

CHAPTER 01 LARGE NUMBERS

Indian Place Value Chart

Crores		Lakhs		Thousands		Ones		
Ten Crores (TC) (10,00,00,000)	Crores (C) (1,00,00,000)	Ten Lakhs (TL) (10,00,000)	Lakhs (L) (1,00,000)	Ten Thousands (TTh) (10,000)	Thousands (Th) (1000)	Hundreds (H) (100)	Tens (T) (10)	Ones (O) (1)

Let's read this number according to Indian Place Value Chart.

3,56,245 – Three lakh fifty six thousand two hundred forty five

1,23,50,005- One crore twenty three lakh fifty thousand five

International Place Value Chart

Millions			Thousands			Ones		
Hundred Millions (HM) (100,000,000)	Ten Millions (TM) (10,000,000)	Millions (M) (1,000,000)	Hundred Thousands (HTh) (100,000)	Ten Thousands (TTh) (10,000)	Thousands (Th) (1,000)	Hundreds (H) (100)	Tens (T) (10)	Ones (O) (1)

Let's read this number according to International Place Value Chart.

37,987,450 – Thirty seven million nine hundred eighty seven thousand four hundred fifty

100,000,150- One hundred million one hundred fifty

Place Value and Face Value

Place value of the digit is the product of the face value of the digit and the value of its place whereas face value of a digit is the digit itself.

Let's find the face value and place value of 6 in 6, 45,100

Face Value is digit itself so face value of 6 in 6, 45,100 is '6'

Place Value of the digit is product of the face value of the digit and the value of its place so, place value of 6 in 6,45,100 is $6 \times 1,00,000 = 6,00,000$ (6 Lakh)

Expanded Notation

In expanded form, we expand each digit of a number to its place value.

Let's see expanded notation of the number 29,123

This can be expanded in three different ways:

1. 2 ten thousands + 9 thousands + 1 hundred + 2 tens + 3 ones
2. $(2 \times 10,000) + (9 \times 1,000) + (1 \times 100) + (2 \times 10) + (3 \times 1)$
3. $20000 + 9000 + 100 + 20 + 3$

Standard form of $60000+4000+40+6$ is 64,046

Successor and Predecessor

To find the successor of a given number, we add 1 to it and to find predecessor of a given number, we subtract 1 from it.

Example:

Successor of 99,99,999 is $99,99,999 + 1 = 1,00,00,000$

Predecessor of 4,00,00,000 is $4,00,00,000 - 1 = 3,99,99,999$

Ascending order

The arrangement of numbers from the smallest to the greatest is called ascending order. This is also called as increasing order.

Example: $88,88,870 < 7,54,34,108 < 67,65,76,676 < 67,76,78,676$

Descending order

The arrangement of numbers from the greatest to the smallest is called descending order. This is also called as decreasing order.

Example: $67,76,78,676 > 67,65,76,676 > 7,54,34,108 > 88,88,870$

ROMAN NUMERALS CHART

1 TO 100

1	I	21	XXI	41	XLI	61	LXI	81	LXXXI
2	II	22	XXII	42	XLII	62	LXII	82	LXXXII
3	III	23	XXIII	43	XLIII	63	LXIII	83	LXXXIII
4	IV	24	XXIV	44	XLIV	64	LXIV	84	LXXXIV
5	V	25	XXV	45	XLV	65	LXV	85	LXXXV
6	VI	26	XXVI	46	XLVI	66	LXVI	86	LXXXVI
7	VII	27	XXVII	47	XLVII	67	LXVII	87	LXXXVII
8	VIII	28	XXVIII	48	XLVIII	68	LXVIII	88	LXXXVIII
9	IX	29	XXIX	49	XLIX	69	LXIX	89	LXXXIX
10	X	30	XXX	50	L	70	LXX	90	XC
11	XI	31	XXXI	51	LI	71	LXXI	91	XCI
12	XII	32	XXXII	52	LII	72	LXXII	92	XCII
13	XIII	33	XXXIII	53	LIII	73	LXXIII	93	XCIII
14	XIV	34	XXXIV	54	LIV	74	LXXIV	94	XCIV
15	XV	35	XXXV	55	LV	75	LXXV	95	XCV
16	XVI	36	XXXVI	56	LVI	76	LXXVI	96	XCVI
17	XVII	37	XXXVII	57	LVII	77	LXXVII	97	XCVII
18	XVIII	38	XXXVIII	58	LVIII	78	LXXVIII	98	XCVIII
19	XIX	39	XXXIX	59	LIX	79	LXXIX	99	XCIX
20	XX	40	XL	60	LX	80	LXXX	100	C

MULTIPLICATION TABLE

	11	12	13	14	15	16	17	18	19	20
1	11	12	13	14	15	16	17	18	19	20
2	22	24	26	28	30	32	34	36	38	40
3	33	36	39	42	45	48	51	54	57	60
4	44	48	52	56	60	64	68	72	76	80
5	55	60	65	70	75	80	85	90	95	100
6	66	72	78	84	90	96	102	108	114	120
7	77	84	91	98	105	112	119	126	133	140
8	88	96	104	112	120	128	136	144	152	160
9	99	108	117	126	135	144	153	162	171	180
10	110	120	130	140	150	160	170	180	190	200

ASSIGNMENT

Q1 Write the number name according to the Indian place value chart.

2,79,68,234 -

44,23,400 -

1,00,06,002 -

Q2 Write the number name according to the International place value chart.

500,500 -

112,400 -

7,077,777 -

Q3 Write in numerals.

Two lakh fifty three thousand two hundred thirty -

Fifty two lakh twenty thousand two -

Thirty five million two hundred thirty four thousand two hundred -

Q4 Write in expanded form.

$$28,457 =$$

$$5,20,754 =$$

$$8,26,444 =$$

Q5 Write in standard form.

$$8 \text{ lakhs} + 0 \text{ ten thousands} + 5 \text{ thousands} + 1 \text{ hundred} =$$

$$5 \text{ ten thousands} + 3 \text{ thousands} + 3 \text{ ones} =$$

$$3,00,000 + 2,000 + 100 + 20 =$$

Q6 Write the place value of underlined digits.

$$1,35,67,214 -$$

$$41,00,15,003 -$$

$$6,40,00,030 -$$

$$35,00,11,045 -$$