ONLINE MATHS CLASS - X - 10 (12 / 07 /2021)

1. ARITHMETIC SEQUENCE - CLASS 8 – WORK SHEET- 2

Important points .

➤ If the first term of an arithmetic sequence is f and its common difference is d ,

then its nth term is $d\,n + f - d$.

➤ If n is an odd number , then the sum of n consecutive terms of an arithmetic

sequence = n x middle term .

➤ In an arithmetic sequence , if the sums of positions of two pairs of terms are equal ,

then the sums of the pairs of the terms are equal .

1) The sum of first and 9th terms of an arithmetic sequence is 44 .

   a) What is the sum of second and 8th terms of this sequence ?

   b) If the fourth term is 18 , find its 6th term .

   c) What is its fifth term ?

2) Seventh term of an arithmetic sequence is 36 .

   a) What is the sum of first and 13th terms of this sequence ?

   b) What is the sum of 6th and 8th terms of this sequence ?

   c) If the 5th term is 26 , find its 9th term .

3) The sum of first and 10th terms of an arithmetic sequence is 35 and its third term is 10

   a) What is the sum of second and 9th terms of this sequence ?

   b) What is its 8th term ?

   c) What is its common difference ?

   d) What is its algebraic form ?

4) The sum of the first and 12th terms of an arithmetic sequence is 68 .

   a) What is the sum of its second and 11th terms ?

   b) What is the sum of its third and 10th terms ?

   c) What is the sum of its 6th and 7th terms ?

   d) What is the sum of first 12 terms of this sequence ?

5) The sum of the third and 18th terms of an arithmetic sequence is 40 .

   a) What is the sum of its first and 20th terms ?

   b) What is the sum of its second   and 19th terms ?

   c) What is the sum of its 10th and 11th terms ?

   d) What is the sum of first 20 terms of this sequence ?