Today's Learning – 4 February 2026

Topic: Arithmetic Progression (AP) – Basics

An Arithmetic Progression (AP) is a sequence of numbers in which the difference between consecutive terms is constant.

First term is denoted by 'a' and common difference by 'd'.

nth term of AP: a■ = a + (n – 1)d

Sum of first n terms: S■ = n/2 [2a + (n – 1)d]

Solved Examples

Example 1: Find the 10th term of AP: 3, 7, 11... Solution: a = 3, d = 4 → a■■ = 39

Example 2: Find sum of first 10 terms of AP: 2, 4, 6... Solution: a = 2, d = 2 → S■■ = 110

Example 3: Find first 5 terms if a = 5, d = 3 Solution: 5, 8, 11, 14, 17

Practice Questions with Answers

1. Find 15th term of AP: 4, 9, 14... Answer: 74

2. Sum of first 20 terms of AP: 3, 6, 9... Answer: 630

3. 8th term of AP: 5, 10, 15... Answer: 40

4. Number of terms in AP: 2, 5, 8... up to 92 Answer: 31 terms

5. Write first 5 terms if a = 10, d = –2 Answer: 10, 8, 6, 4, 2