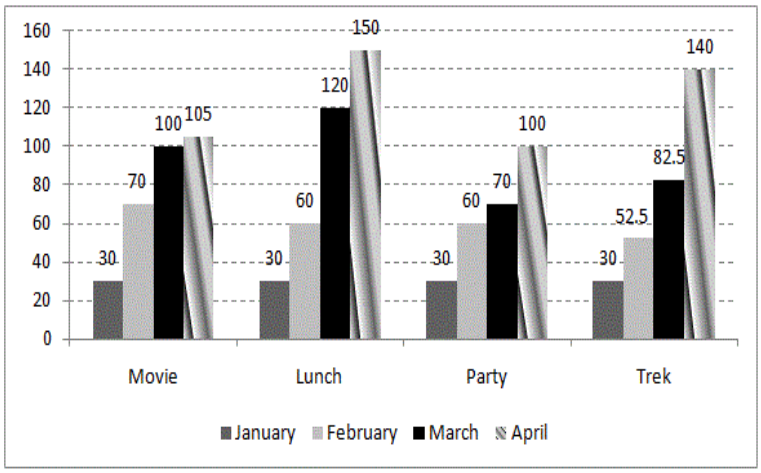
Refer to the data below and answer the questions that follow.

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.



1) How much amount did the group contribute to the Party fund in the month of April?

- Rs. 90
- Rs. 60
- Rs. 150
- Rs. 120

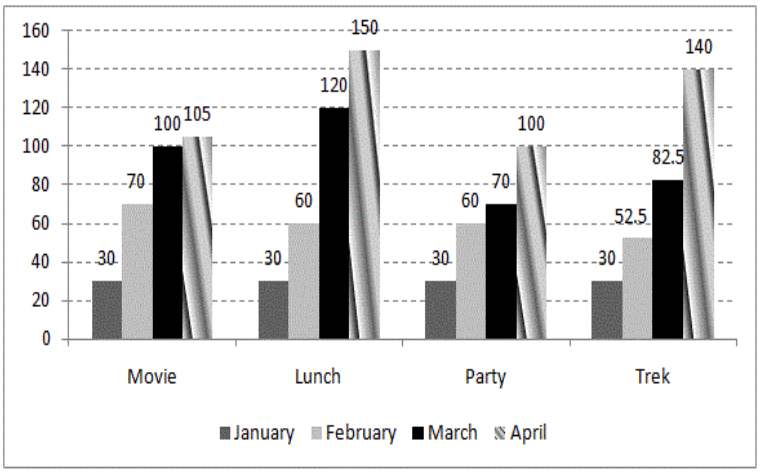
Video Explanation:

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

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.



Explanation:

Change Section here

Let us make a table of the given information:

	January	February	March	April
Movie	30	70	100	105
Lunch	30	60	120	150
Party	30	60	70	100
Trek	30	52.5	82.5	140

Using the condition of calculating the average in each month and the condition that at most one boy in the group contributed to the fund other than the one he had contributed in the previous month, it can be said that if the average increased by 30, then the number of boys who contributed did not change. If the average increased by more than 30, then the number of boys who contributed decreased by 1. If the average increased by less than 30, then the number of boys who contributed increased by 1.

The following table can be made of number of boys who contributed in different funds in four months:

	January	February	March	April
Movie	a	a−1	a−1	a
Lunch	b	b	b−1	b−1
Party	c	c	c+1	c+1
Trek	d	d+1	d+1	d

For Movies: $30a + 30(a - 1) = 70(a - 1)$, solving this we get $a = 4$

For Lunch: $60b + 30(b - 1) = 120(b - 1)$, solving this, we get $b = 3$

For Party: $60c + 30(c + 1) = 70(c + 1)$, solving this, we get $c = 2$

For Trek: $30d + 30(d + 1) = 52.5(d + 1)$, solving this, we get $d = 3$

The final table of number of boys contributing in different funds in four month is as follows:

	January	February	March	April
Movie	4	3	3	4
Lunch	3	3	2	2
Party	2	2	3	3
Trek	3	4	4	3

Contribution in Party fund in the month of April = 3 × 30 = Rs. 90

Hence, [1].

Correct Answer:

Time taken by you: **130 secs**

Avg Time taken by all students: **248 secs**

Your Attempt: **Skipped**

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

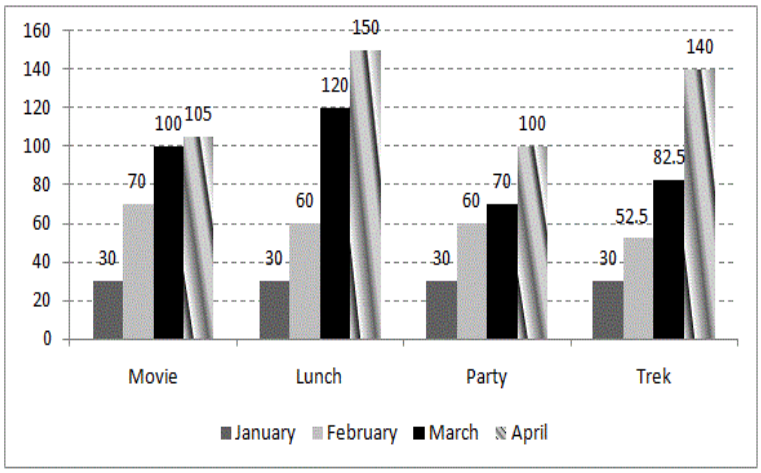
2) Which of the following is not the correct combination of the fund a boy contributes to in a particular month and the fund that he contributes to in the next month?

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

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.



Movie – Trek

Lunch – Party

Trek – Movie

Party – Movie

Change Section here

Video Explanation:

Explanation:

Let us make a table of the given information:

	January	February	March	April
Movie	30	70	100	105
Lunch	30	60	120	150
Party	30	60	70	100
Trek	30	52.5	82.5	140

Using the condition of calculating the average in each month and the condition that at most one boy in the group contributed to the fund other than the one he had contributed in the previous month, it can be said that if the average increased by 30, then the number of boys who contributed did not change. If the average increased by more than 30, then the number of boys who contributed decreased by 1. If the average increased by less than 30, then the number of boys who contributed increased by 1.

The following table can be made of number of boys who contributed in different funds in four months:

	January	February	March	April
Movie	a	a−1	a−1	a
Lunch	b	b	b−1	b−1
Party	c	c	c+1	c+1
Trek	d	d+1	d+1	d

For Movies: $30a + 30(a - 1) = 70(a - 1)$, solving this we get $a = 4$

For Lunch: $60b + 30(b - 1) = 120(b - 1)$, solving this, we get $b = 3$

For Party: $60c + 30(c + 1) = 70(c + 1)$, solving this, we get $c = 2$

For Trek: $30d + 30(d + 1) = 52.5(d + 1)$, solving this, we get $d = 3$

The final table of number of boys contributing in different funds in four month is as follows:

	January	February	March	April
Movie	4	3	3	4
Lunch	3	3	2	2
Party	2	2	3	3
Trek	3	4	4	3

In the month of February one boy shifted from Movie to Trek, in the month of March one boy shifted from Lunch to Party, in the month of April one boy shifted from Trek to Movie.

Hence, [4].

Correct Answer:

Time taken by you: **43 secs**

Avg Time taken by all students: **84 secs**

Your Attempt: **Skipped**

Change Section here

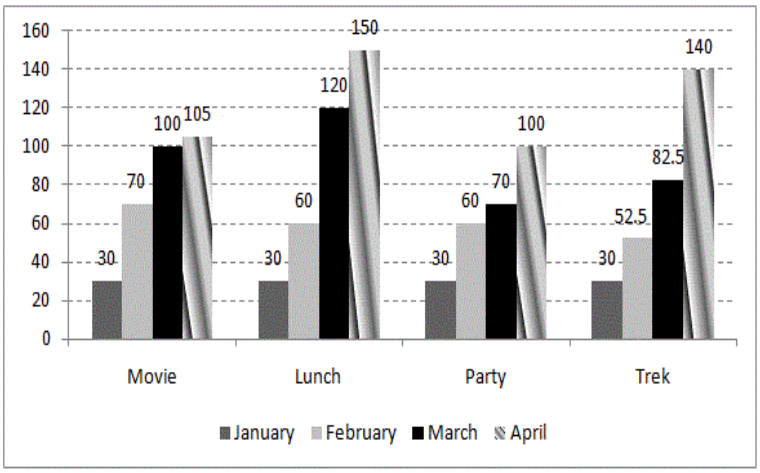
% Students got it correct: **36 %**

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

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.



3) The number of boys who contribute to the Movie and Trek funds is how much more/less than the number of boys who contribute to the Lunch and Party funds in the month of March?

- 1 more
- 2 less
- 2 more
- 1 less

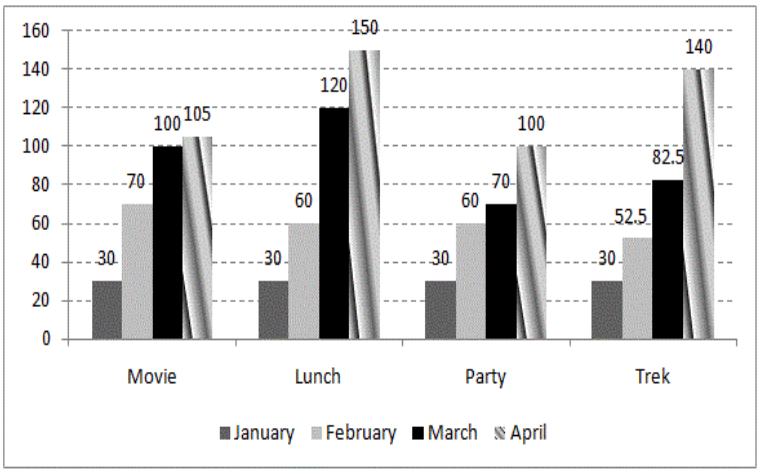
Video Explanation:

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

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.



Explanation:

Change Section here

Let us make a table of the given information:

	January	February	March	April
Movie	30	70	100	105
Lunch	30	60	120	150
Party	30	60	70	100
Trek	30	52.5	82.5	140

Using the condition of calculating the average in each month and the condition that at most one boy in the group contributed to the fund other than the one he had contributed in the previous month, it can be said that if the average increased by 30, then the number of boys who contributed did not change. If the average increased by more than 30, then the number of boys who contributed decreased by 1. If the average increased by less than 30, then the number of boys who contributed increased by 1.

The following table can be made of number of boys who contributed in different funds in four months:

	January	February	March	April
Movie	a	a−1	a−1	a
Lunch	b	b	b−1	b−1
Party	c	c	c+1	c+1
Trek	d	d+1	d+1	d

For Movies: $30a + 30(a - 1) = 70(a - 1)$, solving this we get $a = 4$

For Lunch: $60b + 30(b - 1) = 120(b - 1)$, solving this, we get $b = 3$

For Party: $60c + 30(c + 1) = 70(c + 1)$, solving this, we get $c = 2$

For Trek: $30d + 30(d + 1) = 52.5(d + 1)$, solving this, we get $d = 3$

The final table of number of boys contributing in different funds in four month is as follows:

	January	February	March	April
Movie	4	3	3	4
Lunch	3	3	2	2
Party	2	2	3	3
Trek	3	4	4	3

The required difference = $(3 + 4) - (2 + 3) = 2$

The number of boys who contribute to the Movie and Trek funds is two more than the number of boys who contribute to the Lunch and Party funds in the month of March.

Hence, [3].

Correct Answer:

Time taken by you: **3 secs**

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

Your Attempt: **Skipped**

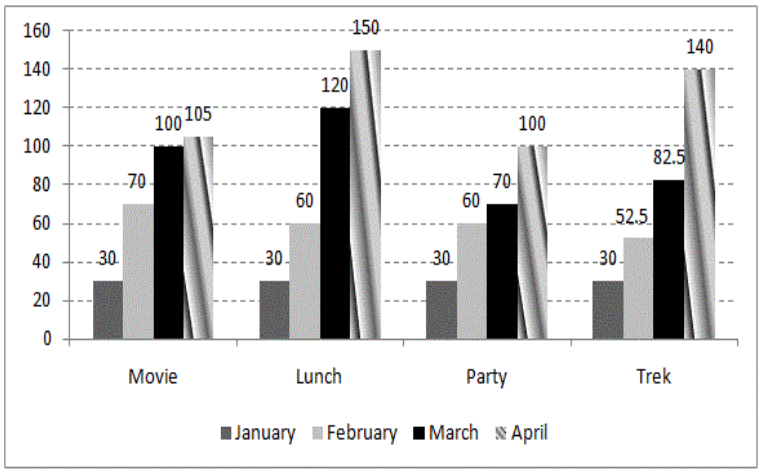
% Students got it correct: **43 %**

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

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.



4) The number of boys in the group is:

- 14
- 16
- 15
- 12

Video Explanation:

Explanation:

Let us make a table of the given information:

	January	February	March	April
Movie	30	70	100	105
Lunch	30	60	120	150
Party	30	60	70	100
Trek	30	52.5	82.5	140

Using the condition of calculating the average in each month and the condition that at most one boy in the group contributed to the fund other than the one he had contributed in the previous month, it can be said that if the average increased by 30, then the number of boys who contributed did not change. If the average increased by more than 30, then the number of boys who contributed decreased by 1. If the average increased by less than 30, then the number of boys who contributed increased by 1.

The following table can be made of number of boys who contributed in different funds in four months:

	January	February	March	April
Movie	a	a−1	a−1	a
Lunch	b	b	b−1	b−1
Party	c	c	c+1	c+1
Trek	d	d+1	d+1	d

For Movies: $30a + 30(a - 1) = 70(a - 1)$, solving this we get $a = 4$

For Lunch: $60b + 30(b - 1) = 120(b - 1)$, solving this, we get $b = 3$

For Party: $60c + 30(c + 1) = 70(c + 1)$, solving this, we get $c = 2$

For Trek: $30d + 30(d + 1) = 52.5(d + 1)$, solving this, we get $d = 3$

The final table of number of boys contributing in different funds in four month is as follows:

	January	February	March	April
Movie	4	3	3	4
Lunch	3	3	2	2
Party	2	2	3	3
Trek	3	4	4	3

The number of boys in the group = 12

Hence, [4].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **80 secs**

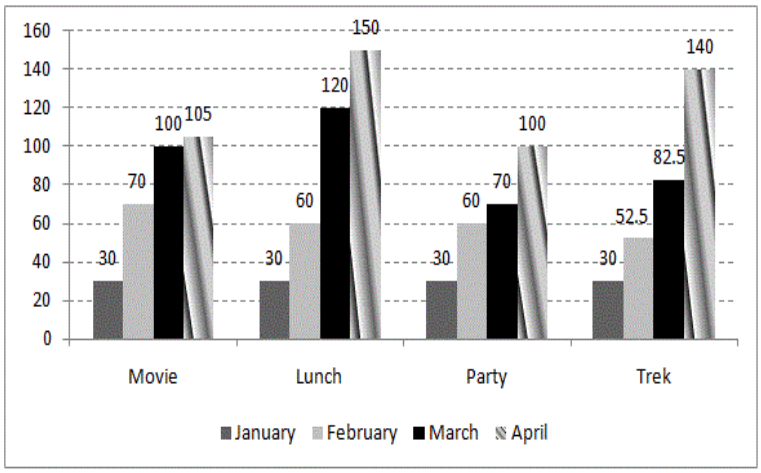
Refer to the data below and answer the questions that follow.

A group of boys started four funds – Movie, Lunch, Party and Trek, among themselves from January 2019. Each one contributed Rs. 30 to any one of the four funds every month, not necessarily to the same fund every month.

The following bar graph gives the average amount collected in each fund in each of the four months – January, February, March and April. The average in a particular month is calculated as the total amount collected in the fund till that month divided by the number of boys contributing to the fund in that month.

The group did not spend anything from these funds in the first four months. Also, every month at the most one boy in the entire group contributed to the fund other than the one he had contributed to in the previous month.

Loading...



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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

1) How many Male garments to be supplied to Lewis Phillip brand?

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

1728

Video Explanation:

Explanation:

Let us first calculate total number of garments ordered by each of the three companies:

$$\text{Lewis Phillip} = \frac{2}{5} \times 7200 = 2880$$

$$\text{Allan Solly} = \frac{7200 - 2880}{2} = \frac{4320}{2} = 2160$$

VenHuesen = 2160

Given: Out of total garments, 57% are male garments, thus 43% are female garments.

Total number of Male garments = 0.57 × 7200 = 4104

Total number of Female garments = 7200 – 4104 = 3096

Number of Male and Female garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Male garments = 2160 × 0.45 = 972; Number of Female garments = 2160 – 972 = 1188

For VenHuesen:

Number of Male garments = 2160 × 0.65 = 1404; Number of Female garments = 2160 – 1404 = 756

For Lewis Phillip:

Number of Male garments = 4104 – 972 – 1404 = 1728; Number of Female garments = 3096 – 1944 = 1152

Given: Out of total garments, 38% are Friday dressing garments, thus 62% are Formal dressing garments.

Total number of Friday dressing garments = 0.38 × 7200 = 2736

Total number of Formal dressing garments = 7200 – 2736 = 4464

Number of Friday dressing garments and Formal dressing garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Friday dressing garments = 2160 × 0.35 = 756; Number of Formal dressing garments
= 2160 – 756 = 1404

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

For VenHuesen:

Number of Friday dressing garments [illegible] of Formal dressing garments

= 2160 – 972 = 1188

For Lewis Phillip:

Number of Friday dressing garments = 2736 – 756 – 972 = 1008;

Number of Formal dressing garments

= 2880 – 1008 = 1872

Here, we can make following table:

	Male	Female	Total	Formal dressing	Friday dressing	Total
Allan Solly	972	1188	**2160**	1404	756	**2160**
VenHuesen	1404	756	**2160**	1188	972	**2160**
Lewis Phillip	1728	1152	**2880**	1872	1008	**2880**
Total	**4104**	**3096**	**7200**	**4464**	**2736**	**7200**

Therefore, the required answer is 1728.

Correct Answer:

1728

Time taken by you: **356 secs**

Avg Time taken by all students: **502 secs**

Your Attempt: **Correct**

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

2) How many Formal dressing garments to be supplied to Lewis Phillip brand?

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

1872

Video Explanation:

Explanation:

Let us first calculate total number of garments ordered by each of the three companies:

$$\text{Lewis Phillip} = \frac{2}{5} \times 7200 = 2880$$

$$\text{Allan Solly} = \frac{7200-2880}{2} = \frac{4320}{2} = 2160$$

VenHuesen = 2160

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

Given: Out of total garments, 57% are male garments, thus 43% are female garments.

Change Section here

Total number of Male garments = 0.57 × 7200 = 4104

Total number of Female garments = 7200 – 4104 = 3096

Number of Male and Female garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Male garments = 2160 × 0.45 = 972; Number of Female garments = 2160 – 972 = 1188

For VenHuesen:

Number of Male garments = 2160 × 0.65 = 1404; Number of Female garments = 2160 – 1404 = 756

For Lewis Phillip:

Number of Male garments = 4104 – 972 – 1404 = 1728; Number of Female garments = 3096 – 1944 = 1152

Given: Out of total garments, 38% are Friday dressing garments, thus 62% are Formal dressing garments:

Total number of Friday dressing garments = 0.38 × 7200 = 2736

Total number of Formal dressing garments = 7200 – 2736 = 4464

Number of Friday dressing garments and Formal dressing garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Friday dressing garments = 2160 × 0.35 = 756; Number of Formal dressing garments
= 2160 – 756 = 1404

For VenHuesen:

Number of Friday dressing garments = 2160 × 0.45 = 972; Number of Formal dressing garments
= 2160 – 972 = 1188

For Lewis Phillip:

Number of Friday dressing garments = 2736 – 756 – 972 = 1008; Number of Formal dressing garments
= 2880 – 1008 = 1872

Here, we can make following table:

	Male	Female	Total	Formal dressing	Friday dressing	Total
Allan Solly	972	1188	**2160**	1404	756	**2160**
VenHuesen	1404	756	**2160**	1188	972	**2160**
Lewis Phillip	1728	1152	**2880**	1872	1008	**2880**
Total	**4104**	**3096**	**7200**	**4464**	**2736**	**7200**

Therefore, the required answer is 1872.

Correct Answer:

Time taken by you: **240 secs**

Avg Time taken by all students: **82**

Change Section here

Your Attempt: **Correct**

% Students got it correct: **53 %**

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

3) Additional information for questions 7 and 8:

The number of Female Friday dressing garments to be supplied to Lewis Phillip brand is same as the number of Male Friday dressing garments to be supplied to Allan Solly brand and that is 432.

What is the difference between the number of Male Formal dressing garments and Female Friday dressing garments to be supplied to VenHuesen brand?

- 324
- 432
- 234
- Cannot be determined ✗

Video Explanation:

Explanation:

Let us first calculate total number of garments ordered by each of the three companies:

$$\text{Lewis Phillip} = \frac{2}{5} \times 7200 = 2880$$

$$\text{Allan Solly} = \frac{7200-2880}{2} = \frac{4320}{2} = 2160$$

VenHuesen = 2160

Given: Out of total garments, 57% are male garments, thus 43% are female garments.

Total number of Male garments = 0.57 × 7200 = 4104

Total number of Female garments = 7200 – 4104 = 3096

Number of Male and Female garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Male garments = 2160 × 0.45 = 972; Number of Female garments = 2160 – 972 = 1188

For VenHuesen:

Number of Male garments = 2160 × 0.65 = 1404; Number of Female garments = 2160 – 1404 = 756

For Lewis Phillip:

Number of Male garments = 4104 – 972 – 1404 = 1728; Number of Female garments = 3096 – 1944 = 1152

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

Given: Out of total garments, 38% are Friday dressing garments; thus 62% are Formal dressing garments:

Total number of Friday dressing garments = 0.38 × 7200 = 2736

Total number of Formal dressing garments = 7200 – 2736 = 4464

Number of Friday dressing garments and Formal dressing garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Friday dressing garments = 2160 × 0.35 = 756; Number of Formal dressing garments
= 2160 – 756 = 1404

For VenHuesen:

Number of Friday dressing garments = 2160 × 0.45 = 972; Number of Formal dressing garments
= 2160 – 972 = 1188

For Lewis Phillip:

Number of Friday dressing garments = 2736 – 756 – 972 = 1008; Number of Formal dressing garments
= 2880 – 1008 = 1872

Here, we can make following table:

	Male	Female	Total	Formal dressing	Friday dressing	Total
Allan Solly	972	1188	**2160**	1404	756	**2160**
VenHuesen	1404	756	**2160**	1188	972	**2160**
Lewis Phillip	1728	1152	**2880**	1872	1008	**2880**
Total	**4104**	**3096**	**7200**	**4464**	**2736**	**7200**

For Lewis Phillip:

Total number of Female garments = 1152; Given, number of Female Friday dressing garments = 432; thus, number of Female Formal dressing garments = 1152 – 432 = 720; therefore, number of Male Friday dressing garments = 1008 – 432 = 576 and number of Male Formal dressing garments = 1872 – 720 = 1152

For Allan Solly:
Total number of Male garments = 972, Given, number of Male Friday dressing garments = 432; thus, number of Male Formal dressing garments = 972 – 432 = 540; therefore, number of Female Formal dressing garments = 1404 – 540 = 864 and number of Female Friday dressing garments = 1188 – 864 = 324.

So far we have,

	Male		Sub Total	Female		Sub Total	Grand Total
	Formal dressing	Friday dressing		Formal dressing	Friday dressing		
Lewis Phillip	1152	576	**1728**	720	432	**1152**	**2880**
Allan Solly	540	432	**972**	864	324	**1188**	**2160**
VenHuesen	a	b	**1404**	c	d	**756**	**2160**
Total			**4104**			**3096**	**7200**

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

a + b = 1404 …(i)
c + d = 756 ….(ii)
Also we know, a + c = 4464 – 1152 – 540 – 720 – 864 = 1188 ….(iii)
b + d = 2736 – 576 – 432 – 432 – 324 = 972 ….(iv)
Subtracting equation (iv) from equation (i) a – d = 1404 – 972 = 432

Hence, [2].

Correct Answer: ⌄

Time taken by you: **257 secs**

Avg Time taken by all students: **43 secs**

Your Attempt: **Wrong**

% Students got it correct: **14 %**

4) Additional information for questions 7 and 8: −

The number of Female Friday dressing garments to be supplied to Lewis Phillip brand is same as the number of Male Friday dressing garments to be supplied to Allan Solly brand and that is 432.

How many Female Friday dressing garments were to be supplied to Allan Solly brand?

- 324 ✓
- 432
- 234
- Cannot be determined

Video Explanation: ⌄

Explanation: ⌄

Let us first calculate total number of garments ordered by each of the three companies:

$$\text{Lewis Phillip} = \frac{2}{5} \times 7200 = 2880$$

$$\text{Allan Solly} = \frac{7200-2880}{2} = \frac{4320}{2} = 2160$$

VenHuesen = 2160

Given: Out of total garments, 57% are male garments, thus 43% are female garments.

Total number of Male garments = 0.57 × 7200 = 4104

Total number of Female garments = 7200 – 4104 = 3096

Number of Male and Female garments for 3 brands can be calculated as follows:

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

For Allan Solly:
Number of Male garments = 2160 × [illegible] garments = 2160 – 972 = 1188

For VenHuesen:

Number of Male garments = 2160 × 0.65 = 1404; Number of Female garments = 2160 – 1404 = 756

For Lewis Phillip:

Number of Male garments = 4104 – 972 – 1404 = 1728; Number of Female garments = 3096 – 1944 = 1152

Given: Out of total garments, 38% are Friday dressing garments, thus 62% are Formal dressing garments.

Total number of Friday dressing garments = 0.38 × 7200 = 2736

Total number of Formal dressing garments = 7200 – 2736 = 4464

Number of Friday dressing garments and Formal dressing garments for 3 brands can be calculated as follows:

For Allan Solly:

Number of Friday dressing garments = 2160 × 0.35 = 756; Number of Formal dressing garments
= 2160 – 756 = 1404

For VenHuesen:

Number of Friday dressing garments = 2160 × 0.45 = 972; Number of Formal dressing garments
= 2160 – 972 = 1188

For Lewis Phillip:

Number of Friday dressing garments = 2736 – 756 – 972 = 1008; Number of Formal dressing garments
= 2880 – 1008 = 1872

Here, we can make following table:

	Male	Female	Total	Formal dressing	Friday dressing	Total
Allan Solly	972	1188	**2160**	1404	756	**2160**
VenHuesen	1404	756	**2160**	1188	972	**2160**
Lewis Phillip	1728	1152	**2880**	1872	1008	**2880**
Total	**4104**	**3096**	**7200**	**4464**	**2736**	**7200**

For Lewis Phillip:
Total number of Female garments = 1152; Given, number of Female Friday dressing garments = 432; thus, number of Female Formal dressing garments = 1152 – 432 = 720; therefore, number of Male Friday dressing garments = 1008 – 432 = 576 and number of Male Formal dressing garments = 1872 – 720 = 1152

For Allan Solly:
Total number of Male garments = 972, Given, number of Male Friday dressing garments = 432; thus, number of Male Formal dressing garments = 972 – 432 = 540; therefore, number of Female Formal dressing garments = 1404 – 540 = 864 and number of Female Friday dressing garments = 1188 – 864 = 324.

Hence, [1].

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

Madhura Garments Pvt. Ltd. supplies male and female Readymade garments to three brand stores, VenHuesen, Lewis Phillip and Allan Solly. For the quarter ending in December 2019, Madhura Garments has to supply 7200 garments, 2/5 of which is to be supplied to Lewis Phillip and the rest equally to Allan Solly and VenHuesen. Garments in both male and female section are categorised as Formal dressing or Friday dressing.

The following table shows the percentage of Male garments and Friday dressing garments, out of total garments ordered by Allan Solly and VenHuesen brands:

	Male	Friday dressing
Allan Solly	45%	35%
VenHuesen	65%	45%

It is known that out of total garments ordered by all the three brands, 57% are Male garments and 38% are Friday dressing garments.

Loading...

Time taken by you: **11 secs**

Avg Time taken by all students: **118 secs**

Your Attempt: **Correct**

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

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

1) What is the best that can be said about the total number of questions in Logical reasoning across all the given years?

- 360
- 370
- 380
- Either 360 or 370 ✗

Video Explanation:

Explanation:

Let us see the possible total for each of the years:

Year 2014 = 360 or 370; Year 2015 = 390 or 400 or 410; Year 2016 = 390 or 400 or 410
Year 2017 = 390 or 400 or 410; Year 2018 = 410 or 420 or 430

It is clear that the total number of questions for year 2015, 2016 and 2017 are 390, 400 and 410 not necessarily in the same order.

Given, the difference between the total number of questions of 2014 and 2018 is 50. Thus Year 2018 must have 420 questions in total and year 2014 must have 370 questions in total.

Now, Let us see the possible total for each of the sections across the years:

Verbal Ability = 390 or 400 or 410; Reading Comprehension = 390 or 400 or 410; Quantitative Ability = 390 or 400 or 410;

Logical Reasoning = 360 or 370; Data Interpretation = 410 or 420 or 430

It is clear that total number of questions in Logical Reasoning = 370 and Data Interpretation = 420.

Using the above data, the table can be filled as follows:

	2014	2015	2016	2017	2018	Total
Verbal Ability	50/60	80/90	100/110	70	80/90	390/400/410
Reading Comprehension	50/60	80/90	80/90	100/110	70	390/400/410
Quantitative Ability	70	50/60	80/90	80/90	110	390/400/410
Logical Reasoning	80	110	70	50/60	50/60	370
Data Interpretation	110	70	50/60	80/90	100	420
Total	370	400/410	390/400/410	390/400/410	420	

Hence, [2].

Correct Answer:

Time taken by you: **561 secs**

Avg Time taken by all students: **11**

Change Section here

Your Attempt: **Wrong**

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

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

2) If the Verbal Ability section had 90 questions in 2018, then what the best can be said about the total number of questions in the year 2016?

- 390
- 400
- 410
- Either 390 or 400

Video Explanation:

Explanation:

Change Section here

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

Let us see the possible total for each of the years:

Year 2014 = 360 or 370; Year 2015 = 390 or 400 or 410; Year 2016 = 390 or 400 or 410
Year 2017 = 390 or 400 or 410; Year 2018 = 410 or 420 or 430

It is clear that the total number of questions for year 2015, 2016 and 2017 are 390, 400 and 410 not necessarily in the same order.

Given, the difference between the total number of questions of 2014 and 2018 is 50. Thus Year 2018 must have 420 questions in total and year 2014 must have 370 questions in total.

Now, Let us see the possible total for each of the sections across the years:

Verbal Ability = 390 or 400 or 410; Reading Comprehension = 390 or 400 or 410; Quantitative Ability = 390 or 400 or 410;

Logical Reasoning = 360 or 370; Data Interpretation = 410 or 420 or 430

It is clear that total number of questions in Logical Reasoning = 370 and Data Interpretation = 420.

Using the above data, the table can be filled as follows:

	2014	2015	2016	2017	2018	Total
Verbal Ability	50/60	80/90	100/110	70	80/90	**390/400/410**
Reading Comprehension	50/60	80/90	80/90	100/110	70	**390/400/410**
Quantitative Ability	70	50/60	80/90	80/90	110	**390/400/410**
Logical Reasoning	80	110	70	50/60	50/60	**370**
Data Interpretation	110	70	50/60	80/90	100	**420**
Total	**370**	**400/410**	**390/400/410**	**390/400/410**	**420**	

If the Verbal Ability section had 90 questions in 2018; the table can be filled as follows:

	2014	2015	2016	2017	2018	Total
Verbal Ability	50/60	80	100/110	70	90	**390/400/410**
Reading Comprehension	60/50	90	80	100/110	70	**390/400/410**
Quantitative Ability	70	50/60	90	80	110	**400/410**
Logical Reasoning	80	110	70	60	50	**370**
Data Interpretation	110	70	50	90	100	**420**
Total	**370**	**400/410**	**390/400**	**400/410**	**420**	

Here, we can see the total number of questions in the year 2015 and 2017 = 400 and 410 in any order.
Thus, the total number of question in the year 2016 = 390
Hence, [1].

Correct Answer:

Time taken by you: **13 secs**

Avg Time taken by all students: **43 secs**

Your Attempt: **Skipped**

Change Section here

% Students got it correct: **20 %**

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

3) Additional information for questions 11 and 12:

The total number of questions in the year 2015 were 410 and in the year 2017 were 400.

Find the number of questions in the section Quantitative Ability in the year 2016?

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

Video Explanation:

Explanation:

Let us see the possible total for each of the years:

Year 2014 = 360 or 370; Year 2015 = 390 or 400 or 410; Year 2016 = 390 or 400 or 410
Year 2017 = 390 or 400 or 410; Year 2018 = 410 or 420 or 430

It is clear that the total number of questions for year 2015, 2016 and 2017 are 390, 400 and 410 not necessarily in the same order.

Given, the difference between the total number of questions of 2014 and 2018 is 50. Thus Year 2018 must have 420 questions in total and year 2014 must have 370 questions in total.

Now, Let us see the possible total for each of the sections across the years:

Verbal Ability = 390 or 400 or 410; Reading Comprehension = 390 or 400 or 410; Quantitative Ability = 390 or 400 or 410;

Logical Reasoning = 360 or 370; Data Interpretation = 410 or 420 or 430

It is clear that total number of questions in Logical Reasoning = 370 and Data Interpretation = 420.

Using the above data, the table can be filled as follows:

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

	2014	2015	2			
Verbal Ability	50/60	80/90	10			
Reading Comprehension	50/60	80/90	80/90	100/110	70	390/400/410
Quantitative Ability	70	50/60	80/90	80/90	110	390/400/410
Logical Reasoning	80	110	70	50/60	50/60	370
Data Interpretation	110	70	50/60	80/90	100	420
Total	370	400/410	390/400/410	390/400/410	420	

If the total number of questions in the year 2015 were 410 and in the year 2017 were 400; then total number of questions in the year 2016 = 390. Thus, number of Quantitative Ability questions in 2015 = 60. Number of Verbal Ability questions and Data Interpretation questions in 2016 must be 100 and 50 respectively. Further number of questions in Data Interpretation and Quantitative Ability in 2017 must be 90 and 80 respectively. And further the table can be filled as follows:

	2014	2015	2016	2017	2018	Total
Verbal Ability	50/60	80	100	70	90	390/400
Reading Comprehension	50/60	90	80	100	70	390/400
Quantitative Ability	70	60	90	80	110	410
Logical Reasoning	80	110	70	60	50	370
Data Interpretation	110	70	50	90	100	420
Total	370	410	390	400	420	

Thus, number of Quantitative Ability questions in 2016 = 90

Therefore, the required answer is 90.

Correct Answer:

Time taken by you: **7 secs**

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

Your Attempt: **Skipped**

% Students got it correct: **37 %**

4) Additional information for questions 11 and 12:

The total number of questions in the year 2015 were 410 and in the year 2017 were 400.

Find the number of questions in the section Reading Comprehension in the year 2017?

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

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

Explanation:

Let us see the possible total for each of the years:

Year 2014 = 360 or 370; Year 2015 = 390 or 400 or 410; Year 2016 = 390 or 400 or 410
Year 2017 = 390 or 400 or 410; Year 2018 = 410 or 420 or 430

It is clear that the total number of questions for year 2015, 2016 and 2017 are 390, 400 and 410 not necessarily in the same order.

Given, the difference between the total number of questions of 2014 and 2018 is 50. Thus Year 2018 must have 420 questions in total and year 2014 must have 370 questions in total.

Now, Let us see the possible total for each of the sections across the years:

Verbal Ability = 390 or 400 or 410; Reading Comprehension = 390 or 400 or 410; Quantitative Ability = 390 or 400 or 410;

Logical Reasoning = 360 or 370; Data Interpretation = 410 or 420 or 430

It is clear that total number of questions in Logical Reasoning = 370 and Data Interpretation = 420.

Using the above data, the table can be filled as follows:

	2014	2015	2016	2017	2018	**Total**
Verbal Ability	50/60	80	100	70	90	**390/400**
Reading Comprehension	60/50	90	80	100	70	**390/400**
Quantitative Ability	70	60	90	80	110	**410**
Logical Reasoning	80	110	70	60	50	**370**
Data Interpretation	110	70	50	90	100	**420**
Total	**370**	**410**	**390**	**400**	**420**	

If the total number of questions in the year 2015 were 410 and in the year 2017 were 400; then total number of questions in the year 2016 = 390. Thus, number of Quantitative Ability questions in 2015 = 60. Number of Verbal Ability questions and Data Interpretation questions in 2016 must be 100 and 50 respectively. Further number of questions in Data Interpretation and Quantitative Ability in 2017 must be 90 and 80 respectively. And further the table can be filled as follows:

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

ET Education provides detailed analysis of MBA entrance Exam CAAT every year since 2014. This exam comprises of 5 sections namely Verbal Ability, Reading Comprehension, Quantitative Ability, Logical Reasoning and Data Interpretation. Each section has distinct number of questions every year and the sum of the number of questions in each section from year 2014 to 2018 is distinct. The sum of the number of questions in Verbal Ability section from 2014 to 2018 is equal to the total number of questions in the exam in one of the years from 2014 to 2018 and this applies to the other four sections as well. The total number of questions in CAAT is different for each year. The difference between the total number of questions of year 2014 and 2018 is 50. In each year no two sections have the same number of questions. The following table gives information of the number of section-wise questions in CAAT from the year 2014 to 2018.

	2014	2015	2016	2017	2018
Verbal Ability	50 or 60	80 or 90	100 or 110	70	80 or 90
Reading Comprehension	50 or 60	80 or 90	80 or 90	100 or 110	70
Quantitative Ability	70	50 or 60	80 or 90	80 or 90	100 or 110
Logical Reasoning	80	100 or 110	70	50 or 60	50 or 60
Data Interpretation	100 or 110	70	50 or 60	80 or 90	100 or 110

	2014	20				
Verbal Ability	50/60	8				
Reading Comprehension	60/50	90	80	100	70	**390/400**
Quantitative Ability	70	60	90	80	110	**410**
Logical Reasoning	80	110	70	60	50	**370**
Data Interpretation	110	70	50	90	100	**420**
Total	**370**	**410**	**390**	**400**	**420**	

Number of questions in Reading Comprehension in the year 2017 = 100

Therefore, the required answer is 100.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **37 secs**

Your Attempt: **Skipped**

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

Loading...

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

1) How many students in the Vidya Mandir Senior Secondary School play Cricket?

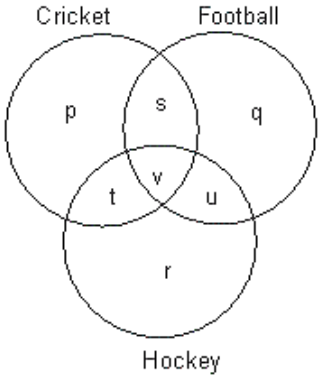
- 360
- 460
- 540 ✓
- Cannot be determined

Video Explanation:

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

Explanation:



Given, $(p + q + r) : (s + t + u) : v = 15 : 3 : 2$
Total number of students in the school = 900

$$p + q + r = 900 \times \frac{15}{20} = 675$$

$$s + t + u = 900 \times \frac{3}{20} = 135$$

$v = 900 - 675 - 135 = 90$

The number of students who play Hockey = $a = r + t + u + v$

The number of students who play Football = $a + 45 = q + u + v + s$

The number of students who play Cricket = $(a + 45) \times 1.5 = 1.5a + 67.5 = p + s + t + v$

Thus, $a + a + 45 + 1.5a + 67.5 = p + q + r + 2s + 2t + 2u + 3v = 675 + 270 + 270 = 1215$

$3.5a + 112.5 = 1215$

$35a + 1125 = 12150$

$35a = 11025$

$a = 315$

Number of students who play Hockey = $a = r + t + u + v = 315$

Number of students who play Football = $a + 45 = q + u + v + s = 315 + 45 = 360$

Number of students who play Cricket = $(a + 45) \times 1.5 = p + s + t + v = 360 \times 1.5 = 540$

Hence, [3].

Correct Answer:

Time taken by you: **484 secs**

Avg Time taken by all students: **407 secs**

Your Attempt: **Correct**

Change Section here

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

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

2) What is the best that can be said about the minimum number of students who play only Football?

- 90
- 135
- 180
- Cannot be determined

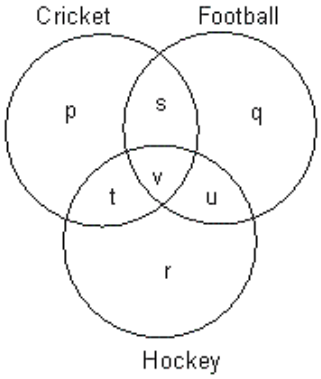
Video Explanation:

Explanation:

Change Section here

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.



Given, $(p + q + r) : (s + t + u) : v = 15 : 3 : 2$
Total number of students in the school = 900

$$p + q + r = 900 \times \frac{15}{20} = 675$$

$$s + t + u = 900 \times \frac{3}{20} = 135$$

$v = 900 - 675 - 135 = 90$

The number of students who play Hockey = $a = r + t + u + v$

The number of students who play Football = $a + 45 = q + u + v + s$

The number of students who play Cricket = $(a + 45) \times 1.5 = 1.5a + 67.5 = p + s + t + v$

Thus, $a + a + 45 + 1.5a + 67.5 = p + q + r + 2s + 2t + 2u + 3v = 675 + 270 + 270 = 1215$

$3.5a + 112.5 = 1215$

$35a + 1125 = 12150$

$35a = 11025$

$a = 315$

Number of students who play Hockey = $a = r + t + u + v = 315$

Number of students who play Football = $a + 45 = q + u + v + s = 315 + 45 = 360$

Number of students who play Cricket = $(a + 45) \times 1.5 = p + s + t + v = 360 \times 1.5 = 540$

To minimise 'q', we need to maximise the value of s + u, we know s + t + u = 135, so if t = 0, s + u = 135.
Thus, q = 360 – 90 – 135 = 135
Hence, [2].

Correct Answer:

Time taken by you: **202 secs**

Avg Time taken by all students

Change Section here

Your Attempt: **Skipped**

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

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

3) If the number of students who play both Cricket and Football (but not Hockey) is 20, then how many students play only Hockey?

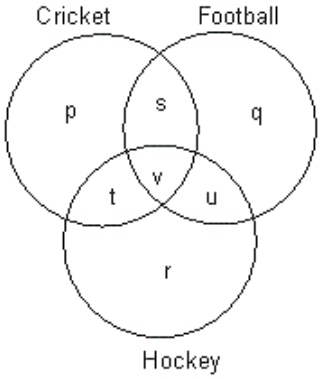
- 135
- 125
- 120
- 110 ✓

Video Explanation:

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

Explanation:



Given, $(p + q + r) : (s + t + u) : v = 15 : 3 : 2$
Total number of students in the school = 900

$$p + q + r = 900 \times \frac{15}{20} = 675$$

$$s + t + u = 900 \times \frac{3}{20} = 135$$

$v = 900 - 675 - 135 = 90$

The number of students who play Hockey = $a = r + t + u + v$

The number of students who play Football = $a + 45 = q + u + v + s$

The number of students who play Cricket = $(a + 45) \times 1.5 = 1.5a + 67.5 = p + s + t + v$

Thus, $a + a + 45 + 1.5a + 67.5 = p + q + r + 2s + 2t + 2u + 3v = 675 + 270 + 270 = 1215$

$3.5a + 112.5 = 1215$

$35a + 1125 = 12150$

$35a = 11025$

$a = 315$

Number of students who play Hockey = $a = r + t + u + v = 315$

Number of students who play Football = $a + 45 = q + u + v + s = 315 + 45 = 360$

Number of students who play Cricket = $(a + 45) \times 1.5 = p + s + t + v = 360 \times 1.5 = 540$

$r + t + u + v = 315$; $s + t + u = 135$; $v = 90$

If $s = 20$; $t + u = 135 - 20 = 115$

$r = 315 - 115 - 90 = 110$

Hence, [4].

Correct Answer:

Time taken by you: **33 secs**

Change Section here ▼

Avg Time taken by all students: **103 secs**

Your Attempt: **Correct**

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

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

4) If the number of students who play only Cricket is 360, then how many students play both Football and Hockey (but not Cricket)?

- 20
- 35
- 45 ✓
- 90

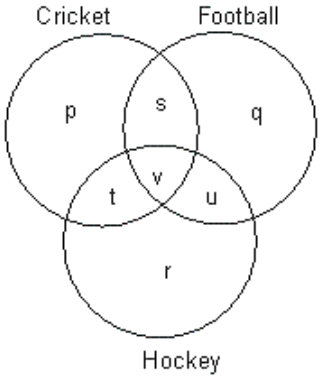
Video Explanation:

Explanation:

Change Section here

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.



Given, $(p + q + r) : (s + t + u) : v = 15 : 3 : 2$
Total number of students in the school = 900

$$p + q + r = 900 \times \frac{15}{20} = 675$$

$$s + t + u = 900 \times \frac{3}{20} = 135$$

$v = 900 – 675 – 135 = 90$

The number of students who play Hockey = $a = r + t + u + v$

The number of students who play Football = $a + 45 = q + u + v + s$

The number of students who play Cricket = $(a + 45) \times 1.5 = 1.5a + 67.5 = p + s + t + v$

Thus, $a + a + 45 + 1.5a + 67.5 = p + q + r + 2s + 2t + 2u + 3v = 675 + 270 + 270 = 1215$

$3.5a + 112.5 = 1215$

$35a + 1125 = 12150$

$35a = 11025$

$a = 315$

Number of students who play Hockey = $a = r + t + u + v = 315$

Number of students who play Football = $a + 45 = q + u + v + s = 315 + 45 = 360$

Number of students who play Cricket = $(a + 45) \times 1.5 = p + s + t + v = 360 \times 1.5 = 540$

$p = 360$; $p + s + t + v = 540$; $v = 90$; thus, $s + t = 540 – 360 – 90 = 90$

$s + t + u = 135 \Rightarrow u = 135 – 90 = 45$

Hence, [3].

Correct Answer:

Time taken by you: **25 secs**

Change Section here ▼

Avg Time taken by all students: **85 secs**

Your Attempt: **Correct**

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

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

Vidya Mandir Senior Secondary School runs Sports division for its students. The sports division provides coaching for 3 sports, Cricket, Football and Hockey. Each student must play at least one sport and at most all 3 sports. Total number of students in the school is 900. The number of students, who play exactly one sport, exactly two sports and all three sports are in the ratio 15 : 3 : 2. The number of students who play Cricket is 50% more than the number of students who play Football, which in turn is 45 more than the number of students who play Hockey.

Loading...

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

1) The exact number of gold coins with how many of the four friends can be uniquely determined?

- 0
- 1
- 2
- More than 2

Video Explanation:

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

Explanation:

Change Section here ▼

Given: Out of the four friends mentioned by each individual, exactly two friends had gold coins with them. However, the number of gold coins with these two friends were 'swapped'. That means, no friend had gold coins equal to the number of coins predicted by any individual.

Consider the statement made by A.

Case 1: As per A's prediction, Kennedy has 10 coins and Trump had 5 coins. Suppose Kennedy and Trump is the pair that has gold coins. In that case, Kennedy should have 5 coins and Trump should have 10 coins.

As per C's prediction, Trump has 2 coins and Bush has 10 coins. If Trump has 10 coins, Bush should have 2 coins.

As per D's prediction, Kennedy has 1 coin and Clinton has 5 coins. If Kennedy has 5 coins, Clinton should have 1 coin.

Therefore, we get the following: Trump - 10 coins, Kennedy - 5 coins, Bush - 2 coins and Clinton - 1 coin.

However, in that case, E and F will get only one name out of the four, while B will get three names out of the four who had gold coins. Therefore this is not a valid case.

Case 2: As per A's prediction, Kennedy has 10 coins and Reagan has 2 coins. Suppose Kennedy and Reagan is the pair that has gold coins. In that case, Reagan should have 10 coins and Kennedy should have 2 coins.

As per B's prediction, Kennedy has 5 coins and Bush has 2 coins. Since Kennedy has 2 coins, Bush should have 5 coins.

As per D's prediction, Kennedy has 1 coin and Nixon has 2 coins. Since Kennedy has 2 coins, Nixon should have 1 coin.

Therefore we have the following:

Reagan - 10 coins, Bush - 5 coins, Kennedy - 2 coins, Nixon - 1 coin

It can be seen that using this combination, the predictions made by others i.e., C, E and F fulfill the given conditions.

Hence, [4].

Correct Answer: ⌄

Time taken by you: **0 secs**

Change Section here

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

Avg Time taken by all students: **372 secs**

Your Attempt: **Skipped**

% Students got it correct: **64 %**

2) Out of the four friends predicted by C, who are the two friends who had gold coins with them?

- Bush and Reagan
- Reagan and Trump
- Trump and Obama
- Bush and Obama

Video Explanation:

Explanation:

Given: Out of the four friends mentioned by each individual, exactly two friends had gold coins with them. However, the number of gold coins with these two friends were 'swapped'. That means, no friend had gold coins equal to the number of coins predicted by any individual.

Consider the statement made by A.

Case 1: As per A's prediction, Kennedy has 10 coins and Trump had 5 coins. Suppose Kennedy and Trump is the pair that has gold coins. In that case, Kennedy should have 5 coins and Trump should have 10 coins.

As per C's prediction, Trump has 2 coins and Bush has 10 coins. If Trump has 10 coins, Bush should have 2 coins.

As per D's prediction, Kennedy has 1 coin and Clinton has 5 coins. If Kennedy has 5 coins, Clinton should have 1 coin.

Therefore, we get the following: Trump - 10 coins, Kennedy - 5 coins, Bush - 2 coins and Clinton - 1 coin.

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

However, in that case, E and F four, while B will get three names out of the four who had gold coins. Therefore this is not a valid case.

Case 2: As per A's prediction, Kennedy has 10 coins and Reagan has 2 coins. Suppose Kennedy and Reagan is the pair that has gold coins. In that case, Reagan should have 10 coins and Kennedy should have 2 coins.

As per B's prediction, Kennedy has 5 coins and Bush has 2 coins. Since Kennedy has 2 coins, Bush should have 5 coins.

As per D's prediction, Kennedy has 1 coin and Nixon has 2 coins. Since Kennedy has 2 coins, Nixon should have 1 coin.

Therefore we have the following:

Reagan - 10 coins, Bush - 5 coins, Kennedy - 2 coins, Nixon - 1 coin

It can be seen that using this combination, the predictions made by others i.e., C, E and F fulfill the given conditions.

Hence, [1].

Correct Answer:

Time taken by you: **120 secs**

Avg Time taken by all students: **100 secs**

Your Attempt: **Skipped**

% Students got it correct: **53 %**

3) What was the sum of the number of gold coins with the friends predicted by D?

- 15
- 7
- 3

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

Explanation:

Given: Out of the four friends mentioned by each individual, exactly two friends had gold coins with them. However, the number of gold coins with these two friends were 'swapped'. That means, no friend had gold coins equal to the number of coins predicted by any individual.

Consider the statement made by A.

Case 1: As per A's prediction, Kennedy has 10 coins and Trump had 5 coins. Suppose Kennedy and Trump is the pair that has gold coins. In that case, Kennedy should have 5 coins and Trump should have 10 coins.

As per C's prediction, Trump has 2 coins and Bush has 10 coins. If Trump has 10 coins, Bush should have 2 coins.

As per D's prediction, Kennedy has 1 coin and Clinton has 5 coins. If Kennedy has 5 coins, Clinton should have 1 coin.

Therefore, we get the following: Trump - 10 coins, Kennedy - 5 coins, Bush - 2 coins and Clinton - 1 coin.

However, in that case, E and F will get only one name out of the four, while B will get three names out of the four who had gold coins. Therefore this is not a valid case.

Case 2: As per A's prediction, Kennedy has 10 coins and Reagan has 2 coins. Suppose Kennedy and Reagan is the pair that has gold coins. In that case, Reagan should have 10 coins and Kennedy should have 2 coins.

As per B's prediction, Kennedy has 5 coins and Bush has 2 coins. Since Kennedy has 2 coins, Bush should have 5 coins.

As per D's prediction, Kennedy has 1 coin and Nixon has 2 coins. Since Kennedy has 2 coins, Nixon should have 1 coin.

Therefore we have the following:

Reagan - 10 coins, Bush - 5 coins, Kennedy - 2 coins, Nixon - 1 coin

It can be seen that using this combination, the predictions made by others i.e., C, E and F fulfill the given conditions.

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

Change Section here

Avg Time taken by all students: **23 secs**

Your Attempt: **Skipped**

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

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

4) How many of Trump, Nixon, Bush and Obama had at least one gold coin with them?

- 0
- 1
- 2
- More than 2

Video Explanation:

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

Explanation:

Given: Out of the four friends mentioned by each individual, exactly two friends had gold coins with them. However, the number of gold coins with these two friends were 'swapped'. That means, no friend had gold coins equal to the number of coins predicted by any individual.

Consider the statement made by A.

Case 1: As per A's prediction, Kennedy has 10 coins and Trump had 5 coins. Suppose Kennedy and Trump is the pair that has gold coins. In that case, Kennedy should have 5 coins and Trump should have 10 coins.

As per C's prediction, Trump has 2 coins and Bush has 10 coins. If Trump has 10 coins, Bush should have 2 coins.

As per D's prediction, Kennedy has 1 coin and Clinton has 5 coins. If Kennedy has 5 coins, Clinton should have 1 coin.

Therefore, we get the following: Trump - 10 coins, Kennedy - 5 coins, Bush - 2 coins and Clinton - 1 coin.

However, in that case, E and F will get only one name out of the four, while B will get three names out of the four who had gold coins. Therefore this is not a valid case.

Case 2: As per A's prediction, Kennedy has 10 coins and Reagan has 2 coins. Suppose Kennedy and Reagan is the pair that has gold coins. In that case, Reagan should have 10 coins and Kennedy should have 2 coins.

As per B's prediction, Kennedy has 5 coins and Bush has 2 coins. Since Kennedy has 2 coins, Bush should have 5 coins.

As per D's prediction, Kennedy has 1 coin and Nixon has 2 coins. Since Kennedy has 2 coins, Nixon should have 1 coin.

Therefore we have the following:

Reagan - 10 coins, Bush - 5 coins, Kennedy - 2 coins, Nixon - 1 coin

It can be seen that using this combination, the predictions made by others i.e., C, E and F fulfill the given conditions.

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

Change Section here

Avg Time taken by all students: **39 secs**

Your Attempt: **Skipped**

% Students got it correct: **79 %**

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

Exactly four out of the eight friends named Trump, Obama, Bush, Clinton, Reagan, Carter, Nixon and Kennedy have a number of gold coins with them. The number of gold coins with these four friends can be 1, 2, 5 or 10. Each of those four friends has different number of gold coins with them. The remaining four friends do not have any gold coin with them.

Six individuals, named A, B, C, D, E and F are asked to predict the names of the friends having different number of gold coins with them. The following table shows the predictions made by these six individuals:

	10 coins	5 coins	2 coins	1 coin
A	Kennedy	Trump	Reagan	Obama
B	Clinton	Kennedy	Bush	Carter
C	Bush	Reagan	Trump	Obama
D	Carter	Clinton	Nixon	Kennedy
E	Nixon	Obama	Clinton	Reagan
F	Carter	Nixon	Obama	Bush

Loading...

Further, the following points are known:

1. Out of the four names mentioned by each of these six individuals, exactly two names contained the names of the friends who had gold coins with them and the remaining two names were of the friends who did not have any gold coin with them.
2. Each individual correctly predicted the names of the two friends who had gold coins with them. However, the number of coins predicted by each individual with these friends was swapped. For example, if one friend (named say 'P') has 10 gold coins and the second friend (named say 'Q') has 5 coins, there is exactly one individual who predicted that P and Q had gold coins with them. However, that individual predicted that 'P' had 5 coins and 'Q' had 10 coins (i.e. exactly opposite of the number of coins actually with them).

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

1) For how many rounds, the total points of each team that participated in that round can be determined uniquely?

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

Video Explanation: ⌄

Explanation: ⌄

The sum total of all the number cards = 2 × (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10) = 110

Total amount = $100
The amount won by winning team in the rounds 1 to 4 is $10, $20, $30 and $40 respectively.

Round 1:
The total of all the number cards distributed among 5 teams in round 1 = 110
The cards with the team that lost in round 1 were discarded after the round. The discarded cards were Black cards 6 and 7, Red cards 1 and 2. Total points of the loser team = 6 + 7 + 1 + 2 = 16. Now we know the total of four teams in round 1: 16, 20, 25 and 26.

Thus, the total points of the 5th team in round 1 = 110 – 16 – 20 – 25 – 26 = 23.

Therefore, using the first point, it can be concluded that the loser team was neither Clubs not Hearts. From the second point, the loser team was not Stars and from the seventh point, it was not Diamonds. Thus, the loser team of round 1 must be Spades.

Round 2:
The total points of all the number cards distributed among 4 teams in round 2 = 110 – 16 (total points of the loser team of round 1) = 94.

The discarded cards (i.e., cards with the team having the lowest sum total) were Red card 10, Black cards 4, 2 and 1. Total points of loser team of round 2 = 10 + 4 + 2 + 1 = 17.

Thus the total points of the 4th team in round 2 = 94 – 17 – 21 – 32 = 24.

Round 3:
Total points of all three teams in round 3 = 94 – 17 (total points of loser team of round 2) = 77.

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

The discarded cards (i.e., cards with total) were Red cards 4, 5 and 6, Black card 8. Total points of the loser team of round 3 = 4 + 5 + 6 + 8 = 23.

Thus, the total points of other two teams in round 3 = 77 – 23 = 54. Now the number cards of these two teams will be distributed in round 4. Thus, the total points of two teams in round 4 is also 54.

Now, the following table can be made:

Round 1	Round 2	Round 3	Round 4
16	17	23	
20	21		
23	24		
25	32		
26			
110	**94**	**77**	**54**

As amount won by winning teams was $10, $20, $30 and $40, using points 4 and 5, it can be concluded that Stars won round 4 and Clubs won round 1 and round 2. Therefore winner of round 3 was Hearts or Diamonds. Therefore, sum total points of Stars in round 3 must be greater than 23. Again using the fifth point, sum total points of Stars in 1 and 3 must be 25. And therefore, sum total points of winning team must be 29.

Cards discarded in first three rounds:

Black cards: 1, 2, 4, 6, 7 and 8
Red cards: 1, 2, 4, 5, 6 and 10

The number cards with the remaining two teams of round 4 must be Black cards 3, 5, 9 and 10 and Red cards 3, 7, 8 and 9.

Using point 8, each team got one 9 and one 3 number card. One of the team got number card 10. Now the forth card with the team having cards 3, 9 and 10 can be 5/7/8. Using point 6, the fourth card with the team having number cards 3, 9 and 10 was not 7. Had it been 5, the total points of each of the two teams would be 27. This violates point 3. Therefore cards with one of the team (i.e., Stars) of round 4 must be 3, 9, 8 and 10, and those with the remaining team must be 3, 9, 7 and 5.

We know Black card 2 was discarded after two rounds. Using condition 6, Diamond got black card 2 in both round 1 and round 2 and got the least points in round 2. Therefore, loser team of round 2 must be Diamonds and hence, Hearts got the highest points in round 3 and lowest points in round 4.

The sum total points of five teams in each round can be tabulated as follows:

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

	Round 1	Round 2		
Spade	16			
Diamond	23	17		
Hearts	20	24	29	24
Stars	25	21	25	30
Club	26	32	23	
	110	**94**	**77**	**54**

Therefore, the required answer is 4.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **83 secs**

Your Attempt: **Skipped**

% Students got it correct: **15 %**

2) What was the sum of the points scored by Hearts in all the rounds of the game that it participated?

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

Video Explanation:

Explanation:

The sum total of all the number cards = 2 × (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10) = 110

Total amount = $100
The amount won by winning team in the rounds 1 to 4 is $10, $20, $30 and $40 respectively.

Round 1:

The total of all the number cards distributed among 5 teams in round 1 = 110
The cards with the team that lost in round 1 were discarded after the round. The discarded cards were Black cards 6 and 7, Red cards 1 and 2. Total points of the loser team = 6 + 7 + 1 + 2 = 16. Now we know the total of four teams in round 1: 16, 20, 25 and 26.
Thus, the total points of the 5th team in round 1 = 110 – 16 – 20 – 25 – 26 = 23.
Therefore, using the first point, it can be concluded that the loser team was neither Clubs not Hearts. From the second point, the loser

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

team was not Stars and from the se...

Thus, the loser team of round 1 mus...

Round 2:

The total points of all the number cards distributed among 4 teams in round 2 = 110 – 16 (total points of the loser team of round 1) = 94.

The discarded cards (i.e., cards with the team having the lowest sum total) were Red card 10, Black cards 4, 2 and 1. Total points of loser team of round 2 = 10 + 4 + 2 + 1 = 17.

Thus the total points of the 4th team in round 2 = 94 – 17 – 21 – 32 = 24.

Round 3:

Total points of all three teams in round 3 = 94 – 17 (total points of loser team of round 2) = 77.

The discarded cards (i.e., cards with the team having the lowest sum total) were Red cards 4, 5 and 6, Black card 8. Total points of the loser team of round 3 = 4 + 5 + 6 + 8 = 23.

Thus, the total points of other two teams in round 3 = 77 – 23 = 54.

Now the number cards of these two teams will be distributed in round 4. Thus, the total points of two teams in round 4 is also 54.

Now, the following table can be made:

Round 1	Round 2	Round 3	Round 4
16	17	23	
20	21		
23	24		
25	32		
26			
110	**94**	**77**	**54**

As amount won by winning teams was $10, $20, $30 and $40, using points 4 and 5, it can be concluded that Stars won round 4 and Clubs won round 1 and round 2. Therefore winner of round 3 was Hearts or Diamonds. Therefore, sum total points of Stars in round 3 must be greater than 23. Again using the fifth point, sum total points of Stars in 1 and 3 must be 25. And therefore, sum total points of winning team must be 29.

Cards discarded in first three rounds:

Black cards: 1, 2, 4, 6, 7 and 8

Red cards: 1, 2, 4, 5, 6 and 10

The number cards with the remaining two teams of round 4 must be Black cards 3, 5, 9 and 10 and Red cards 3, 7, 8 and 9.

Using point 8, each team got one 9 and one 3 number card. One of the team got number card 10. Now the forth card with the team having cards 3, 9 and 10 can be 5/7/8. Using point 6, the fourth card with the team having number cards 3, 9 and 10 was not 7. Had it been 5, the total points of each of the two teams would be 27. This violates point 3. Therefore cards with one of the team (i.e., Stars) of round 4 must be 3, 9, 8 and 10, and those with the remaining team must be 3, 9, 7 and 5.

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

Change Section here

We know Black card 2 was discarde[illegible]
condition 6, Diamond got black card
and got the least points in round 2. Therefore, loser team of round 2 must be Diamonds and hence, Hearts got the highest points in round 3 and lowest points in round 4.

The sum total points of five teams in each round can be tabulated as follows:

	Round 1	Round 2	Round 3	Round 4
Spade	16			
Diamond	23	17		
Hearts	20	24	29	24
Stars	25	21	25	30
Club	26	32	23	
	110	**94**	**77**	**54**

20 + 24 + 29 + 24 = 97

Therefore, the required answer is 97.

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **7 secs**

Your Attempt: **Skipped**

% Students got it correct: **3 %**

3) Suppose A = The average points of Clubs in the game.
B = The average points of Stars in the game.

The average points scored by a team in the game

$$= \frac{\text{Total points scored by the team in all the rounds}}{\text{Number of rounds of the game that the team participated in}}$$

Find the absolute difference between A and B.

- 1
- 1.25
- 1.75
- 2

Video Explanation:

Explanation:

The sum total of all the number cards = 2 × (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10) = 110

Total amount = $100

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

The amount won by winning team in [illegible] $30 and $40 respectively.

Round 1:

The total of all the number cards distributed among 5 teams in round 1 = 110

The cards with the team that lost in round 1 were discarded after the round. The discarded cards were Black cards 6 and 7, Red cards 1 and 2. Total points of the loser team = 6 + 7 + 1 + 2 = 16. Now we know the total of four teams in round 1: 16, 20, 25 and 26.

Thus, the total points of the 5th team in round 1 = 110 – 16 – 20 – 25 – 26 = 23.

Therefore, using the first point, it can be concluded that the loser team was neither Clubs not Hearts. From the second point, the loser team was not Stars and from the seventh point, it was not Diamonds. Thus, the loser team of round 1 must be Spades.

Round 2:

The total points of all the number cards distributed among 4 teams in round 2 = 110 – 16 (total points of the loser team of round 1) = 94.

The discarded cards (i.e., cards with the team having the lowest sum total) were Red card 10, Black cards 4, 2 and 1. Total points of loser team of round 2 = 10 + 4 + 2 + 1 = 17.

Thus the total points of the 4th team in round 2 = 94 – 17 – 21 – 32 = 24.

Round 3:

Total points of all three teams in round 3 = 94 – 17 (total points of loser team of round 2) = 77.

The discarded cards (i.e., cards with the team having the lowest sum total) were Red cards 4, 5 and 6, Black card 8. Total points of the loser team of round 3 = 4 + 5 + 6 + 8 = 23.

Thus, the total points of other two teams in round 3 = 77 – 23 = 54.

Now the number cards of these two teams will be distributed in round 4. Thus, the total points of two teams in round 4 is also 54.

Now, the following table can be made:

Round 1	Round 2	Round 3	Round 4
16	17	23	
20	21		
23	24		
25	32		
26			
110	**94**	**77**	**54**

As amount won by winning teams was $10, $20, $30 and $40, using points 4 and 5, it can be concluded that Stars won round 4 and Clubs won round 1 and round 2. Therefore winner of round 3 was Hearts or Diamonds. Therefore, sum total points of Stars in round 3 must be greater than 23. Again using the fifth point, sum total points of Stars in 1 and 3 must be 25. And therefore, sum total points of winning team must be 29.

Cards discarded in first three rounds:

Black cards: 1, 2, 4, 6, 7 and 8

Red cards: 1, 2, 4, 5, 6 and 10

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

The number cards with the remainir

Black cards 3, 5, 9 and 10 and Red cards 3, 7, 8 and 9.

Using point 8, each team got one 9 and one 3 number card. One of the team got number card 10. Now the forth card with the team having cards 3, 9 and 10 can be 5/7/8. Using point 6, the fourth card with the team having number cards 3, 9 and 10 was not 7. Had it been 5, the total points of each of the two teams would be 27. This violates point 3. Therefore cards with one of the team (i.e., Stars) of round 4 must be 3, 9, 8 and 10, and those with the remaining team must be 3, 9, 7 and 5.

We know Black card 2 was discarded after two rounds. Using condition 6, Diamond got black card 2 in both round 1 and round 2 and got the least points in round 2. Therefore, loser team of round 2 must be Diamonds and hence, Hearts got the highest points in round 3 and lowest points in round 4.

The sum total points of five teams in each round can be tabulated as follows:

	Round 1	Round 2	Round 3	Round 4
Spade	16			
Diamond	23	17		
Hearts	20	24	29	24
Stars	25	21	25	30
Club	26	32	23	
	110	**94**	**77**	**54**

$$A = \frac{26 + 32 + 23}{3} = 27$$

$$B = \frac{25 + 21 + 25 + 30}{4} = 25.25$$

The absolute difference between A and B = 27 – 25.25 = 1.75

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

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

Your Attempt: **Skipped**

% Students got it correct: **48 %**

4) Which team among the following participated in the least number of rounds in the game?

- Spades
- Diamonds

Hearts
Clubs

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

Video Explanation:

Explanation:

The sum total of all the number cards = 2 × (1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + 10) = 110

Total amount = $100
The amount won by winning team in the rounds 1 to 4 is $10, $20, $30 and $40 respectively.

Round 1:
The total of all the number cards distributed among 5 teams in round 1 = 110
The cards with the team that lost in round 1 were discarded after the round. The discarded cards were Black cards 6 and 7, Red cards 1 and 2. Total points of the loser team = 6 + 7 + 1 + 2 = 16. Now we know the total of four teams in round 1: 16, 20, 25 and 26.

Thus, the total points of the 5th team in round 1 = 110 – 16 – 20 – 25 – 26 = 23.
Therefore, using the first point, it can be concluded that the loser team was neither Clubs not Hearts. From the second point, the loser team was not Stars and from the seventh point, it was not Diamonds. Thus, the loser team of round 1 must be Spades.

Round 2:
The total points of all the number cards distributed among 4 teams in round 2 = 110 – 16 (total points of the loser team of round 1) = 94.

The discarded cards (i.e., cards with the team having the lowest sum total) were Red card 10, Black cards 4, 2 and 1. Total points of loser team of round 2 = 10 + 4 + 2 + 1 = 17.

Thus the total points of the 4th team in round 2 = 94 – 17 – 21 – 32 = 24.

Round 3:
Total points of all three teams in round 3 = 94 – 17 (total points of loser team of round 2) = 77.
The discarded cards (i.e., cards with the team having the lowest sum total) were Red cards 4, 5 and 6, Black card 8. Total points of the loser team of round 3 = 4 + 5 + 6 + 8 = 23.

Thus, the total points of other two teams in round 3 = 77 – 23 = 54.
Now the number cards of these two teams will be distributed in round 4. Thus, the total points of two teams in round 4 is also 54.

Now, the following table can be made:

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

Round 1	Round 2	Round 3	
16	17	23	
20	21		
23	24		
25	32		
26			
110	**94**	**77**	**54**

As amount won by winning teams was $10, $20, $30 and $40, using points 4 and 5, it can be concluded that Stars won round 4 and Clubs won round 1 and round 2. Therefore winner of round 3 was Hearts or Diamonds. Therefore, sum total points of Stars in round 3 must be greater than 23. Again using the fifth point, sum total points of Stars in 1 and 3 must be 25. And therefore, sum total points of winning team must be 29.

Cards discarded in first three rounds:
Black cards: 1, 2, 4, 6, 7 and 8
Red cards: 1, 2, 4, 5, 6 and 10

The number cards with the remaining two teams of round 4 must be Black cards 3, 5, 9 and 10 and Red cards 3, 7, 8 and 9.

Using point 8, each team got one 9 and one 3 number card. One of the team got number card 10. Now the forth card with the team having cards 3, 9 and 10 can be 5/7/8. Using point 6, the fourth card with the team having number cards 3, 9 and 10 was not 7. Had it been 5, the total points of each of the two teams would be 27. This violates point 3. Therefore cards with one of the team (i.e., Stars) of round 4 must be 3, 9, 8 and 10, and those with the remaining team must be 3, 9, 7 and 5.

We know Black card 2 was discarded after two rounds. Using condition 6, Diamond got black card 2 in both round 1 and round 2 and got the least points in round 2. Therefore, loser team of round 2 must be Diamonds and hence, Hearts got the highest points in round 3 and lowest points in round 4.

The sum total points of five teams in each round can be tabulated as follows:

	Round 1	Round 2	Round 3	Round 4
Spade	16			
Diamond	23	17		
Hearts	20	24	29	24
Stars	25	21	25	30
Club	26	32	23	
	110	**94**	**77**	**54**

Spades participated only in the first round. Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

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

Your Attempt: **Skipped**

Change Section here ▾

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

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

5 teams of 4 members each are required to play the card game, 'Who is the Ace?' There are total 20 cards, 10 red and 10 black number cards with numbers, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10. The cards are distributed randomly to the teams, one card for each member in any round. Each card carries points equal to the number written on the card. For example, number card 2 carries 2 points. The team with the highest sum total of the points of all four members wins. The team with the lowest sum total points of all four members loses and cannot play in round 2. Also the number cards with the loser team of any round are discarded and not distributed in the next round. This way there are four rounds of the game. The team that wins the 4th round is the winner of the game. Each team has to pay $20 at the start of the game and the winners of 1st round, 2nd round, 3rd round and 4th round get prize amount $10, $20, $30 and $40 respectively. The five teams Spades, Diamonds, Stars, Hearts and Clubs played this game and the details of their game is as follows:

Loading...

1. Team Clubs won the first round i.e., round 1. In round 1, team Hearts scored 20 points and two other teams scored 25 and 26 points.
2. In round 2, Stars scored 21 points and one of the other three teams scored 32 points.
3. In each round, points scored by the participating teams were distinct natural numbers.
4. Two teams won equal amount as prize money in the game.
5. In the game, team Stars won higher prize amount than any other team and also scored equal points in round 1 and round 3.
6. No team in the fourth round scored points equal to the points scored by any team in the third round
7. Diamonds got black card 2 in exactly two rounds.
8. No two members of a team got cards bearing same numbers in any round.

The following table shows the cards discarded in each round:

Round no.	Cards discarded
Round 1	Black cards 6 and 7, Red cards 1 and 2
Round 2	Red card 10, Black cards 4, 2 and 1
Round 3	Red cards 4, 5 and 6, Black card 8

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

1) What was the final score of the team 'Lords'?

- 4
- 5
- 7 ✓
- 5 or 7

Video Explanation:

Explanation:

As there were 6 teams and every team played exactly one match against every other team, the number of matches played = ${}^{6}C_{2}$ = 15.

Each team played exactly five matches. Each team lost at least one match. Therefore, no team can have score more than 2 × 4 = 8

Let us disguise the teams by their initial letters i.e. O, B, L, T, A and Y respectively.

Given,

O + B + L = 19 ……(i) Here, B and L had same final score, thus definitely O had an odd final score.

B + L + T = 18 ……(ii)

O + B + L + T + A + Y= 30 = Total final scores of all the teams.

Therefore, we have T + A + Y = 11 ……(iii)

From (i) and (ii), O – T = 1 i.e., T had even final score as O had an odd final score. As the final scores of exactly two teams were even, exactly one more team has even final score. So, this must be either All Stars or Yorkers. Therefore, (A + Y) has to be odd. Hence O, B and L had odd final score.

B and L had the same final score, thus the final score of O, B and L must be 5, 7, 7 in the given order.

The results of 4 matches of T is known, and the score of these 4 matches = 3. Since T's final score must be even, the 5th match of T (against B) must have been resulted in a draw. It can be concluded that T = 4.

Out of total 11 points of T + A + Y = 11; two points need to be accounted for the match between A and Y. If A won this match then the total score of Y must be 4; it violates the condition that exactly two teams had same score. Thus, Y won the match against A. Therefore, the following table shows the total points of each team.

	O	B	L	T	A	Y
	Odd	Odd	Odd	Even	Odd	Even
Case A	5	7	7	4	1	6

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

Since each team lost at least one match, Buccaneers must have lost against L or O. If they lost against both, their score would be more than 5 which is not possible. So, B lost against L and won against O. Therefore, the match between O and L must have been resulted in a tie.

The other values in the table can be filled accordingly. We get the final table as follows:

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers	Final Score
Outback Vipers	-	0	1	0	2	2	5
Buccaneers	2	-	0	1	2	2	7
Lords	1	2	-	2	2	0	7
The Gurus	2	1	0	-	1	0	4
All Stars	0	0	0	1	-	0	1
Yorkers	0	0	2	2	2	-	6

The final score or the team 'Lords' was 7. Hence, [3].

Correct Answer:

Time taken by you: **547 secs**

Avg Time taken by all students: **624 secs**

Your Attempt: **Correct**

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

2) Against which of the teams did 'Buccaneers' lose its match?

- Outback Vipers
- Lords
- The Gurus
- More than one of the above ✘

Video Explanation:

Explanation:

As there were 6 teams and every team played exactly one match against every other team, the number of matches played = $^6C_2 = 15$.

Each team played exactly five matches. Each team lost at least one match. Therefore, no team can have score more than $2 \times 4 = 8$

Let us disguise the teams by their initial letters i.e. O, B, L, T, A and Y respectively.

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

Given,

O + B + L = 19 ……(i) Here, [illegible] thus definitely O had an odd final score.

B + L + T = 18 ……(ii)

O + B + L + T + A + Y= 30 = Total final scores of all the teams.

Therefore, we have T + A + Y = 11 ……(iii)

From (i) and (ii), O – T = 1 i.e., T had even final score as O had an odd final score. As the final scores of exactly two teams were even, exactly one more team has even final score. So, this must be either All Stars or Yorkers. Therefore, (A + Y) has to be odd. Hence O, B and L had odd final score.

B and L had the same final score, thus the final score of O, B and L must be 5, 7, 7 in the given order.

The results of 4 matches of T is known, and the score of these 4 matches = 3. Since T's final score must be even, the 5th match of T (against B) must have been resulted in a draw. It can be concluded that T = 4.

Out of total 11 points of T + A + Y = 11; two points need to be accounted for the match between A and Y. If A won this match then the total score of Y must be 4; it violates the condition that exactly two teams had same score. Thus, Y won the match against A. Therefore, The following table shows the total points of each team.

	O	B	L	T	A	Y
	Odd	Odd	Odd	Even	Odd	Even
Case A	5	7	7	4	1	6

Since each team lost at least one match, Buccaneers must have lost against L or O. If they lost against O, the final score of O would be more than 5 which is not possible. So, B lost against L and won against O. Therefore, the match between O and L must have been resulted in a tie.

The other values in the table can be filled accordingly. We get the final table as follows:

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers	Final Score
Outback Vipers	-	0	1	0	2	2	5
Buccaneers	2	-	0	1	2	2	7
Lords	1	2	-	2	2	0	7
The Gurus	2	1	0	-	1	0	4
All Stars	0	0	0	1	-	0	1
Yorkers	0	0	2	2	2	-	6

'Buccaneers' lost match against 'Lords'. Hence, [2].

Correct Answer: ⌄

Avg Time taken by all students

Change Section here

Your Attempt: **Wrong**

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

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

3) How many matches in the tournament resulted in a draw? ***Mark '0' if your answer is cannot be determined.***

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

2

Video Explanation:

Explanation:

As there were 6 teams and every team played exactly one match against every other team, the number of matches played = ${}^{6}C_{2}$ = 15.

Each team played exactly five matches. Each team lost at least one match. Therefore, no team can have score more than 2 × 4 = 8

Let us disguise the teams by their initial letters i.e. O, B, L, T, A and Y respectively.

Given,

O + B + L = 19 ……(i) Here, B and L had same final score, thus definitely O had an odd final score.

B + L + T = 18 ……(ii)

O + B + L + T + A + Y= 30 = Total final scores of all the teams.

Therefore, we have T + A + Y = 11 ……(iii)

From (i) and (ii), O – T = 1 i.e., T had even final score as O had an odd final score. As the final scores of exactly two teams were even, exactly one more team has even final score. So, this must be either All Stars or Yorkers. Therefore, (A + Y) has to be odd. Hence O, B and L had odd final score.

B and L had the same final score, thus the final score of O, B and L must be 5, 7, 7 in the given order.

The results of 4 matches of T is known, and the score of these 4 matches = 3. Since T's final score must be even, the 5^{th} match of T (against B) must have been resulted in a draw. It can be concluded that T = 4.

Out of total 11 points of T + A + Y = 11; two points need to be accounted for the match between A and Y. If A won this match then the total score of Y must be 4; it violates the condition that

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

Previous Next Exit Review

Change Section here

exactly two teams had same score. Thus, Y won the match against A. Therefore, The follow
of each team.

	O	B	L	T	A	Y
	Odd	Odd	Odd	Even	Odd	Even
Case A	5	7	7	4	1	6

Since each team lost at least one match, Buccaneers must have lost against L or O. If they lost against O, the final score of O would be more than 5 which is not possible. So, B lost against L and won against O. Therefore, the match between O and L must have been resulted in a tie.

The other values in the table can be filled accordingly. We get the final table as follows:

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers	Final Score
Outback Vipers	-	0	1	0	2	2	5
Buccaneers	2	-	0	1	2	2	7
Lords	1	2	-	2	2	0	7
The Gurus	2	1	0	-	1	0	4
All Stars	0	0	0	1	-	0	1
Yorkers	0	0	2	2	2	-	6

Three matches resulted in a draw.

Therefore, the required answer is 3.

Correct Answer:

Time taken by you: **7 secs**

Avg Time taken by all students: **39 secs**

Your Attempt: **Wrong**

% Students got it correct: **33 %**

4) How many matches did the team 'All Stars' lose in all?
Mark '6' if the answer cannot be determined.

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

3

Video Explanation:

Explanation:

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

As there were 6 teams and eve match against every other team, the number of matches played = ${}^6C_2 = 15$.

Each team played exactly five matches. Each team lost at least one match. Therefore, no team can have score more than $2 \times 4 = 8$

Let us disguise the teams by their initial letters i.e. O, B, L, T, A and Y respectively.

Given,

O + B + L = 19 ……(i) Here, B and L had same final score, thus definitely O had an odd final score.

B + L + T = 18 ……(ii)

O + B + L + T + A + Y= 30 = Total final scores of all the teams.

Therefore, we have T + A + Y = 11 ……(iii)

From (i) and (ii), O – T = 1 i.e., T had even final score as O had an odd final score. As the final scores of exactly two teams were even, exactly one more team has even final score. So, this must be either All Stars or Yorkers. Therefore, (A + Y) has to be odd. Hence O, B and L had odd final score.

B and L had the same final score, thus the final score of O, B and L must be 5, 7, 7 in the given order.

The results of 4 matches of T is known, and the score of these 4 matches = 3. Since T's final score must be even, the 5^{th} match of T (against B) must have been resulted in a draw. It can be concluded that T = 4.

Out of total 11 points of T + A + Y = 11; two points need to be accounted for the match between A and Y. If A won this match then the total score of Y must be 4; it violates the condition that exactly two teams had same score. Thus, Y won the match against A. Therefore, The following table shows the total points of each team.

	O	B	L	T	A	Y
	Odd	Odd	Odd	Even	Odd	Even
Case A	5	7	7	4	1	6

Since each team lost at least one match, Buccaneers must have lost against L or O. If they lost against O, the final score of O would be more than 5 which is not possible. So, B lost against L and won against O. Therefore, the match between O and L must have been resulted in a tie.

The other values in the table can be filled accordingly. We get the final table as follows:

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

Six teams namely Outback Vipers, Buccaneers, Lords, The Gurus, All Stars and Yorkers participated in the Street Cricket Champions tournament. Every team played against every other team exactly once in the tournament. 2 points were awarded for a win while no point was awarded for a loss. In case of a tie both the teams were awarded 1 point each. At the end of the tournament, the sum of the points of Buccaneers, Outback Vipers, and Lords was 19, while that of Buccaneers, The Gurus and Lords was 18.
The table below gives partial information about the results of the matches in the tournament –

	Outback Vipers	Buccaneers	Lords	The Gurus	All Stars	Yorkers
Outback Vipers	-				Won	Won
Buccaneers		-				
Lords			-	Won	Won	
The Gurus	Won			-		
All Stars				Draw	-	
Yorkers			Won	Won		-

As per the table 'The Gurus' won its match against 'Outback Vipers' and so on.

Additionally, the following points are known:

1. The total scores of exactly two teams were even.
2. At least one team out of All Stars and Yorkers had an even total score.
3. There was exactly one pair of teams that had equal total score and that pair was Buccaneers and Lords.
4. Each team lost at least one match in the tournament.

	Outback Vipers	Buccaneers					
Outback Vipers	-	0	1	0	2	2	5
Buccaneers	2	-	0	1	2	2	7
Lords	1	2	-	2	2	0	7
The Gurus	2	1	0	-	1	0	4
All Stars	0	0	0	1	-	0	1
Yorkers	0	0	2	2	2	-	6

'All Stars' lost total 4 matches.
Therefore, the required answer is 4.

Correct Answer:

Time taken by you: **11 secs**

Avg Time taken by all students: **11 secs**

Your Attempt: **Wrong**

% Students got it correct: **20 %**

Loading...

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.

We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.

Further,

1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

1) How many different combinations of first names-surnames are possible for the given 8 people?

- 1
- 2
- 4
- 8

Video Explanation:

Explanation:

The N.E. of the given first names in ascending order are 1, 4, 7, 10, 13, 16, 19 and 22. It is given that the differences between the N.E. of the first names of each couple for all the couples are distinct odd multiples of 3. By trial and error it can be observed that this is possible only when the pairs are 1-22, 4-19, 10-13, and 7-16 having differences as 21, 15, 3, and 9 respectively.

Thus, the couples have the first names as: **Andy - Vince, Drake - Sacha, Jules - Micah, and Gray –Phoenix**, with the first name in each pair being a male.

The N.E. of the given surnames names in ascending order are 2, 5, 7, 10, 11, 16, 23, and 24. It is given that the differences between the N.E. of the surnames of each couple for all the couples are distinct prime numbers. We know that Drake Gopalan and Andy Kalra are male members. N.E. of Kalra = 11. So the corresponding N.E. of surname of the female in the couple should be 16 or 24. As N. E. of Gopalan = 7, corresponding N.E. of surname of the female in the couple should be 10 or 24

Case (i): Assume that Andy Kalra and Vince Xavier form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).

Therefore, (1, 11) & (22, 24) ⇒ Difference of N.E. = 24 – 11 = 13. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 (i.e., Sacha Jindal) with difference between N.E. of surnames = 3. Now N.E. of remaining surnames: 2, 5, 16 and 23. From condition (2), 23 can form a pair with 16. But then Difference between N.E. of remaining surnames = 3 which is same as that of Gopalan and Jindal. Thus, this case is not valid.

Case (ii): Assume that Andy Kalra and Vince Parmar form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.
We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.
Further,
1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

Therefore, (1, 11) & (22, 16) => Difference of N.E. = 16 – 11 = 5. Therefore N.E. of surname Drake Gopalan, (4, 7) must be 10 or 24(i.e., Sacha Jindal) with difference between N.E. of surnames = 3 or 17.

Case (iia): Drake Gopalan(4, 7) and Sacha Jindal(19, 10) form a couple. Difference = 10 – 7 = 3.

Now N.E. of remaining surnames: 2, 5, 23 and 24. From condition (2), 23 cannot form a pair with anyone. Thus, this case is not valid.

Case (iib): Drake Gopalan(4, 7) and Sacha Xavier(19, 24) form a couple. Difference = 24 – 7 = 17. Now N.E. of remaining surnames: 2, 5, 10 and 23. From condition (2), 23 forms a pair with 10 and 5 can form a pair with 2.

Jules cannot have the surnames Jindal as the letter 'J' gets repeated.

The final table will be as follows:

Male	Female
Andy Kalra	Vince Parmar
Drake Gopalan	Sacha Xavier
Gray Jindal	Phoenix Wadhwa
Jules Bhatnagar	Micah Engle

Hence, [1].

Correct Answer:

Time taken by you: **442 secs**

Avg Time taken by all students: **131 secs**

Your Attempt: **Skipped**

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

2) Sacha's surname is _____

- Engle
- Parmar
- Wadhwa
- Xavier

Video Explanation:

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.
We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.
Further,
1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

Explanation:

The N.E. of the given first names in ascending order are 1, 4, 7, 10, 13, 16, 19 and 22. It is given that the differences between the N.E. of the first names of each couple for all the couples are distinct odd multiples of 3. By trial and error it can be observed that this is possible only when the pairs are 1-22, 4-19, 10-13, and 7-16 having differences as 21, 15, 3, and 9 respectively.

Thus, the couples have the first names as: **Andy - Vince, Drake - Sacha, Jules - Micah, and Gray –Phoenix**, with the first name in each pair being a male.

The N.E. of the given surnames names in ascending order are 2, 5, 7, 10, 11, 16, 23, and 24. It is given that the differences between the N.E. of the surnames of each couple for all the couples are distinct prime numbers. We know that Drake Gopalan and Andy Kalra are male members. N.E. of Kalra = 11. So the corresponding N.E. of surname of the female in the couple should be 16 or 24. As N. E. of Gopalan = 7, corresponding N.E. of surname of the female in the couple should be 10 or 24

Case (i): Assume that Andy Kalra and Vince Xavier form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).
Therefore, (1, 11) & (22, 24) ⇒ Difference of N.E. = 24 – 11 = 13. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 (i.e., Sacha Jindal) with difference between N.E. of surnames = 3. Now N.E. of remaining surnames: 2, 5, 16 and 23. From condition (2), 23 can form a pair with 16. But then Difference between N.E. of remaining surnames = 3 which is same as that of Gopalan and Jindal. Thus, this case is not valid.

Case (ii): Assume that Andy Kalra and Vince Parmar form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).
Therefore, (1, 11) & (22, 16) ⇒ Difference of N.E. = 16 – 11 = 5. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 or 24(i.e., Sacha Jindal) with difference between N.E. of surnames = 3 or 17.

Case (iia): Drake Gopalan(4, 7) and Sacha Jindal(19, 10) form a couple. Difference = 10 – 7 = 3.

Now N.E. of remaining surnames: 2, 5, 23 and 24. From condition (2), 23 cannot form a pair with anyone. Thus, this case is not valid.

Case (iib): Drake Gopalan(4, 7) and Sacha Xavier(19, 24) form a couple. Difference = 24 – 7 = 17. Now N.E. of remaining surnames: 2, 5, 10 and 23. From condition (2), 23 forms a pair with 10 and 5 can form a pair with 2.

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.
We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.
Further,
1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

Jules cannot have the surnam repeated.

The final table will be as follows:

Male	Female
Andy Kalra	Vince Parmar
Drake Gopalan	Sacha Xavier
Gray Jindal	Phoenix Wadhwa
Jules Bhatnagar	Micah Engle

Hence, [4].

Correct Answer: ⌄

Time taken by you: **0 secs**

Avg Time taken by all students: **176 secs**

Your Attempt: **Skipped**

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

3) Which of the following is the correct pair of people who form a couple?

- Vince Parmar – Andy Kalra
- Jules Bhatnagar – Phoenix Wadhwa
- Gray Jindal – Sacha Parmar
- More than one of the above

Video Explanation: ⌄

Explanation: ⌄

The N.E. of the given first names in ascending order are 1, 4, 7, 10, 13, 16, 19 and 22. It is given that the differences between the N.E. of the first names of each couple for all the couples are distinct odd multiples of 3. By trial and error it can be observed that this is possible only when the pairs are 1-22, 4-19, 10-13, and 7-16 having differences as 21, 15, 3, and 9 respectively.

Thus, the couples have the first names as: **Andy - Vince, Drake - Sacha, Jules - Micah, and Gray –Phoenix**, with the first name in each pair being a male.

The N.E. of the given surnames names in ascending order are 2, 5, 7, 10, 11, 16, 23, and 24. It is given that the differences between the N.E. of the surnames of each couple for all the couples are distinct prime numbers. We know that Drake

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.
We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.
Further,
1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

Gopalan and Andy Kalra are male members. N.E. of Kalra = 11. So the corresponding N.E. couple should be 16 or 21. As N. E. of Gopalan = 7, corresponding N.E. of surname of the female in the couple should be 10 or 24

Case (i): Assume that Andy Kalra and Vince Xavier form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).
Therefore, (1, 11) & (22, 24) ⇒ Difference of N.E. = 24 – 11 = 13. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 (i.e., Sacha Jindal) with difference between N.E. of surnames = 3. Now N.E. of remaining surnames: 2, 5, 16 and 23. From condition (2), 23 can form a pair with 16. But then Difference between N.E. of remaining surnames = 3 which is same as that of Gopalan and Jindal. Thus, this case is not valid.

Case (ii): Assume that Andy Kalra and Vince Parmar form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).
Therefore, (1, 11) & (22, 16) ⇒ Difference of N.E. = 16 – 11 = 5. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 or 24(i.e., Sacha Jindal) with difference between N.E. of surnames = 3 or 17.

Case (iia): Drake Gopalan(4, 7) and Sacha Jindal(19, 10) form a couple. Difference = 10 – 7 = 3.
Now N.E. of remaining surnames: 2, 5, 23 and 24. From condition (2), 23 cannot form a pair with anyone. Thus, this case is not valid.

Case (iib): Drake Gopalan(4, 7) and Sacha Xavier(19, 24) form a couple. Difference = 24 – 7 = 17. Now N.E. of remaining surnames: 2, 5, 10 and 23. From condition (2), 23 forms a pair with 10 and 5 can form a pair with 2.

Jules cannot have the surnames Jindal as the letter ‘J’ gets repeated.

The final table will be as follows:

Male	Female
Andy Kalra	Vince Parmar
Drake Gopalan	Sacha Xavier
Gray Jindal	Phoenix Wadhwa
Jules Bhatnagar	Micah Engle

Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all studen

Change Section here ▼

Your Attempt: **Skipped**

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

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.
We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.
Further,
1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

4) The surname 'Bhatnagar' belongs to _____

- Micah
- Andy
- Jules
- Cannot be determined

Video Explanation:

Explanation:

The N.E. of the given first names in ascending order are 1, 4, 7, 10, 13, 16, 19 and 22. It is given that the differences between the N.E. of the first names of each couple for all the couples are distinct odd multiples of 3. By trial and error it can be observed that this is possible only when the pairs are 1-22, 4-19, 10-13, and 7-16 having differences as 21, 15, 3, and 9 respectively.

Thus, the couples have the first names as: **Andy - Vince, Drake - Sacha, Jules - Micah, and Gray –Phoenix**, with the first name in each pair being a male.

The N.E. of the given surnames names in ascending order are 2, 5, 7, 10, 11, 16, 23, and 24. It is given that the differences between the N.E. of the surnames of each couple for all the couples are distinct prime numbers. We know that Drake Gopalan and Andy Kalra are male members. N.E. of Kalra = 11. So the corresponding N.E. of surname of the female in the couple should be 16 or 24. As N. E. of Gopalan = 7, corresponding N.E. of surname of the female in the couple should be 10 or 24

Case (i): Assume that Andy Kalra and Vince Xavier form a couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).
Therefore, (1, 11) & (22, 24) ⇒ Difference of N.E. = 24 – 11 = 13. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 (i.e., Sacha Jindal) with difference between N.E. of surnames = 3. Now N.E. of remaining surnames: 2, 5, 16 and 23. From condition (2), 23 can form a pair with 16. But then Difference between N.E. of remaining surnames = 3 which is same as that of Gopalan and Jindal. Thus, this case is not valid.

Case (ii): Assume that Andy Kalra and Vince Parmar form a

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

There is a group of 8 people with first names - Micah, Phoenix, Sacha, Vince, Jules, Drake, Gray and Andy having surnames – Bhatnagar, Kalra, Xavier, Engle, Wadhwa, Parmar, Jindal and Gopalan, not necessarily in the same order. These 8 members form 4 couples and it is known that all members retained their original surnames after marriage. No person and his/her spouse have surnames having the same initial letters as their first names i.e. say if Micah and Phoenix form a couple, neither Micah nor Phoenix have a surname starting with the letters M or P.
We define N.E. as the Numerical Equivalent of a name or surname = The position of the first letter of that name or surname in the English Alphabet. e. g. N.E. of Andy = 1, Bhatnagar = 2, Drake = 4 and so on because A, B and D are at positions 1, 2 and 4 respectively in the English Alphabet.
Further,
1. The absolute differences between the N.E. of the first names of husband and wife in each couple are distinct odd multiples of 3.
2. The absolute differences between the N.E. of the surnames of husband and wife in each couple are distinct prime numbers.
3. In each couple, husband has lower N.E. of both his name as well as surname than his wife
4. Drake Gopalan and Andy Kalra are males.

couple. Let us denote N.E. of the full name Andy Kalra by (1, 11).
Therefore, (1, 11) & (22, 16) ⇒ Difference of N.E. = 16 – 11 = 5. Therefore N.E. of surname of Sacha who forms a pair with Drake Gopalan, (4, 7) must be 10 or 24(i.e., Sacha Jindal) with difference between N.E. of surnames = 3 or 17.

Case (iia): Drake Gopalan(4, 7) and Sacha Jindal(19, 10) form a couple. Difference = 10 – 7 = 3.
Now N.E. of remaining surnames: 2, 5, 23 and 24. From condition (2), 23 cannot form a pair with anyone. Thus, this case is not valid.

Case (iib): Drake Gopalan(4, 7) and Sacha Xavier(19, 24) form a couple. Difference = 24 – 7 = 17. Now N.E. of remaining surnames: 2, 5, 10 and 23. From condition (2), 23 forms a pair with 10 and 5 can form a pair with 2.

Jules cannot have the surnames Jindal as the letter 'J' gets repeated.
The final table will be as follows:

Male	Female
Andy Kalra	Vince Parmar
Drake Gopalan	Sacha Xavier
Gray Jindal	Phoenix Wadhwa
Jules Bhatnagar	Micah Engle

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

Avg Time taken by all students: **153 secs**

Your Attempt: **Skipped**

% Students got it correct: **44 %**