

Greatest and Smallest Numbers



Largest Number:

We can make the largest number from a given number of digits by writing the largest digit at the leftmost place and the remaining digits in descending order of their values to the right that is to arrange the digits in descending order.

Smallest Number:

We can make the smallest number from a given number of digits by writing the smallest digit at the leftmost place and the remaining digits in ascending order of their values to the right, that is arrange the digits in ascending order.

Example: Use the given digits without repetition and make the largest and the smallest number

i) 5,4,3,7

- To get the largest number we will arrange the digits in descending order. i.e. 7,5, 4, 3. Therefore, the largest number is 7543.
- Now, to get the smallest number, we will arrange the given digits in ascending order. i.e. 3, 4, 5, 7. Therefore, the smallest number is 3457.

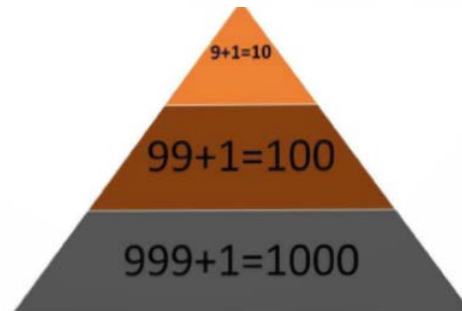
ii) 1,4,9,2

- To get the largest number we will arrange the digits in descending order. i.e. 9, 4, 2, 1. Therefore, the largest number is 9421.

Now, to get the smallest number, we will arrange the given digits in ascending order. i.e. 1, 2, 4, 9. Therefore, the smallest number is 1249

Knowing more about Numbers

Look at the pattern:



- Greatest single digit number + 1 = Smallest 2digits number
- Greatest 2digits number + 1 = Smallest 3 digits number
- Greatest 3 digits number + 1 = Smallest 4 digits number
- Greatest 4 digits number + 1 = Smallest 5 digits number