

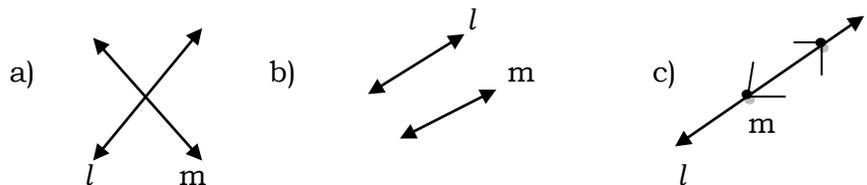
I. Answer in one word: 4x1=4

1. When a system of linear equation has one solution, the system is said to be a _____.

2. When a system of linear equation has infinitely many solutions, the lines are the same, the system is _____.

3. Choose the best option:

Which of the following has no solution.



d) None of the above

4. If $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$ where $a_1x + b_1y + c_1 = 0$ and $a_2x + b_2y + c_2 = 0$ then the given pair of linear equation has _____ solutions.

- a) no b) two c) unique d) infinite

II. Answer the following: 1x2=2

5. Solve: $x + y = 5; x - y = 3$

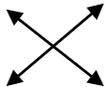
III. Solve the following: 3x5=15

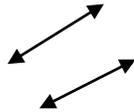
6. Solve using method of substitution for $2x - 3y = 7; 5x + y = 9$

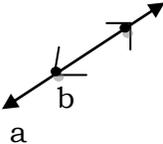
7. Raman's age is three times the sum of ages of his two sons. After 5 years his age will be twice the sum of the ages of his two sons. Find the age of Raman.

8. The monthly income of A and B are in the ratio 3:4 and their monthly expenditures are in the ratio 5:7. If each saves ₹ 5000 per month, find the monthly income of each. Solve by elimination Method.

IV. Match the following: 4x1=4

9.  - Infinite number of solutions

10.  - One single solution

11.  - 4

12. $2x=8, x=?$ - No solution

I. Fill in the blanks: 5x1=5

1. In _____ mirror, the reflecting surface is curved inwards.
2. Apple contains malic acid, orange contains_____.
3. _____ are required in minute quantities to perform specific physiological and biochemical functions.
4. Nyctalopia is caused due to deficiency of _____.
5. _____ is called as sunshine vitamin.

II. Answer the following in short: 5x2=10

Part - A (any one)

1. Define the term OPTICS.
2. What will happen, when a paper is kept in front of the concave mirror? why?

Part -B (any one)

3. Classify the various types of acids based on their sources.
4. Define Aquaregia.

Part - C (any three)

5. List out the five major group of nutrients.
6. List out the macrominerals required by human body.
7. List out the symptoms of scurvy.
8. What is malnutrition?
9. List out the dietary sources of fats.

III. Answer in detail: 2x5=10

Part - A (any one)

1. State the laws of reflection, with diagram?
2. a) What is optical illusion?
b) What are known as spherical mirrors?

Part - B (any one)

3. Write any five uses of acids.
4. Write the classification of acids.