

CHAPTER-3 | Pair of Linear Equations in Two Variables

QUIZ PART-07

1. The ratio of incomes of two persons is 9:7.

Their incomes are:

- A. ₹7200 and ₹5600
- B. ₹6000 and ₹5000
- C. ₹8000 and ₹6000
- D. ₹7000 and ₹5500 (A)

Explanation : Solving gives ₹7200 and ₹5600.

2. The system $2x + 3y = 8$ and $4x + 6y = 7$ is:

- A. Consistent
- B. Inconsistent
- C. Dependent
- D. Independent (B)

Explanation : The system is inconsistent (parallel lines).

3. A two-digit number and its reverse add to 66.

The number is:

- A. 27
- B. 72
- C. 45
- D. 36 (D)

Explanation : The number is 36.

4. The sum of two numbers is 26, and one is three times the other. The numbers are:

- A. 6 and 20
- B. 5 and 21
- C. 7 and 19
- D. 8 and 18 (A)

Explanation : The numbers are 6 and 20.

5. The cost of 2 pencils and 3 erasers is ₹9. The cost of each pencil and eraser is:

- A. ₹3 and ₹1
- B. ₹1 and ₹2
- C. ₹2 and ₹1
- D. ₹1 and ₹3 (C)

Explanation : Pencil = ₹2, Eraser = ₹1.

6. Jacob's age is 40 and his son's age is 10. This satisfies:

- A. 5 times relation
- B. 7 times relation
- C. 3 times relation
- D. None (A)

Explanation : The age relation is 5 times.

7. The sum of a number and its reverse is 66.

The number is:

- A. 27
- B. 72
- C. 45
- D. 36 (D)

Explanation : The number is 36.

8. The sum of two numbers is 26, one number is three times the other. The numbers are:

- A. 6 and 20
- B. 5 and 21
- C. 7 and 19
- D. 8 and 18 (A)

Explanation : The numbers are 6 and 20.

9. The equation of the line passing through (1, 2) with slope 3 is:

- A. $y = 3x + 1$
- B. $y - 2 = 3(x - 1)$
- C. $y = x + 2$
- D. $y = 3x - 1$ (B)

Explanation : Point-slope form gives $y - 2 = 3(x - 1)$.

10. The equation of the line with slope 3 through (1, 2) is:

- A. $y = 3x + 1$
- B. $y - 2 = 3(x - 1)$
- C. $y = x + 2$
- D. $y = 3x - 1$ (B)

Explanation : The equation is $y - 2 = 3(x - 1)$.