ARITHMETIC SEQUENCE ANSWER KEY

Arithmetic sequence answer key refers to the solutions and explanations related to arithmetic sequences, which are fundamental concepts in mathematics. An arithmetic sequence is a series of numbers in which each term after the first is generated by adding a constant difference to the previous term. Understanding arithmetic sequences is essential for students as it forms the basis for more complex mathematical concepts. In this article, we will explore what an arithmetic sequence is, how to find the nth term, the common difference, and provide examples with an answer key for better comprehension.

What is an Arithmetic Sequence?

An arithmetic sequence, also known as an arithmetic progression, is a sequence of numbers in which the difference between consecutive terms is constant. This difference is called the "common difference."

Characteristics of Arithmetic Sequences

To better understand arithmetic sequences, let's look at their key characteristics:

- First Term (a): The initial term of the sequence.
- Common Difference (d): The fixed amount added to each term to obtain the next term.
- nth Term (a_n): The term at position n in the sequence.

Formula for Arithmetic Sequences

The formula to find the nth term of an arithmetic sequence is given by: