



Laying the foundation of lifelong success

CHAPTER 3

Pair Of Linear Equations In Two Variables

(Previous Years' Questions)

Case – Study Based

1. A school is organizing a grand cultural event to show the talent of its students. To accommodate the guests, the school plans to rent chairs and tables from a local supplier. It finds that rent for each chair is ₹ 50 and for each table is ₹ 200. The school spends ₹ 30,000 for renting the chairs and tables. Also, the total number of items (chairs and tables) rented are 300.



If the school rents ' x ' chairs and ' y ' tables, answer the following questions:

- (i) Write down the pair of linear equations representing the given information. 1
- (ii) (a) Find the number of chairs and number of tables rented by the school. 2

OR

- (b) If the school wants to spend a maximum of ₹ 27,000 on 300 items (tables and chairs), then

find the number of chairs and tables it can rent. 2

(iii) What is maximum number of tables that can be rented in ₹ 30,000 if no chairs are rented? 1

(2025)

2. Essel World is one of India's largest amusement parks that offers a diverse range of thrilling rides, water attractions and entertainment options for visitors of all ages. The park is known for its iconic "Water Kingdom" section, making it a popular destination for family outings and fun-filled adventure. The ticket charges for the park are ₹ 150 per child and ₹ 250 per adult.



On a day, the cashier of the park found that 300 tickets were sold and an amount of ₹ 55,000 was collected.

Based on the above, answer the following questions:

(i) If the number of children visited be x and the number of adults visited be y , then write the given situation algebraically. 1

(ii) (a) How many children visited the amusement park that day? 2

OR

(b) How many adults visited the amusement park that day? 2

(iii) How much amount will be collected if 250 children and 100 adults visit the amusement park ? 1

(2024)

3. Two schools 'P' and 'Q' decided to award prizes to their students for two games of Hockey ₹ x per student and Cricket ₹ y per student. School 'P' decided to award a total of ₹ 9,500 for the two games to 5 and 4 students respectively; while school 'Q' decided to award ₹ 7,370 for the two games to 4 and 3 students respectively.



Based on the above information, answer the following questions :

(i) Represent the following information algebraically (in terms of x and y). 1

(ii) (a) What is the prize amount for hockey ? 2

OR

(b) Prize amount on which game is more and by how much? 2

(iii) What will be the total prize amount if there are 2 students each from two games ? 1

(2023)

4. A coaching institute of Mathematics conducts classes in two batches I and II and fees for rich and poor children are different. In batch I, there are 20 poor and 5 rich children, whereas in batch II, there are 5 poor and 25 rich children. The total monthly collection of fees from batch I is ₹ 9000 and from batch II is ₹ 26,000. Assume that each poor child pays ₹ x per month and each rich child pays ₹ y per month.



Based on the above information, answer the following questions:

(i) Represent the information given above in terms of x and y . 1

(ii) Find the monthly fee paid by a poor child. 2

OR

Find the difference in the monthly fee paid by a poor child and a rich child.

(iii) If there are 10 poor and 20 rich children in batch II, what is the total monthly collection of fees from batch II ? 1

(2023)

