

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

Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha’s party while least possible number of guests attended Jenny’s party, which was not on 12th May. 50 guests were common in all the three parties.

1) If the maximum possible number of guests attended exactly two parties, then how many guests attended both Shiji’s and Samantha’s party but not Jenny’s party?

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

Video Explanation: ▼

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

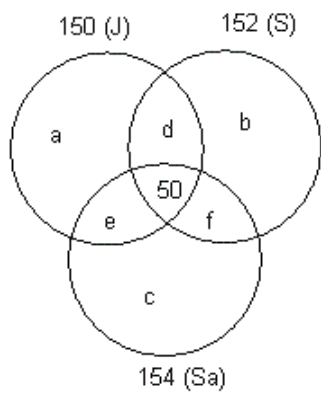
Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha’s party while least possible number of guests attended Jenny’s party, which was not on 12th May. 50 guests were common in all the three parties.

Using the given information, we have the following possible cases:

	Case I	Case II	Case III	Case IV
10th May	148 (J)	152 (S)	154 (Sa)	146 (J)
11th May	150 (S)	150 (J)	150 (J)	150 (Sa)
12th May	152 (Sa)	154 (Sa)	152 (S)	148 (S)

Note: ‘J’ stands for Jenny, ‘S’ stands for Shiji and ‘Sa’ stands for Samantha in the table given above.

To get the maximum number of guests, who attended exactly two parties, we must consider the case II or case III. It is known that 50 guests were common in all the three parties, so now we have to minimize the number of guests who attended exactly one party, i.e. 0.



$d + e = 100$
 $d + f = 102$
 $e + f = 104$
Thus, $2(d + e + f) = 100 + 102 + 104 = 306$
 $d + e + f = 153$.
Since, $d + e = 100$;
Thus, $f = 153 - 100 = 53$
Therefore, the required answer is 53.

Correct Answer: ▼

Time taken by you: 0 secs

Avg Time taken by all students: 17 secs

Your Attempt: Skipped

% Students got it correct: 3 %

2) If the minimum possible number of guests attended exactly two parties, then how many guests attended only Jenny’s party? —

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

Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha’s party while least possible number of guests attended Jenny’s party, which was not on 12th May. 50 guests were common in all the three parties.

- ☐

96
- ☐

98
- ☐

100
- ☐

Cannot be determined

Video Explanation:

▼

Explanation:

▼

Using the given information, we have the following possible cases:

	Case I	Case II	Case III	Case IV
10th May	148 (J)	152 (S)	154 (Sa)	146 (J)
11th May	150 (S)	150 (J)	150 (J)	150 (Sa)
12th May	152 (Sa)	154 (Sa)	152 (S)	148 (S)

Note: ‘J’ stands for Jenny, ‘S’ stands for Shiji and ‘Sa’ stands for Samantha in the table given above.

If the minimum number of guests attended exactly two parties. i.e. 0, then number of guests who attended only Jenny’s party can be (148 – 50) or (150 – 50) or (146 – 50). Thus it can be 98 or 100 or 96.

Hence, [4].

Correct Answer:

▼

Time taken by you: 0 secs

Avg Time taken by all students: 45 secs

Your Attempt: Skipped

% Students got it correct: 30 %

3) Additional information:

—

1. The number of guests who attended both Jenny’s and Samantha’s parties but not Shiji’s party was same as the number of guests who attended both Samantha’s and Shiji’s parties but not Jenny’s party.

Further, among the guests who attended exactly two parties, no guest attended both Shiji’s and Jenny’s parties.

2. Samantha’s party was on 11th May.

If the number of guests who attended both Jenny’s and Samantha’s parties but not Shiji’s party was maximum, then how many guests attended exactly one party?

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

Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha’s party while least possible number of guests attended Jenny’s party, which was not on 12th May. 50 guests were common in all the three parties.

Video Explanation: 

Explanation: 

Using the given information, we have the following possible cases:

	Case I	Case II	Case III	Case IV
10th May	148 (J)	152 (S)	154 (Sa)	146 (J)
11th May	150 (S)	150 (J)	150 (J)	150 (Sa)
12th May	152 (Sa)	154 (Sa)	152 (S)	148 (S)

Note: ‘J’ stands for Jenny, ‘S’ stands for Shiji and ‘Sa’ stands for Samantha in the table given above.

As Samantha’s party was hosted on 11th May; only case IV is valid.

Let the number of guests who attended both Jenny’s and Samantha’s parties but not Shiji’s party and the number of guests who attended both Samantha’s and Shiji’s parties but not Jenny’s party be p.

The number of guests, who attended only Jenny’s party be s.

The number of guests, who attended only Samantha’s party be t.

The number of guests, who attended only Shiji’s party be u.

$s + p = 96$

$u + p = 98$

$t + 2p = 100$

To maximise p, t must be minimum, i.e. 0

Then, $2p = 100$; thus, $p = 50$

Therefore, $s = 46$; $u = 48$

Number of guests, who attended exactly one party = $46 + 48 = 94$

Therefore, the required answer is 94.

Correct Answer: 

Time taken by you: 0 secs

Avg Time taken by all students: 70 secs

Your Attempt: Skipped

% Students got it correct: 26 %

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

Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha’s party while least possible number of guests attended Jenny’s party, which was not on 12th May. 50 guests were common in all the three parties.

4) Additional information

—

1. The number of guests who attended both Jenny’s and Samantha’s parties but not Shiji’s party was same as the number of guests who attended both Samantha’s and Shiji’s parties but not Jenny’s party.
- Further, among the guests who attended exactly two parties, no guest attended both Shiji’s and Jenny’s parties.
2. Samantha’s party was on 11th May.

If the total number of guests who attended at least one of these three parties was 274, then how many guests attended only Shiji’s party?

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

Video Explanation:

▼

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

Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha’s party while least possible number of guests attended Jenny’s party, which was not on 12th May. 50 guests were common in all the three parties.

Using the given information, we have the following possible cases:

	Case I	Case II	Case III	Case IV
10th May	148 (J)	152 (S)	154 (Sa)	146 (J)
11th May	150 (S)	150 (J)	150 (J)	150 (Sa)
12th May	152 (Sa)	154 (Sa)	152 (S)	148 (S)

Note: ‘J’ stands for Jenny, ‘S’ stands for Shiji and ‘Sa’ stands for Samantha in the table given above.

Samantha’s party was hosted on 11th May; only case IV is valid.

Let the number of guests who attended both Jenny’s and Samantha’s parties but not Shiji’s party and the number of guests who attended both Samantha’s and Shiji’s parties but not Jenny’s party be p.

The number of guests, who attended only Jenny’s party be s.

The number of guests, who attended only Samantha’s party be t.

The number of guests, who attended only Shiji’s party be u.

$s + p = 96$

$u + p = 98$

$t + 2p = 100$

$4p + s + u + t = 294 \qquad \dots (i)$

Also given to us : $2p + s + u + t + 50 = 274$

$2p + s + u + t = 224 \qquad \dots (ii)$

Subtracting (ii) from (i)

$p = 35$

The number of guests who attended only Shiji’s party; $u = 148 - 50 - 35 = 63$

Therefore, the required answer is 63.

Correct Answer: 

Time taken by you: 0 secs

Avg Time taken by all students: 42 secs

Your Attempt: Skipped

% Students got it correct: 22 %

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

Loading...

Jenny, Samantha and Shiji hosted their birthday parties on 10th, 11th and 12th May, not necessarily in the same order. The total number of guests, who attended their parties, were three consecutive even numbers. 150 guests attended the party on 11th May. Maximum possible number of guests attended Samantha's party while least possible number of guests attended Jenny's party, which was not on 12th May. 50 guests were common in all the three parties.

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

The tables below give the total marks and the marks in individual subjects (some of which are missing in the second table) scored by five students.

Students	Total marks
Amit	320
Babu	320
Chetan	351
Durga	440
Esha	300

Students	Subjects				
	Mathematics	English	Hindi	Geography	History
Amit					
Babu		50		96	
Chetan					
Durga		82	94		88
Esha	75	50			75
Total	400	272		402	

Listed below are some conditions:

- Maximum marks per subject are 100 and passing marks are 40.
- Each student passed in all the subjects and scored marks only in integer values.
- In 3 subjects, Amit had 3 different scores, that were squares of integers. In Geography and History, he had equal marks and these were not squares of integers.
- Chetan scored 4 marks more in Geography than in Mathematics and 6 marks more in Hindi than in English.
- Amit’s highest score was in Mathematics.
- Babu’s highest score was 96 in Geography. Chetan got more marks in Geography than any other student, which was a prime number.
- Except Mathematics, all scores of Chetan were prime numbers.
- Babu scored equal marks in Hindi and History.
- Esha scored 10 marks more in Geography than in Hindi.

Given these conditions, find the missing data and answer the following questions.

1) —

What is the sum of the marks scored by all the five students in Hindi?

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

314

Video Explanation: ▼

Explanation: ▼

Chetan got more marks in Geography than any other student, which was a prime number.

Therefore, Chetan’s Geography score is a prime number between 96 and 100.

⇒ Chetan’s Geography score = 97

∴ Chetan’s Mathematics score = 97 – 4 = 93

Esha scored 300 – (75 + 50 + 75) = 100 in Hindi and Geography together. For her, Hindi + 10 = Geography

∴ Esha’s score in Hindi = 45 and score in Geography = 55

Since, Amit got 3 different square numbers as scores in Mathematics, English and Hindi, which can be either (49, 64, 81) or (49, 81, 100).

⇒ Amit’s score in Geography = score in History = 63 or 45

If Amit’s score in Geography = 45, then Durga’s score in Geography = 402 – (45 + 96 + 97 + 55) = 109, which is not possible.

∴ Amit’s score in Geography = score in History = 63.

Amit’s highest score was in Mathematics i.e., 81.

If Amit’s score in English would be 64, then Chetan’s score in English < 40

∴ Amit’s scores in English and Hindi were 49 and 64, respectively.

∴ Chetan’s score in English = 272 – (49 + 50 + 82 + 50) = 41 and score in Hindi = 6 + 41 = 47 and score in History = 73

⇒ Durga’s score in Geography = 91 and Mathematics = 85

⇒ Babu’s score in score in Mathematics = 66 and score in Hindi = score in History = 54

The sum of the marks scored by all the five students in Hindi = 304. Therefore the required answer is 304.

Correct Answer: ▼

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

The tables below give the total marks and the marks in individual subjects (some of which are missing in the second table) scored by five students.

Students	Total marks
Amit	320
Babu	320
Chetan	351
Durga	440
Esha	300

Students	Subjects				
	Mathematics	English	Hindi	Geography	History
Amit					
Babu		50		96	
Chetan					
Durga		82	94		88
Esha	75	50			75
Total	400	272		402	

Listed below are some conditions:

- Maximum marks per subject are 100 and passing marks are 40.
- Each student passed in all the subjects and scored marks only in integer values.
- In 3 subjects, Amit had 3 different scores, that were squares of integers. In Geography and History, he had equal marks and these were not squares of integers.
- Chetan scored 4 marks more in Geography than in Mathematics and 6 marks more in Hindi than in English.
- Amit’s highest score was in Mathematics.
- Babu’s highest score was 96 in Geography. Chetan got more marks in Geography than any other student, which was a prime number.
- Except Mathematics, all scores of Chetan were prime numbers.
- Babu scored equal marks in Hindi and History.
- Esha scored 10 marks more in Geography than in Hindi.


Given these conditions, find the missing data and answer the following questions.

Your Attempt: **Wrong**

% Students got it correct: **56 %**

2) —

Among all the students, who scored the maximum marks in Mathematics?

- ☒ Chetan 
- ☐ Amit
- ☐ Durga
- ☐ Cannot be determined

Video Explanation: ▼

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

The tables below give the total marks and the marks in individual subjects (some of which are missing in the second table) scored by five students.

Students	Total marks
Amit	320
Babu	320
Chetan	351
Durga	440
Esha	300

Students	Subjects				
	Mathematics	English	Hindi	Geography	History
Amit					
Babu		50		96	
Chetan					
Durga		82	94		88
Esha	75	50			75
Total	400	272		402	

Listed below are some conditions:

- Maximum marks per subject are 100 and passing marks are 40.
- Each student passed in all the subjects and scored marks only in integer values.
- In 3 subjects, Amit had 3 different scores, that were squares of integers. In Geography and History, he had equal marks and these were not squares of integers.
- Chetan scored 4 marks more in Geography than in Mathematics and 6 marks more in Hindi than in English.
- Amit's highest score was in Mathematics.
- Babu's highest score was 96 in Geography. Chetan got more marks in Geography than any other student, which was a prime number.
- Except Mathematics, all scores of Chetan were prime numbers.
- Babu scored equal marks in Hindi and History.
- Esha scored 10 marks more in Geography than in Hindi.

Given these conditions, find the missing data and answer the following questions.

Chetan got more marks in Geography than any other student, which was a prime number.

Therefore, Chetan's Geography score is a prime number between 96 and 100.

⇒ Chetan's Geography score = 97

∴ Chetan's Mathematics score = 97 – 4 = 93

Esha scored 300 – (75 + 50 + 75) = 100 in Hindi and Geography together. For her, Hindi + 10 = Geography

∴ Esha's score in Hindi = 45 and score in Geography = 55

Since, Amit got 3 different square numbers as scores in Mathematics, English and Hindi, which can be either (49, 64, 81) or (49, 81, 100).

⇒ Amit's score in Geography = score in History = 63 or 45

If Amit's score in Geography = 45, then Durga's score in Geography = 402 – (45 + 96 + 97 + 55) = 109, which is not possible.

∴ Amit's score in Geography = score in History = 63.

Amit's highest score was in Mathematics i.e., 81.

If Amit's score in English would be 64, then Chetan's score in English < 40

∴ Amit's scores in English and Hindi were 49 and 64, respectively.

∴ Chetan's score in English = 272 – (49 + 50 + 82 + 50) = 41 and score in Hindi = 6 + 41 = 47 and score in History = 73

⇒ Durga's score in Geography = 91 and Mathematics = 85

⇒ Babu's score in score in Mathematics = 66 and score in Hindi = score in History = 54

Among all the students, Chetan scored the maximum marks in Mathematics.
Hence, [1].

Correct Answer: ▼

Time taken by you: 61 secs

Avg Time taken by all students: 173 secs

Your Attempt: Correct

% Students got it correct: 72 %

3) —

The difference between Babu and Chetan's scores in History is:

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

The tables below give the total marks and the marks in individual subjects (some of which are missing in the second table) scored by five students.

Students	Total marks
Amit	320
Babu	320
Chetan	351
Durga	440
Esha	300

Students	Subjects				
	Mathematics	English	Hindi	Geography	History
Amit					
Babu		50		96	
Chetan					
Durga		82	94		88
Esha	75	50			75
Total	400	272		402	

Listed below are some conditions:

- Maximum marks per subject are 100 and passing marks are 40.
- Each student passed in all the subjects and scored marks only in integer values.
- In 3 subjects, Amit had 3 different scores, that were squares of integers. In Geography and History, he had equal marks and these were not squares of integers.
- Chetan scored 4 marks more in Geography than in Mathematics and 6 marks more in Hindi than in English.
- Amit's highest score was in Mathematics.
- Babu's highest score was 96 in Geography. Chetan got more marks in Geography than any other student, which was a prime number.
- Except Mathematics, all scores of Chetan were prime numbers.
- Babu scored equal marks in Hindi and History.
- Esha scored 10 marks more in Geography than in Hindi.

Given these conditions, find the missing data and answer the following questions.

11

9

19

23

Video Explanation:

Explanation:

Chetan got more marks in Geography than any other student, which was a prime number.

Therefore, Chetan's Geography score is a prime number between 96 and 100.

⇒ Chetan's Geography score = 97

∴ Chetan's Mathematics score = 97 – 4 = 93

Esha scored 300 – (75 + 50 + 75) = 100 in Hindi and Geography together. For her, Hindi + 10 = Geography

∴ Esha's score in Hindi = 45 and score in Geography = 55

Since, Amit got 3 different square numbers as scores in Mathematics, English and Hindi, which can be either (49, 64, 81) or (49, 81, 100).

⇒ Amit's score in Geography = score in History = 63 or 45

If Amit's score in Geography = 45, then Durga's score in Geography = 402 – (45 + 96 + 97 + 55) = 109, which is not possible.

∴ Amit's score in Geography = score in History = 63.

Amit's highest score was in Mathematics i.e., 81.

If Amit's score in English would be 64, then Chetan's score in English < 40

∴ Amit's scores in English and Hindi were 49 and 64, respectively.

∴ Chetan's score in English = 272 – (49 + 50 + 82 + 50) = 41 and score in Hindi = 6 + 41 = 47 and score in History = 73

⇒ Durga's score in Geography = 91 and Mathematics = 85

⇒ Babu's score in score in Mathematics = 66 and score in Hindi = score in History = 54

The difference between Babu and Chetan's scores in History = 73 – 54 = 19. Hence, [3].

Correct Answer:

Time taken by you: 161 secs

Avg Time taken by all students: 58 secs

Your Attempt: Correct

% Students got it correct: 75 %

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

The tables below give the total marks and the marks in individual subjects (some of which are missing in the second table) scored by five students.

Students	Total marks
Amit	320
Babu	320
Chetan	351
Durga	440
Esha	300

Students	Subjects				
	Mathematics	English	Hindi	Geography	History
Amit					
Babu		50		96	
Chetan					
Durga		82	94		88
Esha	75	50			75
Total	400	272		402	

Listed below are some conditions:

- Maximum marks per subject are 100 and passing marks are 40.
- Each student passed in all the subjects and scored marks only in integer values.
- In 3 subjects, Amit had 3 different scores, that were squares of integers. In Geography and History, he had equal marks and these were not squares of integers.
- Chetan scored 4 marks more in Geography than in Mathematics and 6 marks more in Hindi than in English.
- Amit's highest score was in Mathematics.
- Babu's highest score was 96 in Geography. Chetan got more marks in Geography than any other student, which was a prime number.
- Except Mathematics, all scores of Chetan were prime numbers.
- Babu scored equal marks in Hindi and History.
- Esha scored 10 marks more in Geography than in Hindi.

Given these conditions, find the missing data and answer the following questions.

4) What is Chetan's score in English? —

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

41

Video Explanation: ▼

Explanation: ▼

Chetan got more marks in Geography than any other student, which was a prime number.

Therefore, Chetan's Geography score is a prime number between 96 and 100.

⇒ Chetan's Geography score = 97

∴ Chetan's Mathematics score = $97 - 4 = 93$

Esha scored $300 - (75 + 50 + 75) = 100$ in Hindi and Geography together. For her, $\text{Hindi} + 10 = \text{Geography}$

∴ Esha's score in Hindi = 45 and score in Geography = 55

Since, Amit got 3 different square numbers as scores in Mathematics, English and Hindi, which can be either (49, 64, 81) or (49, 81, 100).

⇒ Amit's score in Geography = score in History = 63 or 45

If Amit's score in Geography = 45, then Durga's score in Geography = $402 - (45 + 96 + 97 + 55) = 109$, which is not possible.

∴ Amit's score in Geography = score in History = 63.

Amit's highest score was in Mathematics i.e., 81.

If Amit's score in English would be 64, then Chetan's score in English < 40

∴ Amit's scores in English and Hindi were 49 and 64, respectively.

∴ Chetan's score in English = $272 - (49 + 50 + 82 + 50) = 41$ and score in Hindi = $6 + 41 = 47$ and score in History = 73

⇒ Durga's score in Geography = 91 and Mathematics = 85

⇒ Babu's score in score in Mathematics = 66 and score in Hindi = score in History = 54

Chetan's score in English is 41. Therefore, the required answer is 41.

Correct Answer: ▼

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

The tables below give the total marks and the marks in individual subjects (some of which are missing in the second table) scored by five students.

Students	Total marks
Amit	320
Babu	320
Chetan	351
Durga	440
Esha	300

Students	Subjects				
	Mathematics	English	Hindi	Geography	History
Amit					
Babu		50		96	
Chetan					
Durga		82	94		88
Esha	75	50			75
Total	400	272		402	

Loading...

Listed below are some conditions:

- Maximum marks per subject are 100 and passing marks are 40.
- Each student passed in all the subjects and scored marks only in integer values.
- In 3 subjects, Amit had 3 different scores, that were squares of integers. In Geography and History, he had equal marks and these were not squares of integers.
- Chetan scored 4 marks more in Geography than in Mathematics and 6 marks more in Hindi than in English.
- Amit's highest score was in Mathematics.
- Babu's highest score was 96 in Geography. Chetan got more marks in Geography than any other student, which was a prime number.
- Except Mathematics, all scores of Chetan were prime numbers.
- Babu scored equal marks in Hindi and History.
- Esha scored 10 marks more in Geography than in Hindi.

Given these conditions, find the missing data and answer the following questions.

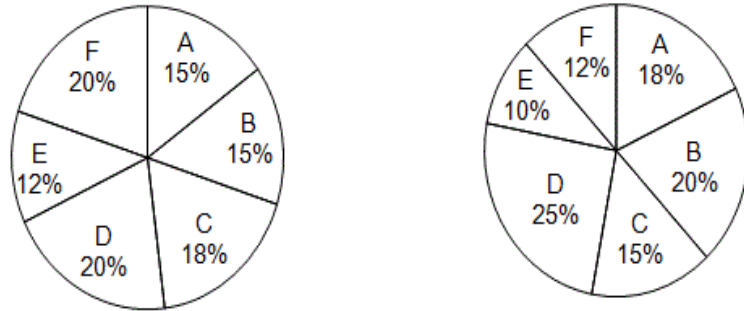
Avg Time taken by all students: 154 secs

Your Attempt: **Correct**

% Students got it correct: **86 %**

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

A, B, C, D, E and F are the only six products sold by a dealer. Pie chart 1 shows the product wise distribution of the total profit earned by him. Pie chart 2 indicates the product wise share of the total sales turnover (value wise). Profit percentage is the profit expressed as a percentage of the sales turnover.



- 1) If the profit percentage on product A is $33\frac{1}{3}\%$, then what is the overall profit percentage of the dealer? —

- ☐ 30
☐ 33
☐ 36
☐ 40

Video Explanation: ✓

Explanation: ✓

From the chart 1, we know that product A has earned 15% of the total profit earned. Also, from chart 2 we know that from product A we get, 18% of the total sales turnover.

Now, given the profit percentage on A = $\frac{100}{3}\%$

Let the overall profit percentage be P.

$$\therefore \frac{15}{18} \times P = \frac{100}{3}$$

$$P = 40\%$$

The overall profit percentage of the dealer = 40%

Hence, [4].

Correct Answer: ✓

Time taken by you: 0 secs

Avg Time taken by all students: 311 secs

Your Attempt: Skipped

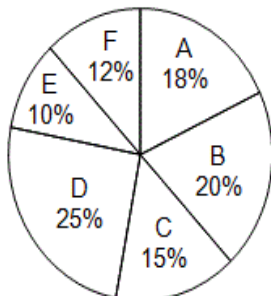
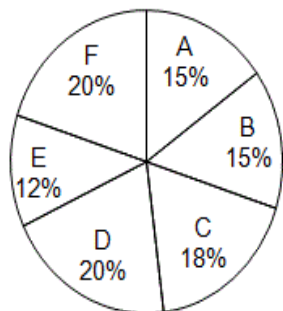
% Students got it correct: 80 %

- 2) —
- For which product is the profit percentage the least?

- ☐ A
☐ B
☐ D
☐ Cannot be determined

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

A, B, C, D, E and F are the only six products sold by a dealer. Pie chart 1 shows the product wise distribution of the total profit earned by him. Pie chart 2 indicates the product wise share of the total sales turnover (value wise). Profit percentage is the profit expressed as a percentage of the sales turnover.



Explanation: ▼

As the profit percentage of a product is directly proportional to ratio of the profit earned by the product to the share of the product in the total sales turnover.

∴ The product with the least profit percentage is B.

Hence, [2].

Correct Answer: ▼

Time taken by you: **0 secs**

Avg Time taken by all students: **95 secs**

Your Attempt: **Skipped**

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

3) —

If the overall profit percentage is 40%, then what is the profit percentage on product D?

- ☐ 32%
- ☐ 28%
- ☐ 24%
- ☐ 20%

Video Explanation: ▼

Explanation: ▼

Let the profit percentage on product D be x.

$$\therefore \frac{20}{25} \times \frac{40}{100} = \frac{x}{100}$$

Which gives x = 32%.

Hence, [1].

Correct Answer: ▼

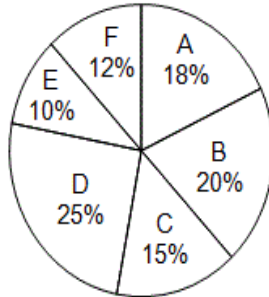
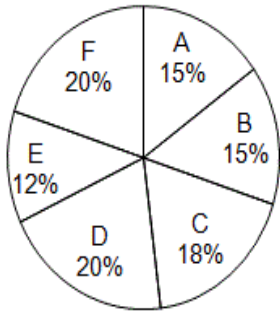
Time taken by you: **0 secs**

Avg Time taken by all students: **65 secs**

Your Attempt: **Skipped**

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

A, B, C, D, E and F are the only six products sold by a dealer. Pie chart 1 shows the product wise distribution of the total profit earned by him. Pie chart 2 indicates the product wise share of the total sales turnover (value wise). Profit percentage is the profit expressed as a percentage of the sales turnover.



4) What is the ratio of profit percent of C to the profit percent of E?

- ☐ 3 : 2
- ☐ 6 : 5
- ☐ 1 : 1
- ☐ Cannot be determined

Video Explanation: ▼

Explanation: ▼

$$\text{Profit percent on C} = \frac{18x}{15y} = \frac{6x}{5y}$$

$$\text{Profit percent on E} = \frac{12x}{10y} = \frac{6x}{5y}$$

∴ Required ratio = 1 : 1.

Hence, [3].

Correct Answer: ▼

Time taken by you: 0 secs

Avg Time taken by all students: 55 secs

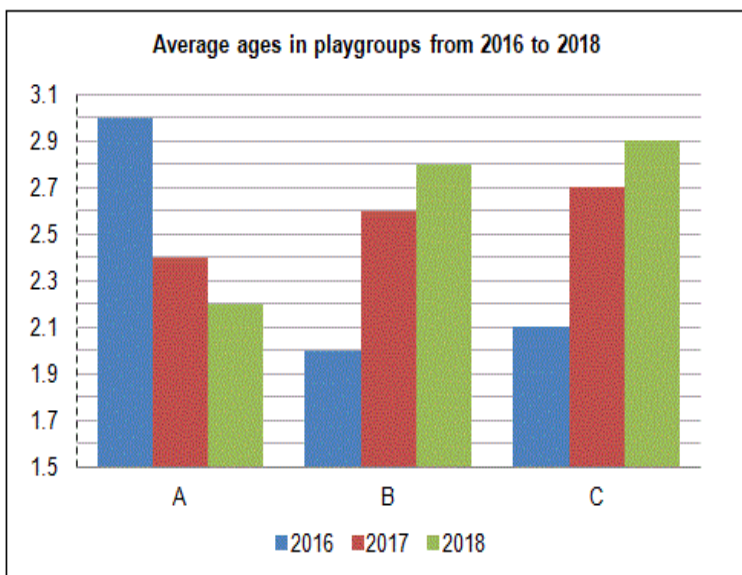
Your Attempt: Skipped

% Students got it correct: 72 %

Loading...

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



1) In playgroup A, in 2016, what was the total number _ of children aged less than or equal to 2 years?

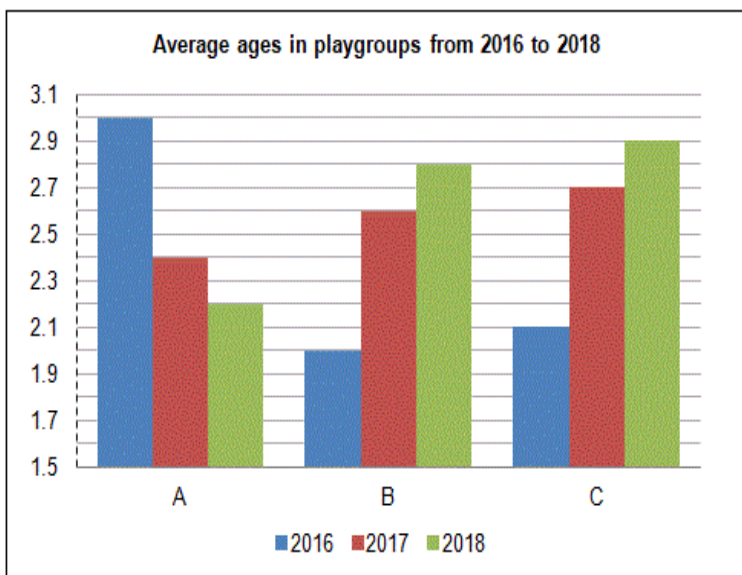
- ☐ 4
- ☐ 3
- ☐ 2
- ☐ 1

Video Explanation:



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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



It is given that all the classrooms were full to capacity in the given years.

∴ Number of children leaving the playgroups = Number of children admitted.

Thus, for any of the given year we can get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	a	b	c	d	d	a	b	c	c	d	a	b
B	p	q	r	s	s	p	q	r	r	s	p	q
C	w	x	y	z	z	w	x	y	y	z	w	x

Where a, b, c, d, p, q, r, s, w, x, y and z are the number of children in the given playgroup in the given year.

For A, in 2016, $a + 2b + 3c + 4d = 30$... (I)

For A, in 2017, $d + 2a + 3b + 4c = 24$... (II)

Subtract I from II, we get:

$$a + b + c - 3d = -6$$

But, $a + b + c + d = 10$ (capacity of playgroup A) ... (III)

$$\therefore 4d = 16 \Rightarrow d = 4$$

Similarly, we can find 'c' by considering the years 2017 and 2018.

$$\therefore c = 3$$

$$\therefore a + b = 3 \quad \text{from (III)}$$

$$\& a + 2b = 5 \quad \text{from (I)}$$

Solving we get: $a = 1$ and $b = 2$.

Similarly, we find p, q, r, s, w, x, y and z and get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	1	2	3	4	4	1	2	3	3	4	1	2
B	8	6	4	2	2	8	6	4	4	2	8	6
C	9	12	6	3	3	9	12	6	6	3	9	12

Total number of children aged less than or equal to 2 years in playgroup A = $1 + 2 = 3$.

Hence, [2].

Correct Answer:

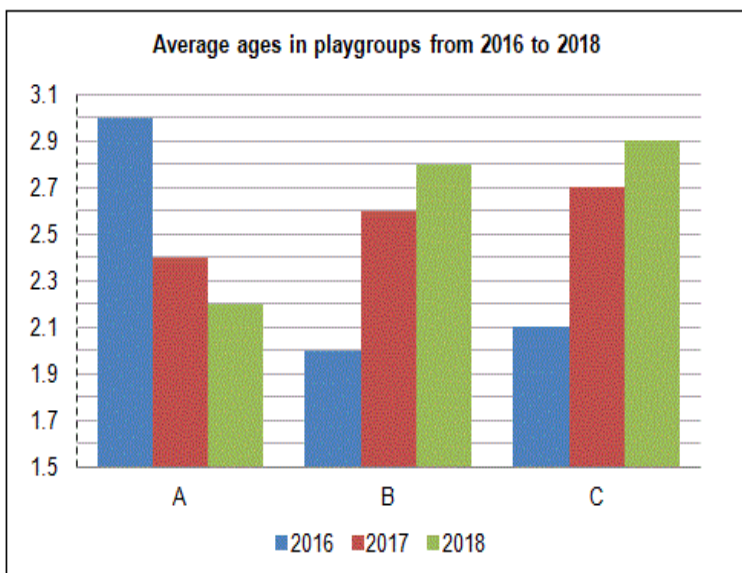
Time taken by you: **0 secs**

Avg Time taken by all students: **204 secs**

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

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



2) What was the total number of children aged 3 years _ in the year 2017 in the playgroup B?

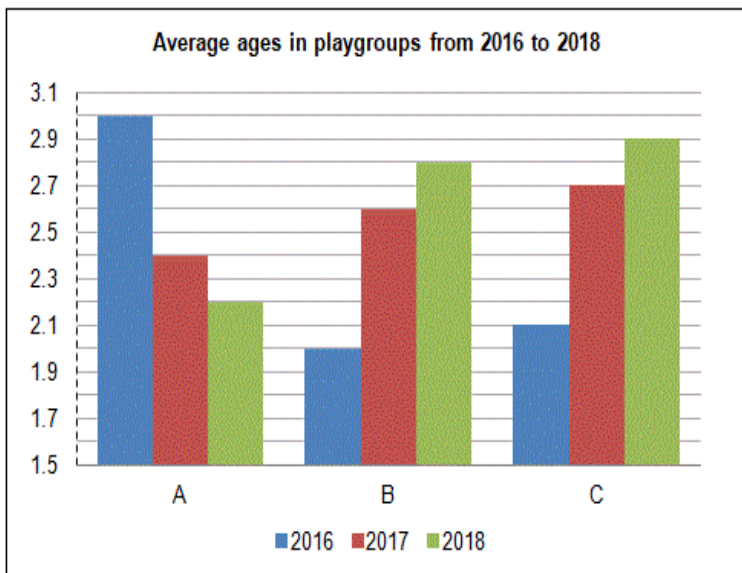
- ☐ 6
- ☐ 8
- ☐ 12
- ☐ Cannot be determined

Video Explanation:



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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



It is given that all the classrooms were full to capacity in the given years.

∴ Number of children leaving the playgroups = Number of children admitted.

Thus, for any of the given year we can get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	a	b	c	d	d	a	b	c	c	d	a	b
B	p	q	r	s	s	p	q	r	r	s	p	q
C	w	x	y	z	z	w	x	y	y	z	w	x

Where a, b, c, d, p, q, r, s, w, x, y and z are the number of children in the given playgroup in the given year.

For A, in 2016, $a + 2b + 3c + 4d = 30$... (I)

For A, in 2017, $d + 2a + 3b + 4c = 24$... (II)

Subtract I from II, we get:

$$a + b + c - 3d = -6$$

But, $a + b + c + d = 10$ (capacity of playgroup A) ... (III)

$$\therefore 4d = 16 \Rightarrow d = 4$$

Similarly, we can find 'c' by considering the years 2017 and 2018.

$$\therefore c = 3$$

$$\therefore a + b = 3 \quad \text{from (III)}$$

$$\& a + 2b = 5 \quad \text{from (I)}$$

Solving we get: $a = 1$ and $b = 2$.

Similarly, we find p, q, r, s, w, x, y and z and get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	1	2	3	4	4	1	2	3	3	4	1	2
B	8	6	4	2	2	8	6	4	4	2	8	6
C	9	12	6	3	3	9	12	6	6	3	9	12

In 2017, in playgroup B, the number children aged 3 years was 6. Hence, [1].

Correct Answer:

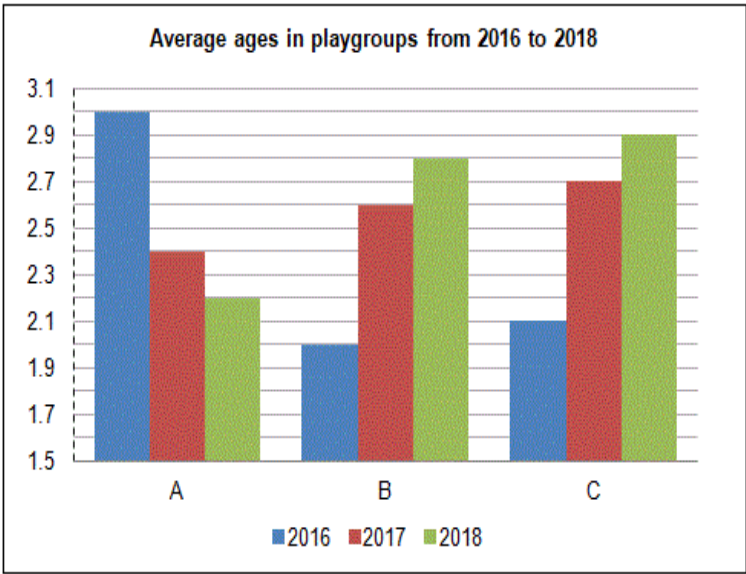
Time taken by you: **0 secs**

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

Your Attempt: **Skipped**

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



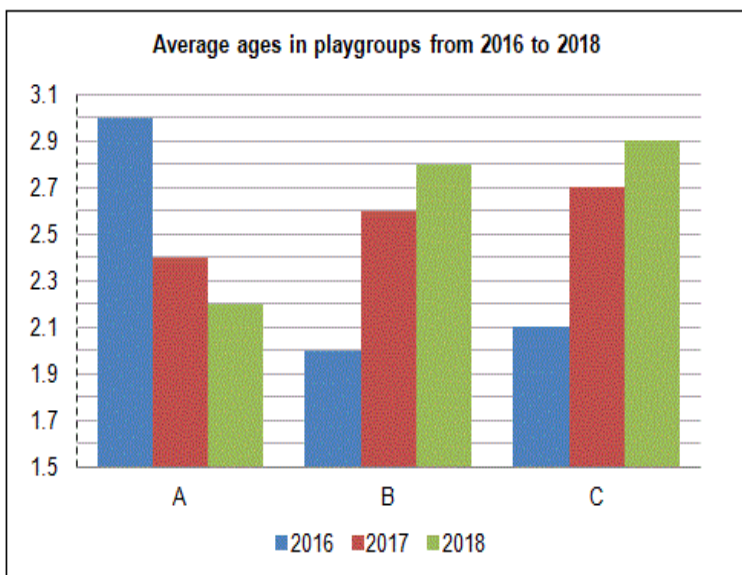
3) How many children left from these playgroups in 2018?

- ☐ 9
- ☐ 11
- ☐ 13
- ☐ Cannot be determined

Video Explanation:

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



It is given that all the classrooms were full to capacity in the given years.

∴ Number of children leaving the playgroups = Number of children admitted.

Thus, for any of the given year we can get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	a	b	c	d	d	a	b	c	c	d	a	b
B	p	q	r	s	s	p	q	r	r	s	p	q
C	w	x	y	z	z	w	x	y	y	z	w	x

Where a, b, c, d, p, q, r, s, w, x, y and z are the number of children in the given playgroup in the given year.

For A, in 2016, $a + 2b + 3c + 4d = 30$... (I)

For A, in 2017, $d + 2a + 3b + 4c = 24$... (II)

Subtract I from II, we get:

$$a + b + c - 3d = -6$$

But, $a + b + c + d = 10$ (capacity of playgroup A) ... (III)

$$\therefore 4d = 16 \Rightarrow d = 4$$

Similarly, we can find 'c' by considering the years 2017 and 2018.

$$\therefore c = 3$$

$$\therefore a + b = 3 \quad \text{from (III)}$$

$$\& a + 2b = 5 \quad \text{from (I)}$$

Solving we get: $a = 1$ and $b = 2$.

Similarly, we find p, q, r, s, w, x, y and z and get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	1	2	3	4	4	1	2	3	3	4	1	2
B	8	6	4	2	2	8	6	4	4	2	8	6
C	9	12	6	3	3	9	12	6	6	3	9	12

Number of children who left the playgroups in 2018 = Number of children aged 4 years in the playgroups in 2017 = $3 + 4 + 6 = 13$.

Hence, [3].

Correct Answer:

Time taken by you: **0 secs**

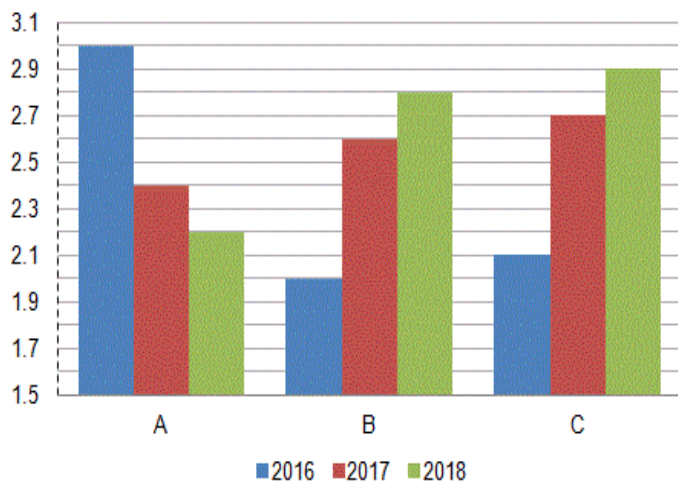
Avg Time taken by all students: **42 secs**

% Students got it correct: **28 %**

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.

Average ages in playgroups from 2016 to 2018



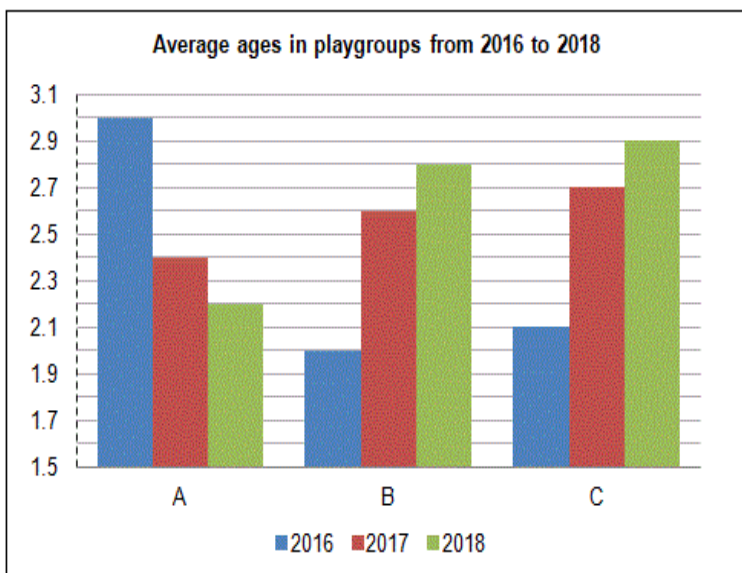
4) In 2019, there were two 1-year old children in the playgroup C. Which of the following would be the average age of children in Playgroup C in 2019?

- ☐ 3.85
- ☐ 3.25
- ☐ 2.95
- ☐ 2.25

Video Explanation:

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



It is given that all the classrooms were full to capacity in the given years.

∴ Number of children leaving the playgroups = Number of children admitted.

Thus, for any of the given year we can get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	a	b	c	d	d	a	b	c	c	d	a	b
B	p	q	r	s	s	p	q	r	r	s	p	q
C	w	x	y	z	z	w	x	y	y	z	w	x

Where a, b, c, d, p, q, r, s, w, x, y and z are the number of children in the given playgroup in the given year.

For A, in 2016, $a + 2b + 3c + 4d = 30$... (I)

For A, in 2017, $d + 2a + 3b + 4c = 24$... (II)

Subtract I from II, we get:

$$a + b + c - 3d = -6$$

But, $a + b + c + d = 10$ (capacity of playgroup A) ... (III)

$$\therefore 4d = 16 \Rightarrow d = 4$$

Similarly, we can find 'c' by considering the years 2017 and 2018.

$$\therefore c = 3$$

$$\therefore a + b = 3 \quad \text{from (III)}$$

$$\& a + 2b = 5 \quad \text{from (I)}$$

Solving we get: $a = 1$ and $b = 2$.

Similarly, we find p, q, r, s, w, x, y and z and get the following table:

Year	2016				2017				2018			
Age	1	2	3	4	1	2	3	4	1	2	3	4
A	1	2	3	4	4	1	2	3	3	4	1	2
B	8	6	4	2	2	8	6	4	4	2	8	6
C	9	12	6	3	3	9	12	6	6	3	9	12

In 2019, in playgroups C, there will be:

Two 1-year old children

Six 2-year old children

Three 3-year old children

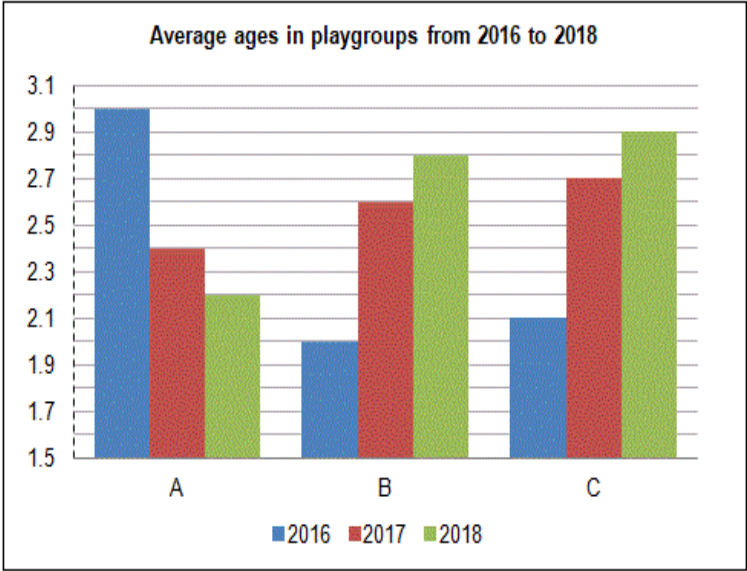
Nine 4-year old children

$$\therefore \text{Required average} = \frac{(2 \times 1) + (6 \times 2) + (3 \times 3) + (9 \times 4)}{(2 + 6 + 3 + 9)} = \frac{59}{20} = 2.95$$

Hence, [3].

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

A small institution runs playgroups in three different villages – A, B and C. The maximum capacity of these playgroups is 10, 20 and 30 children respectively. Children in the age group 1-4 years are taken care of in one of these playgroups. Once a child attains the age of 5, he/she has to leave the playgroup and take admission in a primary school. The following graph shows the average age of the children at these three playgroups (A, B and C) in the years 2016 to 2018 when these playgroups were full to capacity. Only 1-year old children took admissions in these playgroups. No child left the playgroup in the middle of the term.



Avg Time taken by all students: 45 secs

Your Attempt: Skipped

% Students got it correct: 32 %

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

The game of Labyrinth involves participants to enter into a maze having doors labelled A to H, but just one entry door. For every new participant entering the maze, the door labels are shuffled. When the game starts, the participant is told to enter through a particular door, and find the exit to the maze. However, the game has a constraint - Entry through a particular door must be followed by entry through another specific door, as per the table given below. A participant passes through all the doors exactly once and the last door is the exit door.

Entry to door	Followed by
A	B or D
B	E or F
F	H or G
H	E or C
E	C or A
D	G or E
G	A or C
C	F or B

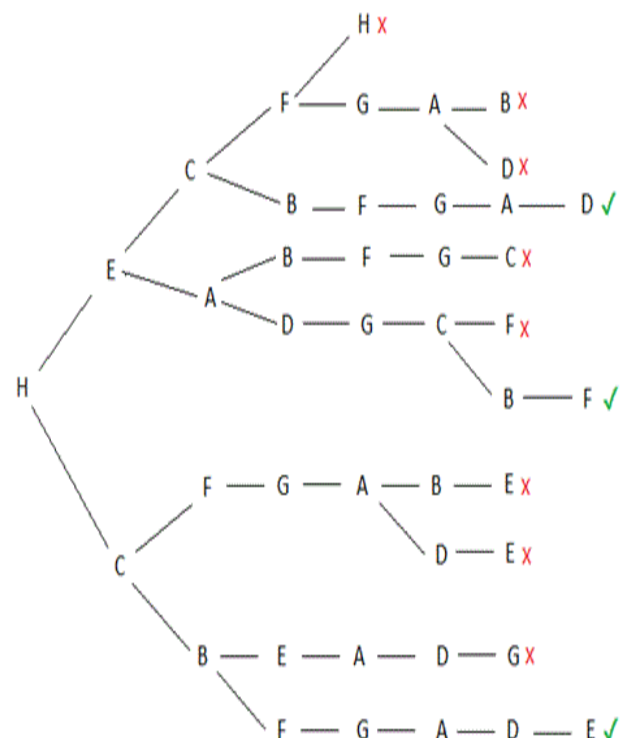
1) If H is the entry door, then how many different exit doors are possible?

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

Video Explanation: ▼

Explanation: ▼

The routing can be diagrammatically shown as follows. A particular route is discarded if there is a repeat in the network after that particular door.



Therefore, the required answer is 3.

Correct Answer: ▼

Time taken by you: 0 secs

Avg Time taken by all students: 130 secs

Your Attempt: Skipped

The game of Labyrinth involves participants to enter into a maze having doors labelled A to H, but just one entry door. For every new participant entering the maze, the door labels are shuffled. When the game starts, the participant is told to enter through a particular door, and find the exit to the maze. However, the game has a constraint - Entry through a particular door must be followed by entry through another specific door, as per the table given below. A participant passes through all the doors exactly once and the last door is the exit door.

Entry to door	Followed by
A	B or D
B	E or F
F	H or G
H	E or C
E	C or A
D	G or E
G	A or C
C	F or B

☐ A

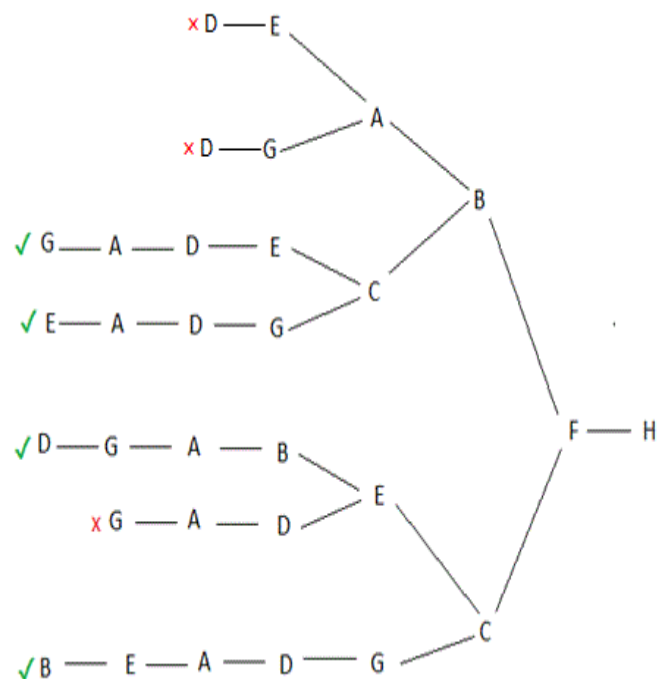
☐ B

☐ D

☐ E

Explanation:

The routing can be diagrammatically represented by starting from the exit door H and finding the possibilities of the preceding door for each intermediate door.



Hence, [1].

Correct Answer:

Time taken by you: **0 secs**

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

Your Attempt: **Skipped**

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

The game of Labyrinth involves participants to enter into a maze having doors labelled A to H, but just one entry door. For every new participant entering the maze, the door labels are shuffled. When the game starts, the participant is told to enter through a particular door, and find the exit to the maze. However, the game has a constraint - Entry through a particular door must be followed by entry through another specific door, as per the table given below. A participant passes through all the doors exactly once and the last door is the exit door.

Entry to door	Followed by
A	B or D
B	E or F
F	H or G
H	E or C
E	C or A
D	G or E
G	A or C
C	F or B

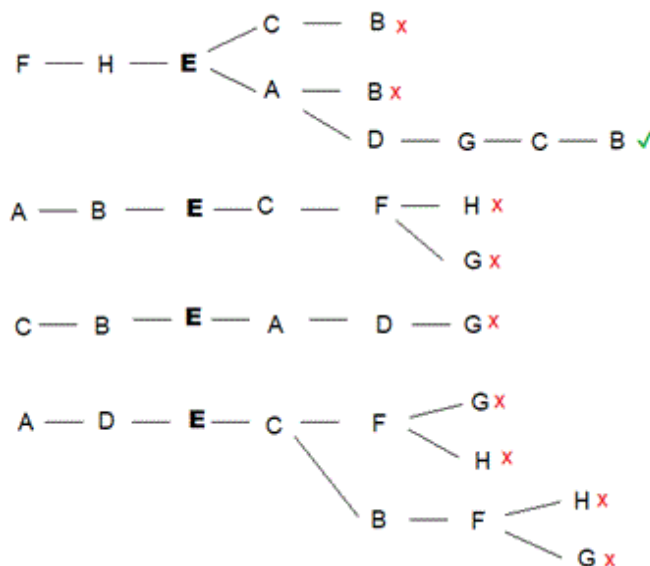
3) If door E is the third door through which a participant passes, then which of the following is the sixth door through which he passes?

- ☐ H
- ☐ G
- ☐ F
- ☐ Cannot be determined

Video Explanation:

Explanation:

The routing can be diagrammatically shown as follows. A particular route is discarded if there is a repeat of a door in the network after that particular door.



Thus, only one possibility exists and door G is the 6th door. Hence, [2].

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 52 secs

Your Attempt: Skipped

% Students got it correct: 26 %

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

The game of Labyrinth involves participants to enter into a maze having doors labelled A to H, but just one entry door. For every new participant entering the maze, the door labels are shuffled. When the game starts, the participant is told to enter through a particular door, and find the exit to the maze. However, the game has a constraint - Entry through a particular door must be followed by entry through another specific door, as per the table given below. A participant passes through all the doors exactly once and the last door is the exit door.

Entry to door	Followed by
A	B or D
B	E or F
F	H or G
H	E or C
E	C or A
D	G or E
G	A or C
C	F or B

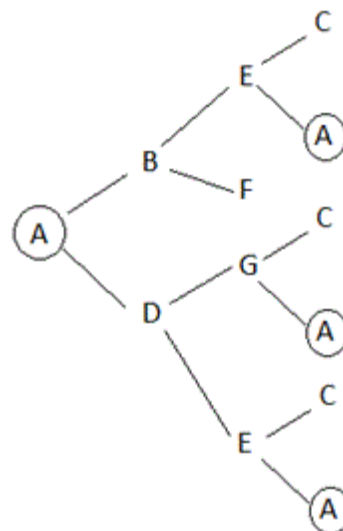
- 4) If now a participant need not pass through all the doors and the entry door to the maze is the exit door, then for how many doors will the number of intermediate doors be the minimum possible?

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

Video Explanation: ▼

Explanation: ▼

Consider door A as the entry door,



On creating a similar diagrammatic representation of routes starting from each of the other 7 doors ending at the same door, it can be observed that the minimum number of intermediate doors through which a participant must pass is 2. This is valid for all the doors. Thus, the required answer is 8.

Therefore, the required answer is 8.

Correct Answer: ▼

Time taken by you: **0 secs**

Avg Time taken by all students: **31 secs**

% Students got it correct: 17 %

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

The game of Labyrinth involves participants to enter into a maze having doors labelled A to H, but just one entry door. For every new participant entering the maze, the door labels are shuffled. When the game starts, the participant is told to enter through a particular door, and find the exit to the maze. However, the game has a constraint - Entry through a particular door must be followed by entry through another specific door, as per the table given below. A participant passes through all the doors exactly once and the last door is the exit door.

Loading...

Entry to door	Followed by
A	B or D
B	E or F
F	H or G
H	E or C
E	C or A
D	G or E
G	A or C
C	F or B

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round1	2,4(Sheetal),6	6	3(Moumeeta)	4
Round2	3	5(Moumeeta)	2(Varsha),4 (Swati),5,6	
Round3	7	8	8	5,7(Moumeeta),10
Round4	10 (Richa)	2(Moumeeta),4 (Varsha),7		3,6
Round5	5,8(Sheetal)	3	7,9	8
Round6	9	9,10	10	2,9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

1) Which number card did Sheetal play in round 4?_

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

Video Explanation: ▼

Explanation: ▼

Using point 1, Number of different cards with each player can be tabulated as follows:

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

In round 4, there are only 3 cards with unknown player, one is Red and two are Green. So, Sheetal played a Red card 7.

Therefore the required answer is 7.

Correct Answer: ▼

Time taken by you: **0 secs**

Avg Time taken by all students: **316 secs**

Your Attempt: **Skipped**

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

2) Which of the following combination of Red cards was held by Varsha? _

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round1	2,4(Sheetal),6	6	3(Moumeeta)	4
Round2	3	5(Moumeeta)	2(Varsha),4 (Swati),5,6	
Round3	7	8	8	5,7(Moumeeta),10
Round4	10 (Richa)	2(Moumeeta),4 (Varsha),7		3,6
Round5	5,8(Sheetal)	3	7,9	8
Round6	9	9,10	10	2,9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

- 4, 6, 8, 10
- 3, 4, 6, 10

- 3, 6, 8, 9
- Cannot be determined

Video Explanation:

▼

Explanation:

▼

Using point 1, Number of different cards with each player can be tabulated as follows:

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

Using point 1, Number of different cards with each player can be tabulated as follows:

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

Using point 2, Swati has Black card having value 6 in the first round, we write this as (1, Black 6), Gauri has (2, Blue 6), while Richa, Moumeeta and Varsha have (3, Green 10), (5, Blue 9) and (6, Red 10) respectively.

Red cards are with Varsha, Moumeeta and Sheetal. So, Varsha must have played (1,Red 6). Sheetal must have played Red cards of values 7 and 9 in rounds 4 and 6 respectively. The third Red card with Sheetal has value other than 3 as she played (5, Black 8). Therefore, Sheetal and Varsha must have (3, Red 8) and (5, Red 3) respectively.

Now among (2, Black 3) and (2, Blue 5), as Richa did not have Blue card, Richa and Sheetal played (2, Black 3) and (2, Blue 5) respectively.

So, Gauri must have remaining 4 Black cards having value 2,7,5 and 9. As Swati has 4 Blue cards, their value must be 4, 8, 7 and 10. Richa has 4 Green cards. As she has (4, Black 10) and (3, Green 10), she has to have (1, Green 4) and (5,

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round1	2,4(Sheetal),6	6	3(Moumeeta)	4
Round2	3	5(Moumeeta)	2(Varsha),4 (Swati),5,6	
Round3	7	8	8	5,7(Moumeeta),10
Round4	10 (Richa)	2(Moumeeta),4 (Varsha),7		3,6
Round5	5,8(Sheetal)	3	7,9	8
Round6	9	9,10	10	2,9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

Green 8). Green card played in fourth round must be by Gauri and Swati
Varsha and Moumeeta respectively.

	Black	Red	Blue	Green
Gauri	2, 5, 7, 9		6	3/6
Sheetal	4, 8	8, 9, 7	5	
Swati	6		4, 7 , 8, 10	3/6
Varsha		3, 6, 10, 4	2	5
Moumeeta		2, 5	3, 9	2, 7
Richa	3, 10			4, 8, 9, 10

Varsha has Red cards having values 3, 4, 6 and 10. Hence, [2].

Correct Answer:

Time taken by you: 0 secs

Avg Time taken by all students: 114 secs

Your Attempt: Skipped

% Students got it correct: 56 %

3) What can be the maximum total of all the cards_ held by any of the 6 friends?

- ☐ 44
- ☐ 41
- ☐ 36
- ☐ Cannot be determined

Video Explanation:

Explanation:

Using point 1, Number of different cards with each player can be tabulated as follows:

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round1	2,4(Sheetal),6	6	3(Moumeeta)	4
Round2	3	5(Moumeeta)	2(Varsha),4 (Swati),5,6	
Round3	7	8	8	5,7(Moumeeta),10
Round4	10(Richa)	2(Moumeeta),4 (Varsha),7		3,6
Round5	5,8(Sheetal)	3	7,9	8
Round6	9	9,10	10	2,9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

Using point 2, Swati has Black card having value 6 in the first round, we write this as (1, Black 6), Gauri has (2, Blue 6), while Richa, Moumeeta and Varsha have (3, Green 10), (5, Blue 9) and (6, Red 10) respectively.

Red cards are with Varsha, Moumeeta and Sheetal. So, Varsha must have played (1,Red 6). Sheetal must have played Red cards of values 7 and 9 in rounds 4 and 6 respectively. The third Red card with Sheetal has value other than 3 as she played (5, Black 8). Therefore, Sheetal and Varsha must have (3, Red 8) and (5, Red 3) respectively.

Now among (2, Black 3) and (2, Blue 5), as Richa did not have Blue card, Richa and Sheetal played (2, Black 3) and (2, Blue 5) respectively.

So, Gauri must have remaining 4 Black cards having value 2,7,5 and 9. As Swati has 4 Blue cards, their value must be 4, 8, 7 and 10. Richa has 4 Green cards. As she has (4, Black 10) and (3, Green 10), she has to have (1, Green 4) and (5, Green 8). Green cards played in fourth round must be by Gauri and Swati and that in round 3 and 6 by Varsha and Moumeeta respectively.

	Black	Red	Blue	Green
Gauri	2, 5, 7, 9		6	3/6
Sheetal	4, 8	8, 9, 7	5	
Swati	6		4, 7, 8, 10	3/6
Varsha		3, 6, 10, 4	2	5
Moumeeta		2, 5	3, 9	2, 7
Richa	3, 10			4, 8, 9, 10

Gauri: $2 + 5 + 7 + 9 + 6 + 6$ (maximum) = 35

Sheetal: $4 + 8 + 8 + 9 + 7 + 5 = 41$

Swati: $6 + 4 + 7 + 8 + 10 + 6$ (maximum) = 41

Varsha: $3 + 6 + 10 + 4 + 5 + 2 = 30$

Moumeeta: $2 + 5 + 3 + 9 + 2 + 7 = 28$

Richa: $3 + 10 + 4 + 8 + 9 + 10 = 44$

Hence, [1].

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round1	2,4(Sheetal),6	6	3(Moumeeta)	4
Round2	3	5(Moumeeta)	2(Varsha),4 (Swati),5,6	
Round3	7	8	8	5,7(Moumeeta),10
Round4	10 (Richa)	2(Moumeeta),4 (Varsha),7		3,6
Round5	5,8(Sheetal)	3	7,9	8
Round6	9	9,10	10	2,9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

Time taken by you: 0 secs

Avg Time taken by all students: 60 secs

Your Attempt: **Skipped**

% Students got it correct: 45 %

4) Which card did Swati play in round 3?

- ☐ Green card having value 3
- ☐ Blue card having value 8
- ☐ Green Card having value 6
- ☐ Cannot be determined

Video Explanation: ▼

Explanation: ▼

Using point 1, Number of different cards with each player can be tabulated as follows:

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

Using point 1, Number of different cards with each player can be tabulated as follows:

	Black	Red	Blue	Green
Gauri	4	0	1	1
Swati	1	0	4	1
Varsha	0	4	1	1
Richa	2	0	0	4
Moumeeta	0	2	2	2
Sheetal	2	3	1	0

Using point 2, Swati has Black card having value 6 in the first round, we write this as (1, Black 6), Gauri has (2, Blue 6), while Richa, Moumeeta and Varsha have (3, Green 10), (5, Blue 9) and (6, Red 10) respectively.

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round1	2,4(Sheetal),6	6	3(Moumeeta)	4
Round2	3	5(Moumeeta)	2(Varsha),4 (Swati),5,6	
Round3	7	8	8	5,7(Moumeeta),10
Round4	10 (Richa)	2(Moumeeta),4 (Varsha),7		3,6
Round5	5,8(Sheetal)	3	7,9	8
Round6	9	9,10	10	2,9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

Swati played Blue card having value 8 in round 3. Hence, [2].

Correct Answer: 

Time taken by you: 0 secs

Avg Time taken by all students: 95 secs

Your Attempt: Skipped

% Students got it correct: 81 %

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

Gauri, Sheetal, Swati, Varsha, Moumeeta and Richa are playing a game of cards. Each player gets 6 cards. In each round, they play a card randomly. The one who plays the card with the highest value wins the round. The values of the cards are as follows: 2, 3, 4, 5, 6, 7, 8, 9, 10. Also, each number card is in 4 colors, viz. Black, Red, Green and Blue.

In any round, if two cards of different colors but having same values are played, then the order of winning is Black, Red, Blue and Green. (The Black card will win over all the other cards, the Red card will win over Blue and Green cards and Blue card will win over Green card.)

The following partially filled table shows the cards played in 6 rounds, brackets indicate the name of the player who played that particular card. For example in round 1, Sheetal played Black card 4.

	Black	Red	Blue	Green
Round 1	2, 4(Sheetal), 6	6	3(Moumeeta)	4
Round 2	3	5(Moumeeta)	2(Varsha), 4 (Swati), 5, 6	
Round 3	7	8	8	5, 7(Moumeeta), 10
Round 4	10 (Richa)	2(Moumeeta), 4 (Varsha), 7		3, 6
Round 5	5, 8(Sheetal)	3	7, 9	8
Round 6	9	9, 10	10	2, 9(Richa)

Further it is known:

- Gauri has 4 Black cards and 1 Blue card and 1 Green card. Swati has 4 Blue cards and 1 Black and 1 Green card, Varsha has 4 Red cards 1 Blue card and 1 Green card, Richa has 4 Green cards and 2 Black cards and Moumeeta has 2 cards each of Red, Blue and Green.
- Winner of round 1 is Swati, round 2 is Gauri, round 3 is Richa, round 4 is Richa, round 5 is Moumeeta and round 6 is Varsha.

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

‘Trick Tok’ is a global virtual reality video making platform and social network that enables users to create short virtual reality videos. The company has planned to launch its app, ‘Tik Talk’ by 2020. As part of the testing process, the founder of the company asked his employees to create a certain number of videos on the app. The next day he made his 12 oldest employees, having employee codes 1 (being the oldest) to 12, stand in a row from left to right, in the same order. The employees were disguised using the first 12 letters of the English Alphabets (A to L). Further-

1. The number of videos created by all the employees was distinct and among the first six multiples of 3 and/or 5. There was one person who did not create any videos.
2. The number of videos created by not more than two adjacent employees were multiple of 3. And the number of videos created by not more than two adjacent employees were multiple of 5. Also, employees creating a number of videos that were multiples of 5 stood together in the pair of two.
3. From the left, E, A, B and K stood first, fifth, tenth and eleventh respectively and created 18, 12, 25 and 6 videos respectively.
4. F, I and A stood consecutively from left to right in that order and none of them created an odd number of videos.
5. The person who created no videos is among the oldest four employees.
6. J, C and L stood consecutively from left to right in that order.
7. All employees having odd employee codes created an even number of videos.
8. H created more videos than F, who created some videos. H was to the left of G and there were exactly 3 people between them. L created fewer videos than B while C created fewer videos than K.

1) The employee who created the most number of videos was _____.

- ☐ H
- ☐ B
- ☐ J
- ☐ D

Video Explanation: ▼

Explanation: ▼

From conditions 3, 4, 6 and 8, we have

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18				12					25	6	

From condition 7, it can be concluded that F, J and L created 10, 20, 30 videos in some order.

Using condition 8, F and L must have created videos other than 30. Hence, J created 30 videos. Also, from condition 8, H, F, L, B, C and K created few videos. Hence, I have not created any video. Maximum number of videos made by H is 15. So, H = 15, F = 10 and L = 20.

Now we need to decide about (G, C, D) and (3, 5, 9). C is between L = 20 and J = 30. Therefore from condition 2, C must have created 3 or 9 videos. C created fewer videos than K (created 6 videos) implies that C created 3 videos. G has to be multiple of 5. Therefore, G = 5 and D = 9.

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18	15	10	0	12	5	30	3	20	25	6	9

J created the most number of videos. Hence, [3].

Correct Answer: ▼

Time taken by you: 0 secs

Avg Time taken by all students: 521 secs

Your Attempt: Skipped

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

‘Trick Tok’ is a global virtual reality video making platform and social network that enables users to create short virtual reality videos. The company has planned to launch its app, ‘Tik Talk’ by 2020. As part of the testing process, the founder of the company asked his employees to create a certain number of videos on the app. The next day he made his 12 oldest employees, having employee codes 1 (being the oldest) to 12, stand in a row from left to right, in the same order. The employees were disguised using the first 12 letters of the English Alphabets (A to L). Further-

1. The number of videos created by all the employees was distinct and among the first six multiples of 3 and/or 5. There was one person who did not create any videos.
2. The number of videos created by not more than two adjacent employees were multiple of 3. And the number of videos created by not more than two adjacent employees were multiple of 5. Also, employees creating a number of videos that were multiples of 5 stood together in the pair of two.
3. From the left, E, A, B and K stood first, fifth, tenth and eleventh respectively and created 18, 12, 25 and 6 videos respectively.
4. F, I and A stood consecutively from left to right in that order and none of them created an odd number of videos.
5. The person who created no videos is among the oldest four employees.
6. J, C and L stood consecutively from left to right in that order.
7. All employees having odd employee codes created an even number of videos.
8. H created more videos than F, who created some videos. H was to the left of G and there were exactly 3 people between them. L created fewer videos than B while C created fewer videos than K.

2) Who did not create any video?

- ☐ C
- ☐ G
- ☐ D
- ☐ I

Video Explanation: 

Explanation: 

From conditions 3, 4, 6 and 8, we have

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18				12					25	6	

From condition 7, it can be concluded that F, J and L created 10, 20, 30 videos in some order.

Using condition 8, F and L must have created videos other than 30. Hence, J created 30 videos. Also, from condition 8, H, F, L, B, C and K created few videos. Hence, I have not created any video. Maximum number of videos made by H is 15. So, H = 15, F = 10 and L = 20.

Now we need to decide about (G, C, D) and (3, 5, 9). C is between L = 20 and J = 30. Therefore from condition 2, C must have created 3 or 9 videos. C created fewer videos than K (created 6 videos) implies that C created 3 videos. G has to be multiple of 5. Therefore, G = 5 and D = 9.

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18	15	10	0	12	5	30	3	20	25	6	9

‘I’ did not create any video. Hence, [4].

Correct Answer: 

Time taken by you: 0 secs

Avg Time taken by all students: 153 secs

Your Attempt: Skipped

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

‘Trick Tok’ is a global virtual reality video making platform and social network that enables users to create short virtual reality videos. The company has planned to launch its app, ‘Tik Talk’ by 2020. As part of the testing process, the founder of the company asked his employees to create a certain number of videos on the app. The next day he made his 12 oldest employees, having employee codes 1 (being the oldest) to 12, stand in a row from left to right, in the same order. The employees were disguised using the first 12 letters of the English Alphabets (A to L). Further-

1. The number of videos created by all the employees was distinct and among the first six multiples of 3 and/or 5. There was one person who did not create any videos.
2. The number of videos created by not more than two adjacent employees were multiple of 3. And the number of videos created by not more than two adjacent employees were multiple of 5. Also, employees creating a number of videos that were multiples of 5 stood together in the pair of two.
3. From the left, E, A, B and K stood first, fifth, tenth and eleventh respectively and created 18, 12, 25 and 6 videos respectively.
4. F, I and A stood consecutively from left to right in that order and none of them created an odd number of videos.
5. The person who created no videos is among the oldest four employees.
6. J, C and L stood consecutively from left to right in that order.
7. All employees having odd employee codes created an even number of videos.
8. H created more videos than F, who created some videos. H was to the left of G and there were exactly 3 people between them. L created fewer videos than B while C created fewer videos than K.

3) If ‘x’ and ‘y’ denote the number of videos created by any pair where the members of the pair stands consecutively. Which of the following option is the best fit for the range for value of $|x - y|$?

- ☐ [5, 30]
- ☐ [0, 30]
- ☐ [0, 15]
- ☐ [3, 27]

Video Explanation:

Explanation:

From conditions 3, 4, 6 and 8, we have

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18				12				25	6		

From condition 7, it can be concluded that F, J and L created 10, 20, 30 videos in some order.

Using condition 8, F and L must have created videos other than 30. Hence, J created 30 videos. Also, from condition 8, H, F, L, B, C and K created few videos. Hence, I have not created any video. Maximum number of videos made by H is 15. So, $H = 15$, $F = 10$ and $L = 20$.

Now we need to decide about (G, C, D) and (3, 5, 9). C is between $L = 20$ and $J = 30$. Therefore from condition 2, C must have created 3 or 9 videos. C created fewer videos than K (created 6 videos) implies that C created 3 videos. G has to be multiple of 5. Therefore, $G = 5$ and $D = 9$.

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18	15	10	0	12	5	30	3	20	25	6	9

The difference between consecutive values of videos created is in the range 3 to 27(both inclusive). Hence, [4].

Correct Answer:

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

‘Trick Tok’ is a global virtual reality video making platform and social network that enables users to create short virtual reality videos. The company has planned to launch its app, ‘Tik Talk’ by 2020. As part of the testing process, the founder of the company asked his employees to create a certain number of videos on the app. The next day he made his 12 oldest employees, having employee codes 1 (being the oldest) to 12, stand in a row from left to right, in the same order. The employees were disguised using the first 12 letters of the English Alphabets (A to L). Further-

1. The number of videos created by all the employees was distinct and among the first six multiples of 3 and/or 5. There was one person who did not create any videos.
2. The number of videos created by not more than two adjacent employees were multiple of 3. And the number of videos created by not more than two adjacent employees were multiple of 5. Also, employees creating a number of videos that were multiples of 5 stood together in the pair of two.
3. From the left, E, A, B and K stood first, fifth, tenth and eleventh respectively and created 18, 12, 25 and 6 videos respectively.
4. F, I and A stood consecutively from left to right in that order and none of them created an odd number of videos.
5. The person who created no videos is among the oldest four employees.
6. J, C and L stood consecutively from left to right in that order.
7. All employees having odd employee codes created an even number of videos.
8. H created more videos than F, who created some videos. H was to the left of G and there were exactly 3 people between them. L created fewer videos than B while C created fewer videos than K.

Your Attempt: **Skipped**

% Students got it correct: **54 %**

4) Which of the following pair had the highest sum of the number of videos created by them?

- ☐ D-B
- ☐ J-B
- ☐ C-F
- ☐ B-F

Video Explanation:

Explanation:

From conditions 3, 4, 6 and 8, we have

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18				12					25	6	

From condition 7, it can be concluded that F, J and L created 10, 20, 30 videos in some order.

Using condition 8, F and L must have created videos other than 30. Hence, J created 30 videos. Also, from condition 8, H, F, L, B, C and K created few videos. Hence, I have not created any video. Maximum number of videos made by H is 15. So, H = 15, F = 10 and L = 20.

Now we need to decide about (G, C, D) and (3, 5, 9). C is between L = 20 and J = 30. Therefore from condition 2, C must have created 3 or 9 videos. C created fewer videos than K (created 6 videos) implies that C created 3 videos. G has to be multiple of 5. Therefore, G = 5 and D = 9.

Employee code	1	2	3	4	5	6	7	8	9	10	11	12
Name	E	H	F	I	A	G	J	C	L	B	K	D
Videos created	18	15	10	0	12	5	30	3	20	25	6	9

‘J’ created 30 videos while ‘B’ created 25 videos. Therefore, the pair J-B had the highest sum of the number of videos created by them Hence, [2].

Correct Answer:

Avg Time taken by all students: 52 secs

Your Attempt: Skipped

% Students got it correct: 77 %

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

‘Trick Tok’ is a global virtual reality video making platform and social network that enables users to create short virtual reality videos. The company has planned to launch its app, ‘Tik Talk’ by 2020. As part of the testing process, the founder of the company asked his employees to create a certain number of videos on the app. The next day he made his 12 oldest employees, having employee codes 1 (being the oldest) to 12, stand in a row from left to right, in the same order. The employees were disguised using the first 12 letters of the English Alphabets (A to L). Further-

1. The number of videos created by all the employees was distinct and among the first six multiples of 3 and/or 5. There was one person who did not create any videos.
2. The number of videos created by not more than two adjacent employees were multiple of 3. And the number of videos created by not more than two adjacent employees were multiple of 5. Also, employees creating a number of videos that were multiples of 5 stood together in the pair of two.
3. From the left, E, A, B and K stood first, fifth, tenth and eleventh respectively and created 18, 12, 25 and 6 videos respectively.
4. F, I and A stood consecutively from left to right in that order and none of them created an odd number of videos.
5. The person who created no videos is among the oldest four employees.
6. J, C and L stood consecutively from left to right in that order.
7. All employees having odd employee codes created an even number of videos.
8. H created more videos than F, who created some videos. H was to the left of G and there were exactly 3 people between them. L created fewer videos than B while C created fewer videos than K.

Loading...

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

- Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
- Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
- Priya was sitting between Bernadette and Laura in the same row.
- The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
- The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
- Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
- Amy did not sit in the same column or row as Jenny.

1) Who among the following was sitting in the middle of the 4th row?

- ☐ Amy
- ☐ Jenny
- ☒ Emily ✓
- ☐ Leslie

Video Explanation: ▼

Explanation: ▼

Ticket price for Amy and Barry was Rs. 250 and Rs. 600 respectively. Ticket price for Sara, Priya and Laura was Rs. 500 while that for Sheldon and Leonard was ($600 \times 0.80 =$) Rs. 480. The ticket price for the remaining family members was ($500 \times 0.80 =$) Rs. 400

Using conditions 4 and 2, the ticket price of persons sitting in 2nd and 3rd row left corner seats must be either Rs. 400 or Rs. 500.

Case 1: If the ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 500.

Using condition 2 and 3, Laura and Sara must be sitting in 2nd and 3rd row left corner seats respectively. Now Bernadette's place must be 2nd row rightmost corner, which violates condition 1.

So this case is invalid.

Case 2:

The ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 400

Using conditions 1 and 2, Sara, Penny and Leonard can be placed in following two ways:

Case 2a		
(400)		Barry(600)
(400)	Sara(500)	(400/500)
	Penny(400)	Leonard(480)

Case 2b		
Sara(500)		
Penny(400)	Leonard(480)	Barry(600)
(400)		(400/500)

Case 2a : Priya must sit in the middle of the 1st row.

Now Sheldon must sit in the leftmost corner of 2nd row, while the ticket price of the person sitting at this place is Rs. 400. Case 2a is also invalid.

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

- 1. Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
- 2. Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
- 3. Priya was sitting between Bernadette and Laura in the same row.
- 4. The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
- 5. The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
- 6. Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
- 7. Amy did not sit in the same column or row as Jenny.

Correct Answer:

Time taken by you: 14 secs

Avg Time taken by all students: 810 secs

Your Attempt: Correct

% Students got it correct: 84 %

2) What is the sum of the price of tickets of all the persons sitting in 1st row?

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

1300

Video Explanation:

Explanation:

Ticket price for Amy and Barry was Rs. 250 and Rs. 600 respectively. Ticket price for Sara, Priya and Laura was Rs. 500 while that for Sheldon and Leonard was (600 × 0.80 =) Rs. 480. The ticket price for the remaining family members was (500 × 0.80 =)Rs. 400

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

- Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
- Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
- Priya was sitting between Bernadette and Laura in the same row.
- The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
- The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
- Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
- Amy did not sit in the same column or row as Jenny.

Case 1: If the ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 500.

Using condition 2 and 3, Laura and Sara must be sitting in 2nd and 3rd row left corner seats respectively. Now Bernadette's place must be 2nd row rightmost corner, which violates condition 1.

So this case is invalid.

Case 2:

The ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 400

Using conditions 1 and 2, Sara, Penny and Leonard can be placed in following two ways:

Case 2a			Case 2b		
			Sara (500)		
(400)		Barry (600)	Penny (400)	Leonard (480)	Barry (600)
(400)	Sara (500)	(400/500)	(400)		(400/500)
	Penny (400)	Leonard (480)			

Case 2a : Priya must sit in the middle of the 1st row.
Now Sheldon must sit in the leftmost corner of 2nd row, while the ticket price of the person sitting at this place is Rs. 400. Case 2a is also invalid.

Case 2b: Priya must sit in the middle of either 3rd row or 4th row. If Priya sits in the fourth row, then using condition 5, Emily and Sheldon must be in the first row with Sheldon occupying middle seat. But it violates condition 7. Hence, Priya was in the 3rd row. Since the ticket price of the person sitting in the left corner seat of 3rd row is Rs. 400, Bernadette must be to the left of Priya and Laura must be to the right of Priya. From conditions 5, 6 and 7, Emily and Sheldon were sitting in the fourth row with Amy. Now it can be concluded that Amy was in the rightmost seat.

Case 2a		
Sara (500)	Jenny (400)	Leslie (400)
Penny (400)	Leonard (480)	Barry (600)
Bernadette (400)	Priya (500)	Laura (500)
Sheldon (480)	Emily (400)	Amy (250)

Sara – 500, Jenny – 400, Leslie – 400. Sum = 500 + 400 + 400 = Rs. 1,300
Therefore, the required answer is 1,300.

Correct Answer:

▼

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

- 1. Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
- 2. Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
- 3. Priya was sitting between Bernadette and Laura in the same row.
- 4. The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
- 5. The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
- 6. Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
- 7. Amy did not sit in the same column or row as Jenny.

Your Attempt: **Correct**

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

3) Who was sitting to the immediate right of Jenny? **—**

- ☐ Amy
- ☐ Barry
- ☐ Leslie
- ☒ Sara **✗**

Video Explanation: **▼**

Explanation: **▼**

Ticket price for Amy and Barry was Rs. 250 and Rs. 600 respectively. Ticket price for Sara, Priya and Laura was Rs. 500 while that for Sheldon and Leonard was $(600 \times 0.80 =)$ Rs. 480. The ticket price for the remaining family members was $(500 \times 0.80 =)$ Rs. 400

Using conditions 4 and 2, the ticket price of persons sitting in 2nd and 3rd row left corner seats must be either Rs. 400 or Rs. 500.

Case 1: If the ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 500.

Using condition 2 and 3, Laura and Sara must be sitting in 2nd and 3rd row left corner seats respectively. Now Bernadette's place must be 2nd row rightmost corner, which violates condition 1.

So this case is invalid.

Case 2:

The ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 400

Using conditions 1 and 2, Sara, Penny and Leonard can be placed in following two ways:

Case 2a			Case 2b		
			Sara (500)		
(400)		Barry (600)	Penny (400)	Leonard (480)	Barry (600)
(400)	Sara (500)	(400/500)	(400)		(400/500)
	Penny (400)	Leonard (480)			

Case 2a : Priya must sit in the middle of the 1st row.

Now Sheldon must sit in the leftmost corner of 2nd row, while the ticket price of the person sitting at this place is Rs. 400. Case 2a is also invalid.

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

- 1. Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
- 2. Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
- 3. Priya was sitting between Bernadette and Laura in the same row.
- 4. The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
- 5. The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
- 6. Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
- 7. Amy did not sit in the same column or row as Jenny.

Case 2b: Priya must sit in the middle of either 2nd row or 4th row. If Priya sits in the middle of 2nd row, it violates condition 5, Emily and Sheldon must be in the first row with Sheldon occupying middle seat. But it violates condition 7. Hence, Priya was in the 3rd row. Since the ticket price of the person sitting in the left corner seat of 3rd row is Rs. 400, Bernadette must be to the left of Priya and Laura must be to the right of Priya. From conditions 5, 6 and 7, Emily and Sheldon were sitting in the fourth row with Amy. Now it can be concluded that Amy was in the rightmost seat.

Case 2a		
Sara (500)	Jenny (400)	Leslie (400)
Penny (400)	Leonard (480)	Barry (600)
Bernadette (400)	Priya (500)	Laura (500)
Sheldon (480)	Emily (400)	Amy (250)

Leslie was sitting to the immediate right of Jenny. Hence, [3].

Correct Answer:

▼

Time taken by you: **82 secs**

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

Your Attempt: **Wrong**

% Students got it correct: **70 %**

4) Who was sitting just behind Bernadette?

—

- ☐ Amy
- ☒ Sheldon✔
- ☐ Penny
- ☐ Sara

Video Explanation:

▼

Explanation:

▼

Ticket price for Amy and Barry was Rs. 250 and Rs. 600 respectively. Ticket price for Sara, Priya and Laura was Rs. 500 while that for Sheldon and Leonard was (600 × 0.80 =) Rs. 480. The ticket price for the remaining family members was (500 × 0.80 =)Rs. 400

Using conditions 4 and 2, the ticket price of persons sitting in 2nd and 3rd row left corner seats must be either Rs. 400 or Rs. 500.

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

1. Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
2. Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
3. Priya was sitting between Bernadette and Laura in the same row.
4. The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
5. The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
6. Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
7. Amy did not sit in the same column or row as Jenny.

Reasoning: Case 1: If the ticket price of persons sitting in 2nd and 3rd row left corner seats

Using condition 2 and 3, Laura and Sara must be sitting in 2nd and 3rd row left corner seats respectively. Now Bernadette's place must be 2nd row rightmost corner, which violates condition 1.

So this case is invalid.

Case 2:

The ticket price of persons sitting in 2nd and 3rd row left corner seats = Rs. 400

Using conditions 1 and 2, Sara, Penny and Leonard can be placed in following two ways:

Case 2a		
(400)		Barry (600)
(400)	Sara (500)	(400/500)
	Penny (400)	Leonard (480)

Case 2b		
Sara(500)		
Penny(400)	Leonard(480)	Barry(600)
(400)		(400/500)

Case 2a : Priya must sit in the middle of the 1st row.

Now Sheldon must sit in the leftmost corner of 2nd row, while the ticket price of the person sitting at this place is Rs. 400. Case 2a is also invalid.

Case 2b: Priya must sit in the middle of either 3rd row or 4th row. If Priya sits in the fourth row, then using condition 5, Emily and Sheldon must be in the first row with Sheldon occupying middle seat. But it violates condition 7. Hence, Priya was in the 3rd row. Since the ticket price of the person sitting in the left corner seat of 3rd row is Rs. 400, Bernadette must be to the left of Priya and Laura must be to the right of Priya. From conditions 5, 6 and 7, Emily and Sheldon were sitting in the fourth row with Amy. Now it can be concluded that Amy was in the rightmost seat.

Case 2a		
Sara (500)	Jenny (400)	Leslie (400)
Penny (400)	Leonard (480)	Barry (600)
Bernadette (400)	Priya (500)	Laura (500)
Sheldon (480)	Emily (400)	Amy (250)

Sheldon was sitting just behind Bernadette. Hence, [2].

Correct Answer:

Time taken by you: **1732** secs

Avg Time taken by all students: **70 secs**

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

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

12 seater 7D movie show has seating arrangement of 3 chairs in each row. The first row is closest to the screen and the fourth row is farthest from the screen as compared to the other rows. The movie ticket prices for a male is Rs. 600, while for a female, it is Rs. 500. If anyone has any school or college ID, then he or she gets a discount of 20% of the rate applicable. The movie ticket price for children below age 3 is Rs. 250. The 7 PM show tickets were purchased by Barry (M) for his family of 12 members (including him). The other family members are Sara (F), Priya (F), Laura (F), Sheldon (M), Leonard (M), Penny (F), Leslie (F), Bernadette (F), Emily (F), Jenny (F) and Amy (child of age 2 years). Among all, Sheldon, Leonard, Penny, Leslie, Bernadette, Emily and Jenny have student IDs.

Further, following information is known:

1. Barry was sitting at the rightmost end of the 2nd row and the ticket price of the person sitting behind him was either Rs. 400 or Rs. 500.
2. Sara was sitting just ahead of Penny, who was sitting to the immediate left of Leonard.
3. Priya was sitting between Bernadette and Laura in the same row.
4. The ticket price of the persons sitting in 2nd and 3rd row left corner seats was the same.
5. The ticket price of the person sitting in the middle of the first row is more than that of sitting in the rightmost corner of the 4th row.
6. Emily and Sheldon were sitting in the same row and Emily was to the right of Sheldon.
7. Amy did not sit in the same column or row as Jenny.

Loading...