time taken by you: 86 secs

Avg Time taken by all students: 60 secs

Your Attempt: Correct

% Students got it correct: 44 %

4) If P3 scored maximum possible points, what can be the minimum difference between the scores of P1 and P4?

- ☐ 0

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

Seven contestants, named P1, P2, P3, P4, P5, P6 and P7 participated in a singing contest organized on the campus of National Institute of Management Ahmedabad (NIMA) during the annual cultural fest, named Chaos. Seven judges (named A, B, C, D, E, F and G) evaluated the contestants on their performance. Each judge awarded whole number points between 0 and 10 (both included) to each contestant. Each judge awarded distinct points to each contestant.

The following table shows the information on the top four points awarded by each judge to the contestants. The rightmost column shows the sum of the points awarded by each judge to the remaining three contestants. For example, judge A awarded 10, 7, 6 and 4 points respectively to P1, P4, P5 and P7 and these were the top 4 scores awarded by judge A, while the sum of the points awarded to the remaining three contestants was 4.

Judge	Contestants				Sum
A	P1 (10)	P4(7)	P5(6)	P7(4)	4
B	P3(10)	P4(9)	P7(6)	P2(5)	9
C	P7(8)	P2(7)	P6(6)	P5(5)	7
D	P2(9)	P6(8)	P3(7)	P1(5)	5
E	P5(9)	P3(8)	P1(7)	P6(5)	6
F	P2(10)	P6(9)	P5(7)	P7(3)	3
G	P7(9)	P4(6)	P3(5)	P2(4)	4

Total score of a contestant in the singing contest was equal to the sum of the points awarded by the seven judges.

- ☐ 1
- ☐ 2

☐ More than 2

Video Explanation:



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

Seven contestants, named P1, P2, P3, P4, P5, P6 and P7 participated in a singing contest organized on the campus of National Institute of Management Ahmedabad (NIMA) during the annual cultural fest, named Chaos. Seven judges (named A, B, C, D, E, F and G) evaluated the contestants on their performance. Each judge awarded whole number points between 0 and 10 (both included) to each contestant. Each judge awarded distinct points to each contestant.

The following table shows the information on the top four points awarded by each judge to the contestants. The rightmost column shows the sum of the points awarded by each judge to the remaining three contestants. For example, judge A awarded 10, 7, 6 and 4 points respectively to P1, P4, P5 and P7 and these were the top 4 scores awarded by judge A, while the sum of the points awarded to the remaining three contestants was 4.

Judge	Contestants				Sum
A	P1 (10)	P4(7)	P5(6)	P7(4)	4
B	P3(10)	P4(9)	P7(6)	P2(5)	9
C	P7(8)	P2(7)	P6(6)	P5(5)	7
D	P2(9)	P6(8)	P3(7)	P1(5)	5
E	P5(9)	P3(8)	P1(7)	P6(5)	6
F	P2(10)	P6(9)	P5(7)	P7(3)	3
G	P7(9)	P4(6)	P3(5)	P2(4)	4

Total score of a contestant in the singing contest was equal to the sum of the points awarded by the seven judges.

Using the information given in the table, we have the following:

	P1	P2	P3	P4	P5	P6	P7	Sum of the other three	Possible combination of points of the other three
A	10			7	6		4	4	0 + 1 + 3
B		5	10	9			6	9	2 + 3 + 4
C		7			5	6	8	7	0 + 3 + 4 or 1 + 2 + 4
D	5	9	7			8		5	0 + 1 + 4 or 0 + 2 + 3
E	7		8		9	5		6	0 + 2 + 4 or 1 + 2 + 3
F		10			7	9	3	3	0 + 1 + 2
G		4	5	6			9	4	0 + 1 + 3
Sum	22	35	30	22	27	28	30		
Remaining	4	2	3	4	3	3	2		

If P3 scored maximum possible points, he is awarded maximum possible points by the judges A, C and F, P3’s score will be $30 + 3 + 4 + 2 = 39$.

So far, P1 and P4 have scored equal points. Using trial and error, we get the following for minimizing the difference between their scores. If P1 was awarded 4 points by B, while P4 was awarded 2 points each by D and E, still the difference between their scores so far would be zero.

In order to minimize the difference in the scores, let us allocate the points as follows:

	P1	P4	Possible combination of points of the remaining judges
A	10	7	0 + 1
B	4	9	2 + 3 + 4
C	1	2	1 + 2
D	5	2	0 + 1 + 4 or 0 + 2 + 3
E	7	2	0 + 2 + 4 or 1 + 2 + 3
F	1	0	0 + 1
G	0	6	0 + 1 + 3
Sum	28	28	

Therefore the minimum possible difference between their scores = $28 - 28 = 0$.

Hence, [1].

Correct Answer: ▼

Your Attempt: **Skipped**

% Students got it correct: **45 %**

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

Seven contestants, named P1, P2, P3, P4, P5, P6 and P7 participated in a singing contest organized on the campus of National Institute of Management Ahmedabad (NIMA) during the annual cultural fest, named Chaos. Seven judges (named A, B, C, D, E, F and G) evaluated the contestants on their performance. Each judge awarded whole number points between 0 and 10 (both included) to each contestant. Each judge awarded distinct points to each contestant.

The following table shows the information on the top four points awarded by each judge to the contestants. The rightmost column shows the sum of the points awarded by each judge to the remaining three contestants. For example, judge A awarded 10, 7, 6 and 4 points respectively to P1, P4, P5 and P7 and these were the top 4 scores awarded by judge A, while the sum of the points awarded to the remaining three contestants was 4.

Judge	Contestants				Sum
A	P1 (10)	P4(7)	P5(6)	P7(4)	4
B	P3(10)	P4(9)	P7(6)	P2(5)	9
C	P7(8)	P2(7)	P6(6)	P5(5)	7
D	P2(9)	P6(8)	P3(7)	P1(5)	5
E	P5(9)	P3(8)	P1(7)	P6(5)	6
F	P2(10)	P6(9)	P5(7)	P7(3)	3
G	P7(9)	P4(6)	P3(5)	P2(4)	4

Total score of a contestant in the singing contest was equal to the sum of the points awarded by the seven judges.

Loading...

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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

1. E and I came together for the allotment. Both E and I took floors above their original floors and E took a floor rise that was twice the floor rise of I.
2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

1) For many people can we uniquely determine the floor numbers that they were allotted in the new building?

- ☒ 7
- ☐ 8
- ☐ 9
- ☐ 10

Video Explanation:

Explanation:

The arrangement of original floors is as follows,

11	10	9	8	7	6	5	4	3	2	1
A	B	C	D	E	F	G	H	I	J	K

Using condition (1), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E					I			
E						I				

Applying condition (2), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E		F	D		I			
E				F	D	I				
E			F			I	D			
E		F				I			D	

Applying condition (3) and then condition (4), the possible arrangements are,

Case	11	10	9	8	7	6	5	4	3	2	1
1	G	H	E		F	D	K	I			
2	E	G	H		F	D	I	K			
3	E		G	H	F	D	I	K			
4	E	G	H	F	K		I	D			
5	E			F	G	H	I	D	K		
6	E		F	G	H	K	I			D	
7	E		F		G	H	I	K		D	

Now, A, B and C could not be below floors 5, 4 and 3. It can be seen that cases 1 to 5 are invalid. Hence, we are left with case 6 and 7.

Applying condition (5) and then (6),Thus, we have

Case	11	10	9	8	7	6	5	4	3	2	1
6	E	A	F	G	H	K	I	B	C	D	J
7	E	A	F	B	G	H	I	K	C	D	J

The floor numbers of E, A, F, I, C, D and J can be uniquely determined. Hence, [1].

Correct Answer:

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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

1. E and I came together for the allotment. Both E and I took floors above their original floors and E took a floor rise that was twice the floor rise of I.
2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

Avg Time taken by all students: 278 secs

Your Attempt: Correct

% Students got it correct: 34 %

2) How many people stay between the floors allotted to _ F and D?

- ☐ 0
- ☐ 4
- ☐ 6
- ☒ Cannot be determined ❌

Video Explanation:



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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

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2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

Explanation:

The arrangement of original floors is as follows,

11	10	9	8	7	6	5	4	3	2	1
A	B	C	D	E	F	G	H	I	J	K

Using condition (1), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E					I			
E						I				

Applying condition (2), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E		F	D		I			
E				F	D	I				
E			F			I	D			
E		F				I			D	

Applying condition (3) and then condition (4), the possible arrangements are,

Case	11	10	9	8	7	6	5	4	3	2	1
1	G	H	E		F	D	K	I			
2	E	G	H		F	D	I	K			
3	E		G	H	F	D	I	K			
4	E	G	H	F	K		I	D			
5	E			F	G	H	I	D	K		
6	E		F	G	H	K	I			D	
7	E		F		G	H	I	K		D	

Now, A, B and C could not be below floors 5, 4 and 3. It can be seen that cases 1 to 5 are invalid. Hence, we are left with case 6 and 7.

Applying condition (5) and then (6), Thus, we have

Case	11	10	9	8	7	6	5	4	3	2	1
6	E	A	F	G	H	K	I	B	C	D	J
7	E	A	F	B	G	H	I	K	C	D	J

In both the cases it can be observed that there were 6 people who were allotted floors between F and D. Hence, [3].

Correct Answer:

Time taken by you: **21 secs**

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

Your Attempt: **Wrong**

% Students got it correct: **32 %**

- 3) A person is said to be a happy person if the sum of his _ floors numbers before and after the allotment was greater than 12. Which of the following can be maximum number of happy people in the new building?

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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

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2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

3

4

5

6

Video Explanation:

Explanation:

The arrangement of original floors is as follows,

11	10	9	8	7	6	5	4	3	2	1
A	B	C	D	E	F	G	H	I	J	K

Using condition (1), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E					I			
E						I				

Applying condition (2), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E		F	D		I			
E				F	D	I				
E			F			I	D			
E		F				I			D	

Applying condition (3) and then condition (4), the possible arrangements are,

Case	11	10	9	8	7	6	5	4	3	2	1
1	G	H	E		F	D	K	I			
2	E	G	H		F	D	I	K			
3	E		G	H	F	D	I	K			
4	E	G	H	F	K		I	D			
5	E			F	G	H	I	D	K		
6	E		F	G	H	K	I			D	
7	E		F		G	H	I	K		D	

Now, A, B and C could not be below floors 5, 4 and 3. It can be seen that cases 1 to 5 are invalid. Hence, we are left with case 6 and 7.

Applying condition (5) and then (6), Thus, we have

Case	11	10	9	8	7	6	5	4	3	2	1
6	E	A	F	G	H	K	I	B	C	D	J
7	E	A	F	B	G	H	I	K	C	D	J

Based on the above cases, the possible values of sum of the floor numbers of the mentioned people can be shown as follows:

Floor number	11	10	9	8	7	6	5	4	3	2	1
	A	B	C	D	E	F	G	H	I	J	K
As per case 6	21	14	12	10	18	15	13	11	8	3	7
As per case 7	21	18	12	10	18	15	12	10	8	3	5

Thus, the maximum number of happy people will be as per case 6, i.e. 5. Hence, [3].

Correct Answer:

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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

1. E and I came together for the allotment. Both E and I took floors above their original floors and E took a floor rise that was twice the floor rise of I.
2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

Your Attempt: Wrong

% Students got it correct: 32 %

4) What was the new floor number allotted to K?

- ☐ 3
- ☐ 4
- ☐ 6
- ☒ Cannot be determined

Video Explanation:

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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

1. E and I came together for the allotment. Both E and I took floors above their original floors and E took a floor rise that was twice the floor rise of I.
2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

Explanation:

The arrangement of original floors is as follows,

11	10	9	8	7	6	5	4	3	2	1
A	B	C	D	E	F	G	H	I	J	K

Using condition (1), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E					I			
E						I				

Applying condition (2), the possible arrangements are,

11	10	9	8	7	6	5	4	3	2	1
		E		F	D		I			
E				F	D	I				
E			F			I	D			
E		F				I			D	

Applying condition (3) and then condition (4), the possible arrangements are,

Case	11	10	9	8	7	6	5	4	3	2	1
1	G	H	E		F	D	K	I			
2	E	G	H		F	D	I	K			
3	E		G	H	F	D	I	K			
4	E	G	H	F	K		I	D			
5	E			F	G	H	I	D	K		
6	E		F	G	H	K	I			D	
7	E		F		G	H	I	K		D	

Now, A, B and C could not be below floors 5, 4 and 3. It can be seen that cases 1 to 5 are invalid. Hence, we are left with case 6 and 7.

Applying condition (5) and then (6), Thus, we have

Case	11	10	9	8	7	6	5	4	3	2	1
6	E	A	F	G	H	K	I	B	C	D	J
7	E	A	F	B	G	H	I	K	C	D	J

Based on the above cases, the possible values of sum of the floor numbers of the mentioned people can be shown as follows:

Floor number	11	10	9	8	7	6	5	4	3	2	1
	A	B	C	D	E	F	G	H	I	J	K
As per case 6	21	14	12	10	18	15	13	11	8	3	7
As per case 7	21	18	12	10	18	15	12	10	8	3	5

K could either be allotted the 4th or the 6th floor. Hence, [4].

Correct Answer:

Time taken by you: 22 secs

Avg Time taken by all students: 38 secs

Your Attempt: Correct

% Students got it correct: 39 %

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

A building in Mumbai had residents named A to K living on 11 different floors, in that order, from top to bottom, such that each floor has exactly one resident. The bottom most floor is numbered 1 whereas the topmost is numbered 11. As this building was dilapidated, the residents were called for an allotment and offered keys to the flats of a new 11 floor building on a first come first served basis. A person could have gained a maximum floor rise or a fall of 6 floors compared to their original floor numbers. The following was the order in which they came for the allotment,

1. E and I came together for the allotment. Both E and I took floors above their original floors and E took a floor rise that was twice the floor rise of I.
2. D and F came together. The number of floors by which D went down was twice the number of floors by which F went up.
3. Next, G & H came together and preferred staying on consecutive floors but both preferred floors above their original floor numbers. G took a floor immediately above the floor chosen by H.
4. K was the next person to enter and tried to get a floor number with the maximum possible floor rise compared to his original position.
5. Next, A and B entered together and were interested in floors below their original floors.
6. C and J had some work because of which they were late for the allotment and had to settle with the remaining floors, below their original positions.

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- Each standard has a one hour slot free, which is distinct for all the standards.
- Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- Each subject is scheduled in Standard X before Standard VII.

1) For which Standard the subject English is scheduled at 10:00 AM?

- ☒ Standard V
- ☐ Standard VI
- ☐ Standard VII
- ☐ Standard X

Video Explanation:

Explanation:

Consider Standard VII & Standard X:
Using point 4, it can be concluded that there is no class at 7:00 AM and 12noon for Standard VII and Standard X respectively. At 9:00 AM, Hindi must be scheduled in class VII and Mathematics must be scheduled in class X. As English is scheduled at 11:00 AM for Standard VIII, it is neither scheduled at 10:00 AM for Standard X not at 12 noon for Standard VII. Thus, it can be concluded that English is scheduled at 8:00 AM for Standard VII and at 7:00 AM for Standard X. Similarly Science must be scheduled at 11:00 AM for Standard VII and at 10:00 AM for Standard X. Hence, Geography is scheduled for Standard VII & Standard X at 12 noon and 11:00 AM respectively.
In Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So, slot at 11:00 is the free slot for Standard V. Therefore, Standard VI has free hour at 9:00 AM. Since time slot 10:00 AM is the free slot for Standard IX, English must be scheduled at 9:00 AM. Therefore, English must be scheduled at 10:00 AM and 12 noon for Standard V and Standard VI respectively. In Standard VIII, Mathematics must be scheduled at 12 noon and Hindi must be scheduled at 10:00 AM. In Standard V, Hindi must be scheduled at 12 noon. So far we have the following table:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics		No class			English
8:00 AM			English	No class		Hindi
9:00 AM		No class	Hindi		English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class		Science	English		Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

We know that, for Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So we have two cases.
Case 1: For Standard V, Geography is scheduled at 8:00 AM and Science is scheduled at 9:00 AM.
At 9:00 AM, Geography must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VIII, VI and IX respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Hindi	No class	No class	No class	No class
8:00 AM	Geography	Science	English	No class	No class	No class
9:00 AM	Science	No class	Hindi	Geography	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Mathematics	Science	English	Hindi	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

Change Section here ▼

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- Each standard has a one hour slot free, which is distinct for all the standards.
- Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- Each subject is scheduled in Standard X before Standard VII.

Case 2: For Standard V, Science is scheduled at 8:00 AM and Geography is scheduled at 9:00 AM.
At 9:00 AM, Science must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VI, IX and VIII respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Science	No class	Geography	Hindi	English
8:00 AM	Science	Mathematics	English	No class	Geography	Hindi
9:00 AM	Geography	No class	Hindi	Science	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Hindi	Science	English	Mathematics	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

At 10:00 AM, English is scheduled for Standard V. Hence, [1].

Correct Answer: ▼

Time taken by you: 556 secs

Avg Time taken by all students: 576 secs

Your Attempt: Correct

% Students got it correct: 71 %

2) The free hour for Standard V starts at: —

- ☒ 9:00 AM ✖
- ☐ 11:00 AM
- ☐ Neither 9:00 AM nor 11:00 AM
- ☐ Either 9:00 AM or 11:00 AM

Video Explanation: ▼

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- Each standard has a one hour slot free, which is distinct for all the standards.
- Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- Each subject is scheduled in Standard X before Standard VII.

Consider Standard VII & Standard X:
Using point 4, it can be concluded that there is no class at 7:00 AM and 12noon for Standard VII and Standard X respectively. At 9:00 AM, Hindi must be scheduled in class VII and Mathematics must be scheduled in class X. As English is scheduled at 11:00 AM for Standard VIII, it is neither scheduled at 10:00 AM for Standard X not at 12 noon for Standard VII. Thus, it can be concluded that English is scheduled at 8:00 AM for Standard VII and at 7:00 AM for Standard X. Similarly Science must be scheduled at 11:00 AM for Standard VII and at 10:00 AM for Standard X. Hence, Geography is scheduled for Standard VII & Standard X at 12 noon and 11:00 AM respectively.

In Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So, slot at 11:00 is the free slot for Standard V. Therefore, Standard VI has free hour at 9:00 AM. Since time slot 10:00 AM is the free slot for Standard IX, English must be scheduled at 9:00 AM. Therefore, English must be scheduled at 10:00 AM and 12 noon for Standard V and Standard VI respectively. In Standard VIII, Mathematics must be scheduled at 12 noon and Hindi must be scheduled at 10:00 AM. In Standard V, Hindi must be scheduled at 12 noon. So far we have the following table:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics		No class			English
8:00 AM			English	No class		Hindi
9:00 AM		No class	Hindi		English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class		Science	English		Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

We know that, for Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So we have two cases.

Case 1: For Standard V, Geography is scheduled at 8:00 AM and Science is scheduled at 9:00 AM.
At 9:00 AM, Geography must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VIII, VI and IX respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Hindi	No class	Science	Geography	English
8:00 AM	Geography	Science	English	No class	Mathematics	Hindi
9:00 AM	Science	No class	Hindi	Geography	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Mathematics	Science	English	Hindi	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

Case 2: For Standard V, Science is scheduled at 8:00 AM and Geography is scheduled at 9:00 AM.
At 9:00 AM, Science must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VI, IX and VIII respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Science	No class	Geography	Hindi	English
8:00 AM	Science	Mathematics	English	No class	Geography	Hindi
9:00 AM	Geography	No class	Hindi	Science	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Hindi	Science	English	Mathematics	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

The free hour for Standard V starts at 11:00 AM. Hence, [2].

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

1. Each standard has a one hour slot free, which is distinct for all the standards.
2. Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
3. Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
4. Each subject is scheduled in Standard X before Standard VII.

Time taken by you: 132 secs

Avg Time taken by all students: 59 secs

Your Attempt: Wrong

% Students got it correct: 26 %

3) Which is the first subject scheduled for Standard VI? _

- ☐ English
- ☐ Hindi
- ☐ Science
- ☒ Cannot be determined✔

Video Explanation:

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- Each standard has a one hour slot free, which is distinct for all the standards.
- Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- Each subject is scheduled in Standard X before Standard VII.

Consider Standard VII & Standard X:
Using point 4, it can be concluded that there is no class at 7:00 AM and 12 noon for Standard VII and Standard X respectively. At 9:00 AM, Hindi must be scheduled in class VII and Mathematics must be scheduled in class X. As English is scheduled at 11:00 AM for Standard VIII, it is neither scheduled at 10:00 AM for Standard X not at 12 noon for Standard VII. Thus, it can be concluded that English is scheduled at 8:00 AM for Standard VII and at 7:00 AM for Standard X. Similarly Science must be scheduled at 11:00 AM for Standard VII and at 10:00 AM for Standard X. Hence, Geography is scheduled for Standard VII & Standard X at 12 noon and 11:00 AM respectively.

In Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So, slot at 11:00 is the free slot for Standard V. Therefore, Standard VI has free hour at 9:00 AM. Since time slot 10:00 AM is the free slot for Standard IX, English must be scheduled at 9:00 AM. Therefore, English must be scheduled at 10:00 AM and 12 noon for Standard V and Standard VI respectively. In Standard VIII, Mathematics must be scheduled at 12 noon and Hindi must be scheduled at 10:00 AM. In Standard V, Hindi must be scheduled at 12 noon. So far we have the following table:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics		No class			English
8:00 AM			English	No class		Hindi
9:00 AM		No class	Hindi		English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class		Science	English		Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

We know that, for Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So we have two cases.

Case 1: For Standard V, Geography is scheduled at 8:00 AM and Science is scheduled at 9:00 AM.
At 9:00 AM, Geography must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VIII, VI and IX respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Hindi	No class	Science	Geography	English
8:00 AM	Geography	Science	English	No class	Mathematics	Hindi
9:00 AM	Science	No class	Hindi	Geography	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Mathematics	Science	English	Hindi	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

Case 2: For Standard V, Science is scheduled at 8:00 AM and Geography is scheduled at 9:00 AM.
At 9:00 AM, Science must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VI, IX and VIII respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Science	No class	Geography	Hindi	English
8:00 AM	Science	Mathematics	English	No class	Geography	Hindi
9:00 AM	Geography	No class	Hindi	Science	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Hindi	Science	English	Mathematics	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

Either Science or Hindi is scheduled for Standard VI at 7:00 AM. Hence, [4].

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- 1. Each standard has a one hour slot free, which is distinct for all the standards.
- 2. Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- 3. Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- 4. Each subject is scheduled in Standard X before Standard VII.

Time taken by you: 50 secs

Avg Time taken by all students: 81 secs

Your Attempt: Correct

% Students got it correct: 68 %

4) If Geography is scheduled at 8:00 AM for Standard V, which two subjects are scheduled consecutively for Standard IX?

- ☐ Hindi – Geography
- ☐ English – Science
- ☐ Hindi – Science
- ☒ Science – Mathematics ❌

Video Explanation: ▼

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- Each standard has a one hour slot free, which is distinct for all the standards.
- Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- Each subject is scheduled in Standard X before Standard VII.

Explanation:

Consider Standard VII & Standard X:
Using point 4, it can be concluded that there is no class at 7:00 AM and 12 noon for Standard VII and Standard X respectively. At 9:00 AM, Hindi must be scheduled in class VII and Mathematics must be scheduled in class X. As English is scheduled at 11:00 AM for Standard VIII, it is neither scheduled at 10:00 AM for Standard X not at 12 noon for Standard VII. Thus, it can be concluded that English is scheduled at 8:00 AM for Standard VII and at 7:00 AM for Standard X. Similarly Science must be scheduled at 11:00 AM for Standard VII and at 10:00 AM for Standard X. Hence, Geography is scheduled for Standard VII & Standard X at 12 noon and 11:00 AM respectively.

In Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So, slot at 11:00 is the free slot for Standard V. Therefore, Standard VI has free hour at 9:00 AM. Since time slot 10:00 AM is the free slot for Standard IX, English must be scheduled at 9:00 AM. Therefore, English must be scheduled at 10:00 AM and 12 noon for Standard V and Standard VI respectively. In Standard VIII, Mathematics must be scheduled at 12 noon and Hindi must be scheduled at 10:00 AM. In Standard V, Hindi must be scheduled at 12 noon. So far we have the following table:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics		No class			English
8:00 AM			English	No class		Hindi
9:00 AM		No class	Hindi		English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class		Science	English		Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

We know that, for Standard V, Geography and Science can be scheduled at 8:00 AM slot and 9:00 AM slot in any order. So we have two cases.

Case 1: For Standard V, Geography is scheduled at 8:00 AM and Science is scheduled at 9:00 AM.
At 9:00 AM, Geography must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VIII, VI and IX respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Hindi	No class	Science	Geography	English
8:00 AM	Geography	Science	English	No class	Mathematics	Hindi
9:00 AM	Science	No class	Hindi	Geography	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Mathematics	Science	English	Hindi	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

Case 2: For Standard V, Science is scheduled at 8:00 AM and Geography is scheduled at 9:00 AM.
At 9:00 AM, Science must be scheduled for Standard VIII. Now at 7:00 AM, Science, Hindi and Geography must be scheduled for Standards VI, IX and VIII respectively. Now the table can be completed as:

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics	Science	No class	Geography	Hindi	English
8:00 AM	Science	Mathematics	English	No class	Geography	Hindi
9:00 AM	Geography	No class	Hindi	Science	English	Mathematics
10:00 AM	English	Geography	Mathematics	Hindi	No class	Science
11:00 AM	No class	Hindi	Science	English	Mathematics	Geography
12 noon	Hindi	English	Geography	Mathematics	Science	No class

Here, case 1 needs to be considered. Hindi and Science are scheduled consecutively for Standard IX. Hence, [3].

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

Mehta Classes provides coaching for standards V, VI, VII, VIII, IX and X. It conducts coaching for five subjects, Hindi, English, Geography, Science and Mathematics. All the subjects are taught for each standard. The following time table provides partial information about the class schedules. No two standards have the same subjects taught in a particular hour.

	V	VI	VII	VIII	IX	X
7:00 AM	Mathematics					
8:00 AM						Hindi
9:00 AM						
10:00 AM		Geography	Mathematics			
11:00 AM				English		
12 noon					Science	

Following information is known:

- Each standard has a one hour slot free, which is distinct for all the standards.
- Standard IX has a free hour at 10:00 AM (i.e., no class from 10:00 AM to 11:00 AM).
- Standard VIII has a free hour at 8:00 AM (i.e., no class from 8:00 AM to 9:00 AM).
- Each subject is scheduled in Standard X before Standard VII.

Time taken by you: 112 secs

Avg Time taken by all students: 123 secs

Your Attempt: Wrong

% Students got it correct: 68 %

Loading...

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

Stan Lee plays a puzzle game wherein he has to fill a 7 × 9 matrix with some words either horizontally or vertically with the names of seven Marvel superheroes. The superheroes are – WOLVERINE, WASP, WANDA, VORE, GAMORA, THANOS and HULK. The following rules are to be followed while solving the puzzle:

- 1) The names of only two superheroes, ‘WOLVERINE’ and ‘WASP’, are placed horizontally. Rest of the names lie in the columns.
- 2) Except ‘WASP’, the names of all other superheroes have a letter in common with ‘WOLVERINE’.
- 3) The names in the rows begin from left to right while those in the columns begin from top to bottom, not necessarily the first cell.
- 4) The name ‘WASP’ has a letter in common with exactly one other superhero name.

Note: Usual rules of crossword do not apply here. The names of the superheroes are to be placed in rows and/or columns in the matrix subject to given conditions without any other consideration. That means one or more letters from the name of one superhero can come next to one or more letters from the name of another superhero.

Consider the following arrangement.

W	O	L	V	E	R	I	N	E	H
									U
									L
									K

This is an acceptable arrangement if it satisfies the given conditions even though ‘WOLVERINEH’ is not a valid name of a superhero.

1) How many rows in the matrix have exactly five letters?

1

2

3

4

Video Explanation:

Explanation:

As per conditions 1 and 2, the word ‘WANDA’ can be placed in the following ways,
Case 1:

									W
									A
W	O	L	V	E	R	I	N	E	
									D
									A

Case 2:

W	O	L	V	E	R	I	N	E	
									A
									N
									D
									A

The word ‘GAMORA’ can share either the letter O or R with the word ‘WOLVERINE’. However, on placing the word ‘GAMORA’ it can be observed that the row limit (7) would exceed in case 2. Case 2 is ruled out. The following possibilities thus exist.
Case 1A:

									G
									A
									M
									O
W	O	L	V	E	R	I	N	E	W
									A
									D
									A

Case 1B:

									G
									A
									M
W	O	L	V	E	R	I	N	E	W
									A
									D
									A

Now, the only letter that the word ‘THANOS’ can share is ‘O’. Case 1B is ruled out.
Case 1A:

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

Stan Lee plays a puzzle game wherein he has to fill a 7 × 9 matrix with some words either horizontally or vertically with the names of seven Marvel superheroes. The superheroes are – WOLVERINE, WASP, WANDA, VORE, GAMORA, THANOS and HULK. The following rules are to be followed while solving the puzzle:

- 1) The names of only two superheroes, ‘WOLVERINE’ and ‘WASP’, are placed horizontally. Rest of the names lie in the columns.
- 2) Except ‘WASP’, the names of all other superheroes have a letter in common with ‘WOLVERINE’.
- 3) The names in the rows begin from left to right while those in the columns begin from top to bottom, not necessarily the first cell.
- 4) The name ‘WASP’ has a letter in common with exactly one other superhero name.

Note: Usual rules of crossword do not apply here. The names of the superheroes are to be placed in rows and/or columns in the matrix subject to given conditions without any other consideration. That means one or more letters from the name of one superhero can come next to one or more letters from the name of another superhero.

Consider the following arrangement.

W	O	L	V	E	R	I	N	E	H
									U
									L
									K

This is an acceptable arrangement if it satisfies the given conditions even though ‘WOLVERINEH’ is not a valid name of a superhero.

‘WASP’ shares a letter with exactly one word. Also, the word ‘VORE’ can only share the letter ‘E’. Thus, the final arrangement must be as follows:

	1	2	3	4	5	6	7	8	9
1		T				G			
2		H			W	A	S	P	V
3		A	H			M		W	O
4		N	U			O		A	R
5	W	O	L	V	E	R	I	N	E
6		S	K			A		D	
7								A	

The third and the fourth row has exactly five letters. Hence, [2].

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 468 secs

Your Attempt: Skipped

% Students got it correct: 56 %

2) Which of the following name shares a letter with ‘WASP’?

- ☐ THANOS
- ☐ WANDA
- ☐ GAMORA
- ☐ Cannot be determined

Video Explanation:

Explanation:

As per conditions 1 and 2, the word ‘WANDA’ can be placed in the following ways,
Case 1:

AND A

The word 'GAMORA' can share either the letter O or R with the word 'WOLVERINE'. However, on placing the word 'GAMORA' it can be observed that the row limit (7) would exceed in case 2. Case 2 is ruled out. The following possibilities thus exist.

W O L V E R I N E
G
A
M W
O A
A D
A

Case 1B:

W O L V E R I N E
G
A W
M A
R D
A A

Now, the only letter that the word 'THANOS' can share is 'O'. Case 1B is ruled out.

Case 1A:

	T			G				
	H			A				
	A	H		M		W		
	N	U		O		A		
W	O	L	V	E	R	I	N	E
	S	K			A		D	
							A	

[illegible]

'WASP' shares a letter with exactly one word. Also, the word 'VORE' can only share the letter 'E'. Thus, the final arrangement must be as follows:

	1	2	3	4	5	6	7	8	9
1		T				G			
2		H			W	A	S	P	V
3		A	H			M		W	O
4		N	U			O		A	R
5	W	O	L	V	E	R	I	N	E
6		S	K			A		D	
7								A	

Correct Answer:

Avg Time taken by all students: **64 secs**

Your Attempt: **Skipped**

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

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- 4) The name ‘WASP’ has a letter in common with exactly one other superhero name.

Note: Usual rules of crossword do not apply here. The names of the superheroes are to be placed in rows and/or columns in the matrix subject to given conditions without any other consideration. That means one or more letters from the name of one superhero can come next to one or more letters from the name of another superhero.

Consider the following arrangement.

W	O	L	V	E	R	I	N	E	H
									U
									L
									K

This is an acceptable arrangement if it satisfies the given conditions even though ‘WOLVERINEH’ is not a valid name of a superhero.

- 3) A new word ‘GROOT’ is to be placed in the grid either horizontally or vertically not necessarily following condition (3), then in how many ways can the word be placed?
Note: The word may/may not share a letter with the word ‘WOLVERINE’.

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

Video Explanation:

Explanation:

As per conditions 1 and 2, the word ‘WANDA’ can be placed in the following ways,
Case 1:

								W	
								A	
W	O	L	V	E	R	I	N	E	
								D	
								A	

Case 2:
W O L V E R I N E
A
N
D
A

The word ‘GAMORA’ can share either the letter O or R with the word ‘WOLVERINE’. However, on placing the word ‘GAMORA’ it can be observed that the row limit (7) would exceed in case 2. Case 2 is ruled out. The following possibilities thus exist.

Case 1A:

								G	
								A	
								M	W
								O	A
W	O	L	V	E	R	I	N	E	
								A	D
									A

Case 1B:
G
A
M
W O L V E R I N E
R
A
W
A
D
A

Now, the only letter that the word ‘THANOS’ can share is ‘O’. Case 1B is ruled out.

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

Stan Lee plays a puzzle game wherein he has to fill a 7 × 9 matrix with some words either horizontally or vertically with the names of seven Marvel superheroes. The superheroes are – WOLVERINE, WASP, WANDA, VORE, GAMORA, THANOS and HULK. The following rules are to be followed while solving the puzzle:

- 1) The names of only two superheroes, ‘WOLVERINE’ and ‘WASP’, are placed horizontally. Rest of the names lie in the columns.
- 2) Except ‘WASP’, the names of all other superheroes have a letter in common with ‘WOLVERINE’.
- 3) The names in the rows begin from left to right while those in the columns begin from top to bottom, not necessarily the first cell.
- 4) The name ‘WASP’ has a letter in common with exactly one other superhero name.

Note: Usual rules of crossword do not apply here. The names of the superheroes are to be placed in rows and/or columns in the matrix subject to given conditions without any other consideration. That means one or more letters from the name of one superhero can come next to one or more letters from the name of another superhero.

Consider the following arrangement.

W	O	L	V	E	R	I	N	E	H
									U
									L
									K

This is an acceptable arrangement if it satisfies the given conditions even though ‘WOLVERINEH’ is not a valid name of a superhero.

T									G
H									A
A	H								M
N	U								O
W	O	L	V	E	R	I	N	E	
S	K								A
									D
									A

‘WASP’ shares a letter with exactly one word. Also, the word ‘VORE’ can only share the letter ‘E’. Thus, the final arrangement must be as follows:

	1	2	3	4	5	6	7	8	9
1		T				G			
2		H			W	A	S	P	V
3		A	H			M		W	O
4		N	U			O		A	R
5	W	O	L	V	E	R	I	N	E
6		S	K			A		D	
7								A	

The word ‘GROOT’ can be placed in only 1 way in row 1 and in 6 ways in row 7. No other possibilities exist. Therefore the required answer is 7.

Correct Answer: ▼

Time taken by you: 0 secs

Avg Time taken by all students: 18 secs

Your Attempt: Skipped

% Students got it correct: 14 %

4) Suppose –

R = The number of rows having exactly one letter
C = The number of columns having exactly one letter

Then what is the value of R + C?

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

Video Explanation: ▼

Explanation: ▼

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

Stan Lee plays a puzzle game wherein he has to fill a 7 × 9 matrix with some words either horizontally or vertically with the names of seven Marvel superheroes. The superheroes are – WOLVERINE, WASP, WANDA, VORE, GAMORA, THANOS and HULK. The following rules are to be followed while solving the puzzle:

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Note: Usual rules of crossword do not apply here. The names of the superheroes are to be placed in rows and/or columns in the matrix subject to given conditions without any other consideration. That means one or more letters from the name of one superhero can come next to one or more letters from the name of another superhero.

Consider the following arrangement.

W	O	L	V	E	R	I	N	E	H
									U
									L
									K

This is an acceptable arrangement if it satisfies the given conditions even though 'WOLVERINEH' is not a valid name of a superhero.

									W
									A
W	O	L	V	E	R	I	N	E	
									D
									A

W	O	L	V	E	R	I	N	E	
A									
N									
D									
A									

The word 'GAMORA' can share either the letter O or R with the word 'WOLVERINE'. However, on placing the word 'GAMORA' it can be observed that the row limit (7) would exceed in case 2. Case 2 is ruled out. The following possibilities thus exist.

									G
									A
									M
									O
W	O	L	V	E	R	I	N	E	
									A
									D
									A

									G
									A
									M
W	O	L	V	E	R	I	N	E	
									A
									D
									A

Now, the only letter that the word 'THANOS' can share is 'O'. Case 1B is ruled out.

									T
									H
									A
									H
									N
W	O	L	V	E	R	I	N	E	
									U
									S
									K
									A
									D
									A

'WASP' shares a letter with exactly one word. Also, the word 'VORE' can only share the letter 'E'. Thus, the final arrangement must be as follows:

										1	2	3	4	5	6	7	8	9
1		T				G												
2		H			W	A	S	P	V									
3		A	H			M		W	O									
4		N	U			O		A	R									
5	W	O	L	V	E	R	I	N	E									
6		S	K			A		D										
7								A										

The seventh row has exactly one letter. Therefore, R = 1

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

Stan Lee plays a puzzle game wherein he has to fill a 7×9 matrix with some words either horizontally or vertically with the names of seven Marvel superheroes. The superheroes are – WOLVERINE, WASP, WANDA, VORE, GAMORA, THANOS and HULK. The following rules are to be followed while solving the puzzle:

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Note: Usual rules of crossword do not apply here. The names of the superheroes are to be placed in rows and/or columns in the matrix subject to given conditions without any other consideration. That means one or more letters from the name of one superhero can come next to one or more letters from the name of another superhero.

Consider the following arrangement.

W	O	L	V	E	R	I	N	E	H
									U
									L
									K

This is an acceptable arrangement if it satisfies the given conditions even though ‘WOLVERINEH’ is not a valid name of a superhero.

$R + C = 3$

Therefore, the required answer is 3.

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 42 secs

Your Attempt: Skipped

% Students got it correct: 44 %

Loading...