1. What is 18^{th} term of the sequence defined by $a_n = \frac{n(n-3)}{n+4}$

2. Write the A.P., when the first term a is 10 and common difference d is 10.

3. For the following A.P.'s write the first term and the common difference:

   (i) $3, 1, -1, -3, \ldots$ (ii) $\frac{1}{3}, \frac{5}{3}, \frac{9}{3}, \frac{13}{3}, \ldots$ (iii) $0.6, 1.7, 2.8, \ldots$

4. Find the 18^{th} term and n^{th} term for the sequence 7, 4, 1, −2, −5.

5. Which term of the A.P. 7, 12, 17, ….. is 87?

6. Find the 5^{th} term from the end of the AP, 17, 14, 11, ….., −40

7. If $2x, x+10, 3x+2$ are in A.P., find the value of x.

8. If the numbers a, b, c, d, e form an A.P., then find the value of $a - 4b + 6c - 4d + e$.

9. Find the sum of the first

   (i) 100 natural numbers (ii) n natural numbers.

10. If the sum of 7 term of an A.P. is 49 and that of 17 term is 289, find the sum of n terms.