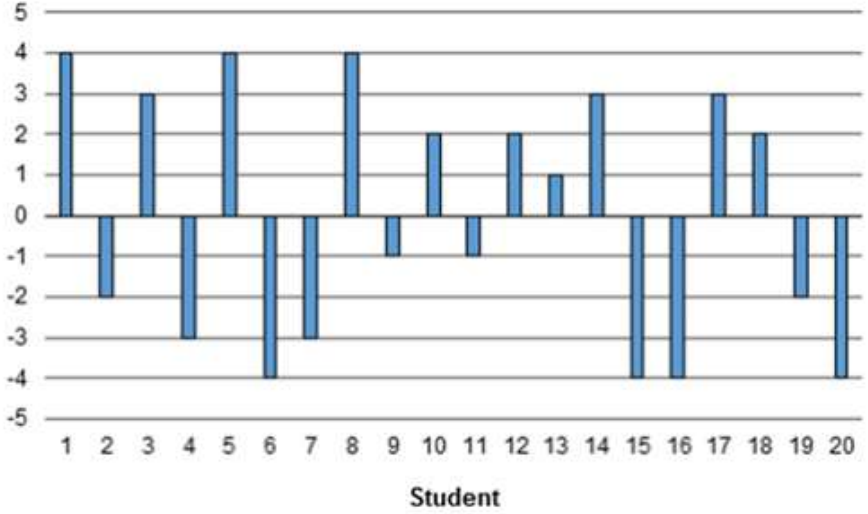
LR-DI CLASS

Parthiv, a professor in a college, conducted a test for the twenty students in his class. Each student scored at least 10 and at most 20 marks in the test and the score of each student was an integer. The bar graph given below provides, for each student, the value of the average marks scored by the twenty students in the test minus the score of that student in the test.



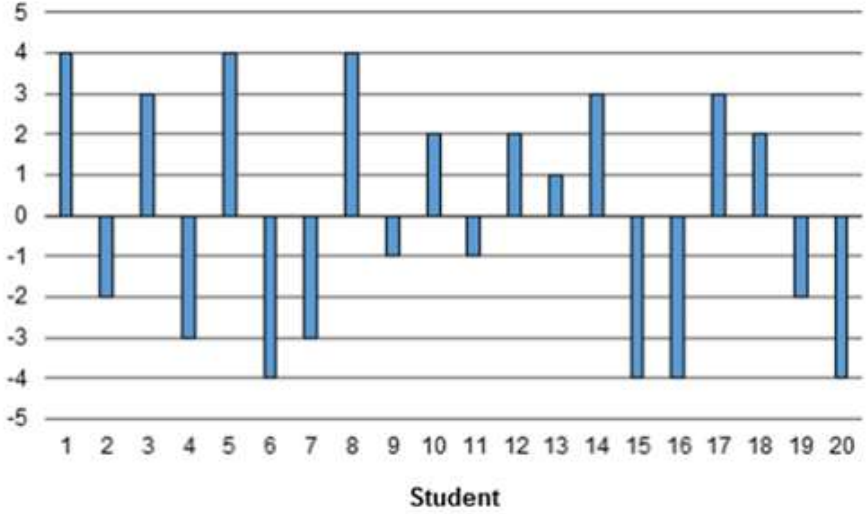
Q1. Which of the following can be the number of students who scored exactly 13 marks in the test?

a) 4 b) 3 c) 2 d) 0

Q2. How many students definitely scored at least 16 marks in the test?

a) 7 b) 8 c) 9 d) 10

Parthiv, a professor in a college, conducted a test for the twenty students in his class. Each student scored at least 10 and at most 20 marks in the test and the score of each student was an integer. The bar graph given below provides, for each student, the value of the average marks scored by the twenty students in the test minus the score of that student in the test.



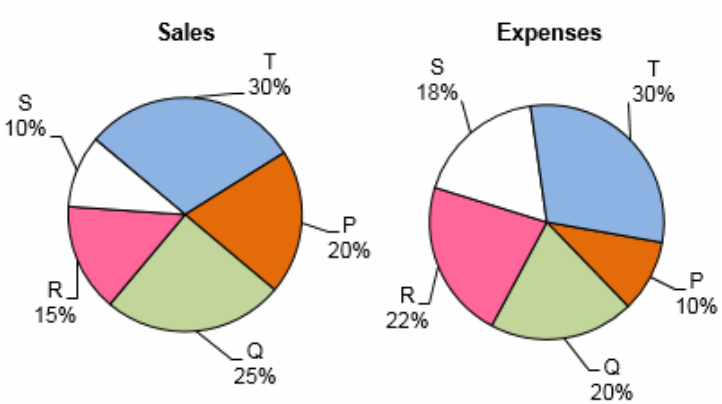
Q3. If the number of students who scored exactly 15 marks is two less than the number of students who scored exactly 12 marks, what is the average marks of the students in the test?

a) 16 b) 15 c) 14 d) Cannot be determined

Q4. If the number of students who scored at least 14 marks was one less than the number of students who scored at most 16 marks, what is the average marks of the students in the test?

a) 14 b) 15 c) 16 d) Data Inconsistent

The following pie charts give the values of the sales and expenses of five companies – P, Q, R, S and T – as a percentage of the total sales and expenses of these five companies put together:



Q1. Which of the companies had the highest profit percentage?
a) P b) Q c) R d) Cannot be determined

Q2. For which of the companies is the ratio of expenses to profit, the highest?
a) P b) S c) T d) Cannot be determined

Q3. If the overall profit percentage of all the five companies put together was 50%, how many companies had a profit percentage greater than 60%?
a) 0 b) 1 c) 2 d) 3

Q4. If the total sales were Rs.800 crore and the overall profit percentage of all the five companies put together was 50%, what were the expenses of company R?
a) Rs.60 crore b) Rs.68 crore c) Rs.80 crore d) Rs.88 crore

Profit = Sales – Expenses

$$\text{Profit percentage} = \frac{\text{Profit}}{\text{Sales}} \times 100$$

No company made a loss.

Read the following information carefully and answer the questions that follow. For an election campaign, six party members Ajay, Bhola, Chintu, Dolly, Eklavya, and Faiz were ordered to visit different societies to advertise for the party. When they came back, they reported the number of societies they visited and also the number of societies their colleagues visited. However, each of them reported the correct number only for themselves. Furthermore, the following information is known-

1) The total number of societies visited by all of them together is 120.
2) Eklavya visited more than 23 societies
3) C visited less number of societies than the average number of societies visited by each member.

	P1	P2	P3	P4	P5	P6
Ajay	18	13	15	12	21	23
Bhola	19	21	29	13	25	23
Chintu	23	35	15	11	27	19
Dolly	18	17	15	15	20	23
Eklavya	18	23	19	13	19	27
Faiz	15	13	21	18	20	26

Q1.Who visited the most number of societies?
A. Ajay B. Bhola C. Dolly D. Eklavya

Q2.What is the ratio of the number of societies visited by Ajay to that of Faiz?
A. 5:7 B. 21:13 C.13:21 D.7:5

Q3.What is the difference between the maximum and the minimum number of societies visited by any member?
A. 18 B. 24 C. 23 D. 21

Q4. If Faiz visits 40 societies in the next year, what is the percentage increase in the number of societies he visited as compared to this year?
A. 133.33% B. 175% C. 166.66% D. 180%

During a particular month, Tarak visited six cities, Delhi, Chennai, Mumbai, Kolkata, Hyderabad and Bangalore, not necessarily in the same order. After visiting the six cities, he ranked the cities, from 1 to 6, based on the order of his preference. The ranks of any two cities that he visited one immediately after the other differed by at least two, while for any two cities whose ranks differed by exactly two, he visited at least one city between them. It is also known that

1. he visited the city ranked three before he visited Chennai.
2. he visited Kolkata after he visited the city ranked 1.
3. Mumbai was not the third city that he visited.
4. Delhi was the fourth city that he visited.
5. he visited the city ranked two before he visited Bangalore.
6. he visited Hyderabad before he visited Mumbai.

Q1. What is the rank of the second city that he visited?

Q2. What is the rank of Delhi?

Q3. How many cities did he visit between Chennai and the city ranked three?
a) 0 b) 1 c) 2 d) 3

Q4. How many cities did he visit between Chennai and the city ranked three?
a) 0 b) 1 c) 2 d) 3