

## Numbers in Indian and International System

- Ascending order means arrangement from the smallest to the greatest
- Descending order means arrangement from the greatest to the smallest
- Comparison is always from left to right: Given two numbers, one with more digits is the greater number. If the number of digits in the two given numbers is the same, that number is larger, that has a greater leftmost digit. If this digit also happens to be the same, we look at the next digit and so on
- In forming numbers from given digits, we should be careful to see if the conditions under which the numbers are to be formed are satisfied ; repetition of numbers allowed or not
- Zero before a number has no meaning : 097 is a 2 digit number not a three digit number

Number of digits	Smallest	Greatest	Relation
1	0	9	$9 + 1 = 10$
2	10	99	$99 + 1 = 100$
3	100	999	$999 + 1 = 1,000$
4	1,000	9,999	$9,999 + 1 = 10,000$
5	10,000	99,999	$99,999 + 1 = 1,00,000$
6	1,00,000	9,99,999	$9,99,999 + 1 = 10,00,000$
7	10,00,000	99,99,999	$99,99,999 + 1 = 1,00,00,000$

1 hundred = 10 tens

1 thousand = 10 hundreds = 100 tens

1 lakh = 100 thousands = 1000 hundreds

1 crore = 100 lakhs = 10,000 thousands

Brackets help us in performing mathematical operations efficiently and without ambiguity

### Indian system of numeration:

- We use ones, tens, hundreds, thousands and then lakhs and crores
- Commas are used to mark thousands, lakhs and crores
- The first comma comes after hundreds place (three digits from the right) and marks thousands
- The second comma comes two digits later (five digits from the right). It comes after ten thousands place and marks lakh
- The third comma comes after another two digits (seven digits from the right). It comes after ten lakh place and marks crore
- Example : 5, 08, 01, 592 is read as five crore eight lakh one thousand five hundred ninety two

### International System of Numeration:

- We use ones, tens, hundreds, thousands and then millions
- One million is a thousand thousands
- Commas are used to mark thousands and millions
- It comes after every three digits from the right
- Commas are placed after 3 and 6 digits to separate thousand and million respectively, from the right
- The first comma from the right marks thousands and the next comma marks millions
- Example : 50,801,592 is read as fifty million eight hundred one thousand five hundred ninety two