Word Problems on Mixed Operation (Addition and Subtraction)

Mixed Operation Word Problems

Mixed operation word problems involve both addition and subtraction in a single question. We use these when a real-life situation includes both increasing and decreasing values.

Example: A person had 500 rupees. He spent 150 rupees and then got 200 rupees more. How much does he have now?

We first subtract, then add: (500 − 150) + 200 = 550

Steps to Solve Word Problems

i. Read the problem carefully

ii. Identify what is being added and what is being subtracted

iii. Use brackets or write step-by-step to solve

iv. Always check your answer by reading the question again

Properties Used

Addition is used to find total, combined, or increased value

Subtraction is used to find difference, remaining, or how much left

Addition and subtraction are inverse operations and often work together in word problems

Example 1:

Question: Rina had 2,400 rupees. She bought a dress for 850 rupees and later received 500 rupees from her aunt. How much money does she have now?

Solution:

Step 1: Subtract the amount spent → 2400 − 850 = 1550

Step 2: Add the money received → 1550 + 500 = 2050

Answer: Rina has 2,050 rupees now

Example 2:

Question: A water tank had $\frac{5}{6}$ of water. $\frac{1}{6}$ of it was used and then $\frac{2}{6}$ more was added. How much water is there now?

Solution:

Step 1: Subtract the part used → $\frac{5}{6} - \frac{1}{6} = \frac{4}{6}$

Step 2: Add the new water → $\frac{4}{6} + \frac{2}{6} = \frac{6}{6} = 1$

Answer: The tank is now full with 1 whole

Summary Points

- Mixed operation problems use both addition and subtraction
- Understand the story problem before choosing the operations
- Follow correct order: subtract what is lost, then add what is gained
- Use brackets or step-by-step methods to avoid confusion
- This helps in solving real-life problems like money, distance, and quantity