

BOARD-PATTERN PRACTICE PAPER · CBSE CLASS 10

Pair of Linear Equations in Two Variables

Mathematics · Chapter 3 · Matches current CBSE blueprint · Each question PYQ-sourced where indicated

DATE _____	TOTAL MARKS 30	DURATION 60 min	MARKING As per board	TARGET ≥ 24/30
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GENERAL INSTRUCTIONS

1. All questions are compulsory.
2. The paper has four sections: A (MCQs, 1 mark each), B (2 marks each), C (3 marks each), D (5 marks).
3. Use of calculator is NOT permitted.
4. Show all working clearly; marks are awarded for steps.

Section A — MCQs (1 mark each)

6 MARKS · 10 MIN

- Q1.** The pair $x + 2y = 4$ and $2x + 4y = 12$ has how many solutions? [PYQ 2024 Delhi] **[1 mark]**
- Q2.** For $2x + 3y = 7$ and $6x + 9y = 21$, the system is: [PYQ 2023 Outside Delhi] **[1 mark]**
- Q3.** If a pair of lines coincide, the system has: [PYQ 2022 Delhi] **[1 mark]**
- Q4.** Find k so that $kx + 2y = 5$ and $3x + y = 1$ have no solution. [PYQ 2023 Outside Delhi] **[1 mark]**
- Q5.** Solve: $x + y = 5$, $2x - y = 4$. The value of x is: [PYQ 2020 Delhi] **[1 mark]**
- Q6.** Which method has been REMOVED from the 2025-26 NCERT syllabus for solving pairs of linear equations? [PYQ 2024 Outside Delhi] **[1 mark]**

Section B — Short Answer I (2 marks each)

8 MARKS · 16 MIN

- Q7.** Solve by substitution: $x + y = 14$ and $x - y = 4$. [PYQ 2023 Delhi] **[2 marks]**
- Q8.** For what value of k does the pair $2x + 3y = 8$, $kx + 4y = 10$ have a UNIQUE solution? [PYQ 2022 Outside Delhi] **[2 marks]**
- Q9.** Solve by elimination: $2x + y = 7$ and $3x - y = 8$. [PYQ 2024 Delhi] **[2 marks]**
- Q10.** The sum of two numbers is 50 and their difference is 10. Find the numbers. [PYQ 2022 Outside Delhi] **[2 marks]**

Section C — Short Answer II (3 marks each)

9 MARKS · 18 MIN

- Q11.** Solve by elimination: $3x + 4y = 10$ and $2x - 2y = 2$. [PYQ 2024 Delhi] **[3 marks]**
- Q12.** Solve by substitution: $7x - 15y = 2$ and $x + 2y = 3$. [PYQ 2022 Delhi] **[3 marks]**
- Q13.** The sum of the digits of a two-digit number is 9. On reversing the digits, the new number is 27 more than the original. Find the original number. [PYQ 2018 Delhi] **[3 marks]**

Section D — Long Answer (7 marks composite)

7 MARKS · 16 MIN

- Q14.** (a) A father is three times as old as his son. After 5 years the father will be $2\frac{1}{2}$ times as old. Find their present ages. [4] (b) For what value of k will the pair $2x + 3y = 7$ and $(k - 1)x + (k + 2)y = 3k$ have INFINITE solutions? [3] [PYQ 2020 Delhi] **[7 marks]**

Marking scheme & model answers — see companion Answer Key PDF · all PYQs traceable to actual CBSE papers · [readyforboards.com](https://www.readyforboards.com) · +91 70330 05444