

1. If $x=1$ and $y=2$ is a solution of the pair of linear equation $2x-3y+a=0$ and $2x+3y+b=0$, then: [cbse-2025]

2. Vijay invested certain amounts of money in two schemes A and B, which offer interest at the rate of 8% per annum and 9% per annum, respectively. He received ₹ 1860 as the total annual interest. However, had he interchanged the amounts of investments in two schemes, he would have received 20 more as annual interest. How much money did he invest in each scheme. [cbse-2025]

3. A school is organizing a grand cultural event to show the talent of its school. To accommodate the guests, the school plans to rent chairs and table from local supplier. It find that rent for each chair is ₹ 50 and for each table ₹ 200. The school spends ₹ 30000 for renting the chair and table. Also total no. of items rented are 300. If the school rents ' x ' chairs and ' y ' tables.

- Write down the pair of linear eqⁿ representing the information.
- Find the no. of chairs and no. of tables, rented by the school.
- What is maximum no. of tables that can be rented in ₹ 30000 if no chair are rented.

[cbse-2025]

4. The value of ' p ' for which the equation $px+3y=p-3$, $12x+py=p$ has infinitely many solution. [cbse-2025]

5. Solve the following system of equation
 $30x+44y=10$, $40x+55y=13$ [cbse-2025]

6. The monthly incomes of two persons are in the ratio 9:7 and their monthly expenditures are in the ratio 4:3. If each saved ₹ 5000 express the given situation algebraically as a system of linear equation in two variable. Hence, find their respective monthly incomes

[cbse-2025]

7. Solve for x and y

$$\sqrt{2}x + \sqrt{3}y = 5 \text{ and } \sqrt{3}x - \sqrt{8}y = -\sqrt{6}$$

[cbse-2025]

8. Solve the following system of equation graphically.

$$\begin{aligned} 2x - y - 2 &= 0 \\ -4x + y + 4 &= 0 \end{aligned}$$

Also, find the absolute diff. b/w the ordinate of the points where given lines cut y-axis [cbse-2025]

9. The system of eqn $2x+1=0$ and $3y-5=0$ has find solⁿ [cbse-2025]

10. Solve the following pair of equation algebraically.

$$101x + 102y = 304$$

$$102x + 101y = 305$$

(cbse-2025)

11. Three year ago, Rashmi was thrice as old as Nazma. Ten year later, Rashmi will be twice as old as Nazma. How old are Rashmi and Nazma Now? (cbse-2024)

12. Tara scored 40 marks in a test, getting 3 marks for each right answer and losing 1 marks for each wrong answer. Had 4 marks been awarded for each correct answer and 2 marks been deducted for each wrong answer, then Tara would have scored 50 marks. Assuming that Tara attempted all question. find total number of question in test [cbse-2024]

13. Rehana went to a bank to withdraw 2000 ₹ she asked the Cashier to given her ₹ 50 and ₹ 100 notes only. Rehana got 25 notes in all. find how many notes of ₹ 50 and ₹ 100 did she receive (cbse-2024)

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

on a ~~one~~ day, the cashier of the park found that 300 tickets were sold and an amount of ₹ 5500 was collected.

(i) If no. of children visit be x and the no. of adults visit be y . then write the given situation algebraically.

(ii) How many children visited the park that day.

(iii) How much amount will be collected if 250 children and 100 adult visit park

[cbse-2024]