

Mathematics

Practice Test Paper 2

(Chapter 3: Pair of Linear Equations in Two Variables)

Class X | 2026-27

Time Allowed: 45 Minutes

Maximum Marks: 25

General Instructions

1. All 13 questions are compulsory. The paper has four sections: A, B, C and D.
2. Section A - 5 marks; Section B - 8 marks; Section C - 9 marks; Section D - 3 marks.
3. Choose one correct option in Section A. Show the necessary steps and reasoning in Sections B, C and D.
4. Use algebraic methods where required. Use of calculators is not allowed.

SECTION A

(5 questions $\times$ 1 mark = 5 marks)

1. The pair $3x + 2y = 7$, $6x + 4y = 9$ is:

- (A) inconsistent
- (B) dependent
- (C) uniquely solvable
- (D) satisfied by every ordered pair

2. From $2x + 3y = 10$, y equals:

- | | |
|-------------------------|-------------------------|
| (A) $\frac{10 + 2x}{3}$ | (B) $10 - 2x$ |
| (C) $\frac{2x - 10}{3}$ | (D) $\frac{10 - 2x}{3}$ |

3. If $x - y = 7$ and $x + y = 11$, then x is:

- | | |
|-------|--------|
| (A) 2 | (B) 7 |
| (C) 9 | (D) 18 |

4. The equation $x = -4$ represents a line parallel to the:

- (A) x-axis
- (B) y-axis
- (C) line $y = x$
- (D) line $y = -x$

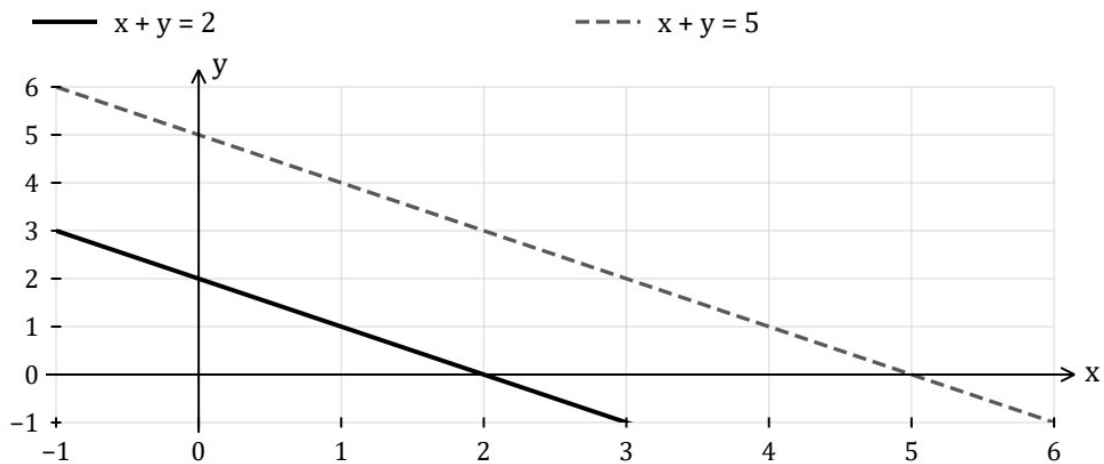
5. For which k are $2x + ky = 6$ and $4x + 6y = 12$ coincident?

- | | |
|-------|-------|
| (A) 2 | (B) 3 |
| (C) 4 | (D) 6 |

SECTION B

(4 questions $\times$ 2 marks = 8 marks)

6. Solve $x - y = 3$ and $\frac{1}{3}x + \frac{1}{2}y = 6$ by substitution.
7. Find p so that $2x + py = 8$ and $x + y = 6$ have no solution.
8. A 34 cm wire forms a rectangle whose length exceeds its width by 5 cm. Form two equations in length x and width y , and find both.
9. State the number of common solutions of the two lines shown. Explain using the graph.



SECTION C

(3 questions $\times$ 3 marks = 9 marks)

10. Five pencils and seven pens cost ₹50; seven pencils and five pens cost ₹46. Form equations and find the price of each item.
11. Solve $2x + y = 23$ and $4x - y = 19$. Hence find $5y - 2x$.
12. A two-digit number has digit sum 11. Reversing its digits makes the number 27 smaller. Find the original number by forming two equations.

SECTION D

(Application Based Question - 3 marks)

13. A food stall sells sandwiches for ₹ x and juice cups for ₹ y . Three sandwiches and two juices cost ₹220; two sandwiches and five juices cost ₹330.
- (i) Write the two equations.
- (ii) Find the price of one sandwich.
- (iii) Find the price of two sandwiches and three juices.