Section A (10 marks)

1. Solve the following pair of linear equations by the elimination method:

$$\circ$$
 2x + 3y = 7

$$\circ$$
 3x + 2y = 8

2. Solve the following pair of linear equations by the substitution method:

$$\circ \quad \mathbf{x} + \mathbf{y} = \mathbf{14}$$

$$\circ$$
 $x - y = 4$

3. Solve the following pair of linear equations by the cross-multiplication method:

$$\circ$$
 3x + 4y = 10

$$\circ$$
 2x - 2y = 2

4. Find the value of k for which the following pair of linear equations has no solution:

$$\circ$$
 3x + 2y = 5

$$\circ$$
 2x + ky = 1

5. Draw the graph of the following linear equation:

$$\circ$$
 2x + 3y = 6

Section B (10 marks)

- 6. The sum of the digits of a two-digit number is 9. The number obtained by reversing the digits exceeds the original number by 27. Find the number.
- 7. The length of a rectangle is 5 cm more than its breadth. If the perimeter of the rectangle is 46 cm, find its length and breadth.
- 8. The sum of the ages of a father and his son is 45 years. Five years ago, the father's age was four times the age of his son. Find their present ages.
- 9. A fraction becomes 1/3 when 1 is subtracted from the numerator and it becomes 1/4 when 8 is added to its denominator. Find the fraction.
- 10. Solve the following pair of linear equations graphically:

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$$2x - y = 1$$

$$\bullet \quad x + y = 8$$