Ordering of Numbers

Ordering of Numbers:

Ordering means arranging numbers in a specific sequence — either from smallest to greatest or from greatest to smallest.

Types of Ordering:

Ascending Order:

Arranging numbers from smallest to greatest.

Example: 25, 46, 103, 245 \rightarrow (Ascending order)

Descending Order:

Arranging numbers from greatest to smallest.

Example: 245, 103, 46, $25 \rightarrow$ (Descending order)

How to Order Large Numbers:

To compare and arrange numbers:

- Count the digits in each number. A number with more digits is greater.
- If digits are equal, compare from left to right.

Properties of Ordering:

1. Numbers with more digits are always greater.

Example: 89,542 > 9,452

2. If digits are equal, compare from leftmost digit.

Example: Compare 43,215 and 41,785

4 = 4 (ten-thousands place), but $3 > 1 \rightarrow So$, 43,215 > 41,785

3. Helps in arranging, sorting, and comparing numbers.

Example 1:

Question: Arrange the following numbers in ascending order:

34,682, 29,305, 40,012, 18,764

Solution:

Step 1: Compare the numbers

18,764 < 29,305 < 34,682 < 40,012

Answer: 18,764, 29,305, 34,682, 40,012

Example 2:

Question: Arrange the following numbers in descending order: 55,049, 72,186, 61,024, 49,835 Solution: Step 1: Compare the numbers 72,186 > 61,024 > 55,049 > 49,835 Answer: 72,186, 61,024, 55,049, 49,835

Summary Points:

- Ordering means putting numbers in ascending (small to big) or descending (big to small) order.
- First, check the number of digits.
- If digits are equal, compare digit by digit from left.
- Useful in comparison, arrangement, and data sorting.