ACADEMIC WORLD SCHOOL™
BEMETARA

CLASS – V

SUBJECTS - MATHEMATICS

2 Roman Numerals

In Class 4, we have learnt reading and writing Roman numerals up to 100. In this section, we shall extend learning of reading and writing of these numerals up to 500.

We already know that there are seven basic symbols to write any Roman numeral.

These symbols with their corresponding Hindu-Arabic numerals are given below.

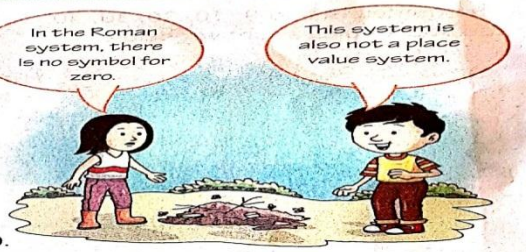
Roman Numeral	I	V	X	L	C	D	M
Hindu-Arabic Numeral	1	5	10	50	100	500	1000

Rules for forming Roman Numerals

Rule 1: Repetition of a Roman numeral means addition.

Caution: (1) Only I, X, C and M can be repeated.
(2) V, L and D cannot be repeated.
(3) No numeral can be repeated more than 3 times.

Examples: II = 1 + 1 = 2, III = 1 + 1 + 1 = 3,
XX = 10 + 10 = 20, XXX = 10 + 10 + 10 = 30,
CC = 100 + 100 = 200, CCC = 100 + 100 + 100 = 300.



Rule 2: A smaller numeral written to the right of a larger numeral is always added to the larger numeral.

Examples: VI = 5 + 1 = 6, VII = 5 + 1 + 1 = 7, VIII = 5 + 1 + 1 + 1 = 8,
XI = 10 + 1 = 11, XII = 10 + 1 + 1= 12, XIII = 10 + 1 + 1 + 1 = 13, XV = 10 + 5 = 15,
LX = 50 + 10 = 60, LXX = 50 + 10 + 10 = 70, LXXX = 50 + 10 + 10 +10 = 80,
CX = 100 + 10 = 110, CXX = 100 + 10 + 10 = 120,
CXXX = 100 + 10 + 10 + 10 = 130, CL = 100 + 50 =150.

Rule 3: A smaller numeral written to the left of a larger numeral is always subtracted from the larger numeral.

Caution: (1) V, L and D are never subtracted.
(2) I can be subtracted from V and X only.

Examples: IV = 5 – 1 = 4, IX = 10 – 1 = 9
(3) X can be subtracted from L and C only.

Examples: XL = 50 –10 = 40, XC = 100 – 10 = 90.
(4) C can be subtracted from D and M only.

Example: CD = 500 – 100 = 400.

Rule 4: When a smaller numeral is placed between two larger numerals, then it is always subtracted from the larger numeral immediately following it.

Examples: XIV = 10 + (5 – 1) = 14, XIX = 10 + (10 – 1) = 19,
CXIV = 100 + 10 + (5 – 1) = 114, CXC = 100 + (100 – 10) = 190.

Writing Roman Numerals for Hindu-Arabic Numerals up to 500

The numerals 1 to 9; 10, 20, 30, 40, ..., 90 and 100, 200, ..., 500 can be written in Roman numerals using the above rules as shown below.

Hindu-Arabic Numeral	Roman Numeral	Hindu-Arabic Numeral	Roman Numeral	Hindu-Arabic Numeral	Roman Numeral
1	I	10	X	100	C
2	II	20	XX	200	CC
3	III	30	XXX	300	CCC
4	IV	40	XL	400	CD
5	V	50	L	500	D
6	VI	60	LX		
7	VII	70	LXX		
8	VIII	80	LXXX		
9	IX	90	XC		

When we write any number in Roman numeral, we write it in expanded form first and then write the Roman numeral for the hundreds first, followed by the Roman numeral for the tens and then for the ones to the right of it.

Thus, we have:

(a) 89 = 80 + 9 = LXXX + IX = LXXXIX
(b) 97 = 90 + 7 = XC + VII = XCVII
(c) 146 = 100 + 40 + 6 = C + XL + VI = CXLVI
(d) 199 = 100 + 90 + 9 = C + XC + IX = CXCIX
(e) 258 = 200 + 50 + 8 = CC + L + VIII = CCLVIII
(f) 335 = 300 + 30 + 5 = CCC + XXX +V = CCCXXXV
(g) 410 = 400 + 10 = CD + X = CDX
(h) 444 = 400 + 40 + 4 = CD + XL + IV = CDXLIV

Similarly, we have:

(a) CIX = C + IX = 100 + 9 = 109
(b) CLXIX = C + L + X + IX = 100 + 50 + 10 + 9 = 169
(c) CXCIV = C + XC + IV = 100 + 90 + 4 = 194
(d) CCXLVII = CC + XL + VII = 200 + 40 + 7 = 247
(e) CDXXXVIII = CD + XXX + VIII = 400 + 30 + 8 = 438

Exercise 2

1. **Write the Roman numeral for each of the following Hindu-Arabic numerals.**
(a) 78 (b) 189 (c) 247 (d) 196 (e) 365
(f) 399 (g) 449 (h) 495 (i) 344 (j) 466

2. **Write the Hindu-Arabic numerals corresponding to each of the following.**
(a) LXIX (b) XCI (c) CXLVI (d) CXCII
(e) CCCLXXXV (f) CCLIX (g) CCXCVI (h) CXCVI
(i) CCLXVI (j) CCCXIII

3. **Which of the following are meaningless?**
(a) IC (b) CI (c) IL (d) LI (e) VC
(f) CV (g) CXXXXVI (h) CCCCXVI (i) LLIV (j) CCV

4. **Compare and put the correct symbol >, < or = in the placeholders.**
(a) XCIII ☐ CXIII (b) CD ☐ CCCXC
(c) CCLIX ☐ CCXLI (d) CDXL ☐ CDLX
(e) CXLIX ☐ CLXXXIX (f) CCXXVI ☐ CCXXIX

MULTIPLE CHOICE QUESTIONS

1. **What is the roman numeral for 2017?**

a) **MMXVII**

b) **MCCXVII**

c) **MXXVII**

d) **None of these**

2. **What is the Hindu -Arabic numerals for MCCCLX?**

a) **1360**

b) **690**

c) **1256**

d) **1320**

3. **In a roman numeral how many basic symbols are there?**

a) **7**

b) **8**

c) **9**

d) **10**

4. **Which of the following roman numerals cannot be repeated?**

a) **I**

b) **V**

c) **X**

d) **C**

5. **I can be subtracted from which of the following roman numerals?**

a) **V**

b) **V and X**

c) **X and C**

d) **V, X and C**

SOLVE THE FOLLOWING

1. **XLIX + XXXIX**
2. **LVII – XXIX**
3. **Arrange the roman numerals in ascending order.**
   CXIX, XCIX, CXXI, CIX, CXX

3 Large Numbers (UP TO TEN CRORES)

Introduction

In Class 4, we have studied up to 7-digit numbers.

We know that the largest 7-digit number is 9999999.

Putting its digits in Indian Place Value Chart, we have:

TL	L	TTh	Th	H	T	O
9	9	9	9	9	9	9

So, we can read it easily as:

'Ninety-nine lakh ninety-nine thousand nine hundred ninety-nine'.

On adding 1 to 9999999, we get:

	9	9	9	9	9	9	9
+							1
1	0	0	0	0	0	0	0

Thus, 9999999 + 1 = 10000000.

We read 10000000 as one crore.

This is the smallest 8-digit number.

The eighth place is called the crores place.

We may now extend the place value chart to 8 places.

Thus, 20000000 is read as two crores;

30000000 is read as three crores;

70000000 is read as seven crores;

90000000 is read as nine crores.

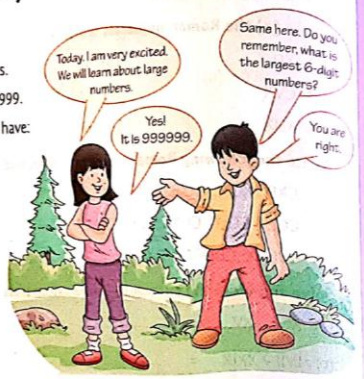
The largest 8-digit number is 99999999.

Putting its digits in Indian Place Value Chart having 8 places, we have:

C	TL	L	TTh	Th	H	T	O
9	9	9	9	9	9	9	9

Thus, we can read it as:

'Nine crore ninety-nine lakh ninety-nine thousand nine hundred ninety-nine.'



On adding 1 to 99999999, we get:

	9	9	9	9	9	9	9	9
+								1
1	0	0	0	0	0	0	0	0

We read 100000000 as ten crores.

This is the smallest 9-digit number.

The ninth place is called the ten crores place.

Thus, we may now extend the Indian Place Value Chart to 9 places.

Periods in a Place Value Chart

In an Indian Place Value Chart, the nine places are grouped into four periods.

These periods from right to left are: Ones, Thousands, Lakhs, Crores.

Given below is the place value chart showing the first nine places.

Indian Place Value Chart

Periods →	Crores		Lakhs		Thousands		Ones		
Places →	Ten Crores 10000000	Crores 10000000	Ten Lakhs 1000000	Lakhs 100000	Ten Thousands 10000	Thousands 1000	Hundreds 100	Tens 10	Ones 1
	TC	C	TL	L	TTh	Th	H	T	O

In a given numeral, starting from the right, the first three places make the ones period, the next two places make the thousands period, the next two places make the lakhs period and the next two places make the crores period.

How to Write a Number?

In a given number, we separate the periods by using commas (,).

The following examples will make the ideas more clear.

Example 1: Write the number 183672123 by separating the periods.

Solution: Starting from the right we make bunches of 3 digits, 2 digits, 2 digits and 2 digits respectively and separating the bunches by commas, we may write 183672123 as

TC	C	TL	L	TTh	Th	H	T	O
1	8	3	6	7	2	1	2	3

So, we write it as 18,36,72,123.

Example 2: Arrange the digits of each of the following numerals in the place value chart and write it by separating the periods.

(a) 29574 (b) 136095 (c) 3705160

(d) 18256479 (e) 20703584 (f) 240800218

Solution: Starting from the right, we make entries of the digits of each numeral in the place value chart as shown below.

Now, separating the periods, we may write the given numerals as under.

	Given Numeral									Using Commas
	Crores		Lakhs		Thousands		Ones			
	TC	C	TL	L	TTh	Th	H	T	O	
(a)					2	9	5	7	4	29,574
(b)				1	3	6	0	9	5	1,36,095
(c)			3	7	0	5	1	6	0	37,05,160
(d)		1	8	2	5	6	4	7	9	1,82,56,479
(e)		2	0	7	0	3	5	8	4	2,07,03,584
(f)	2	4	0	8	0	0	2	1	8	24,08,00,218

How to Read a Number?

While reading a number all the digits in the same period are read together and the name of the period, except the ones, is read along with them.

Example 3: Write the following numbers in words.

(a) 295708 (b) 1407319 (c) 12043056

(d) 50834570 (e) 230305211 (f) 920517068

Solution: Separating the periods of ones, thousands, lakhs and crores from the right in each numeral, we may write the given numerals as under.

	Given Numeral									Number Names
	Crores		Lakhs		Thousands		Ones			
	TC	C	TL	L	TTh	Th	H	T	O	
(a)				2	9	5	7	0	8	Two lakh ninety-five thousand seven hundred eight
(b)			1	4	0	7	3	1	9	Fourteen lakh seven thousand three hundred nineteen
(c)		1	2	0	4	3	0	5	6	One crore twenty lakh forty-three thousand fifty-six
(d)		5	0	8	3	4	5	7	0	Five crore eight lakh thirty-four thousand five hundred seventy
(e)	2	3	0	3	0	5	2	1	1	Twenty-three crore three lakh five thousand two hundred eleven
(f)	9	2	0	5	1	7	0	6	8	Ninety-two crore five lakh seventeen thousand sixty-eight

Example 4: Find the place value of each of the digits in the number 367405281.

Solution: We may write the given number as:

TC	C	TL	L	TTh	Th	H	T	O
3	6	7	4	0	5	2	8	1

Place value of 1 = 1 one = 1 × 1 = 1

Place value of 8 = 8 tens = 8 × 10 = 80

Place value of 2 = 2 hundreds = 2 × 100 = 200

Place value of 5 = 5 thousands = 5 × 1000 = 5000

Place value of 0 = 0 ten thousands = 0 × 10000 = 0

Place value of 4 = 4 lakhs = 4 × 100000 = 400000

Place value of 7 = 7 ten lakhs = 7 × 1000000 = 7000000

Place value of 6 = 6 crores = 6 × 10000000 = 60000000

Place value of 3 = 3 ten crores = 3 × 100000000 = 300000000

Example 5: Write 490570316 in the expanded form.

Solution: The given number may be written as:

TC	C	TL	L	TTh	Th	H	T	O
4	9	0	5	7	0	3	1	6

Thus, we have:

490570316 = 4 ten crores + 9 crores + 0 ten lakhs + 5 lakhs + 7 ten thousands + 0 thousands + 3 hundreds + 1 ten + 6 ones

= 4 × 100000000 + 9 × 10000000 + 0 × 1000000 + 5 × 100000 + 7 × 10000 + 0 × 1000 + 3 × 100 + 1 × 10 + 6 × 1

= 400000000 + 90000000 + 0 + 500000 + 70000 + 0 + 300 + 10 + 6

= 400000000 + 90000000 + 500000 + 70000 + 300 + 10 + 6.

Exercise 3

1. Rewrite the following numbers using commas to separate the periods according to the Indian place value chart.

(a) 623974 (b) 3768954 (c) 52673894 (d) 430615029 (e) 681008546

(f) 705000038 (g) 800808088 (h) 900000100 (i) 303100001

2. Write the following numbers in words.

(a) 74,10,507 (b) 39,00,302 (c) 2,41,05,063 (d) 10,00,53,109 (e) 22,07,08,518
(f) 36,10,06,284 (g) 50,19,00,006 (h) 10,01,01,100 (i) 4,04,04,004

3. Write the following numbers in figures.

(a) Ninety-two lakh five thousand fifty-five
(b) Six crore sixty-five lakh twenty thousand seven hundred sixteen
(c) Nine crore nineteen lakh nine thousand nine hundred ninety
(d) Twelve crore ten lakh three hundred sixty-five
(e) Five crore forty-two thousand one hundred nine
(f) Twenty-three crore five lakh seven thousand one hundred eight
(g) Thirty crore fifteen thousand eighteen
(h) Fifty-two crore one lakh thirty-one
(i) Thirteen crore five hundred seventy
(j) Ten crore ten thousand eleven
(k) One crore one thousand one

4. Using Indian place value system, write the place value of each of the digits in the numeral 64,19,70,528

5. Using Indian system of numeration, find the place value of the underlined digits in each of the following.

(a) 590713568 (b) 635709412 (c) 820307514
(d) 813605247 (e) 246053819 (f) 913546007

6. Write the following numbers in an expanded form.

(a) 5,29,347 (b) 23,09,519 (c) 9,72,34,026
(d) 13,06,19,804 (e) 37,24,09,578 (f) 89,30,16,870

7. Write the following in standard form.

(a) 3000000 + 700000 + 60000 + 9000 + 70 + 6
(b) 60000000 + 8000000 + 30000 + 400 + 80 + 4
(c) 20000000 + 200000 + 2000 + 200 + 2
(d) 700000000 + 30000000 + 200000 + 80000 + 4000 + 60 + 9
(e) 500000000 + 5000 + 50 + 5
(f) 900000000 + 900000 + 900 + 9
(g) 40000000 + 10 + 7

8. Counting in thousands, write the numbers from 2906754 to 2911754.

9. Counting in lakhs, write the numbers from 52736109 to 53236109.

10. Counting in crores, write the numbers from 163057500 to 223057500.

11. Look at the pattern and write the next three numbers.

(a) 3140624, 3140724, 3140824, ..., ..., ...
(b) 3256419, 3257419, 3258419, ..., ..., ...
(c) 70809010, 70909010, 71009010, ..., ..., ...
(d) 191817600, 201817600, 211817600, ..., ..., ...
(e) 302010400, 292010400, 282010400, ..., ..., ...

12. Write the smallest 9-digit number and the largest 8-digit number.

13. Answer the following.

(a) What comes just after 9536999? (b) What comes just before 9900000?
(c) What comes just after 13700899? (d) What comes just before 10000000?

Order Relation

In order to compare two numbers, we adopt the following rules:

Rule 1: The number with less digits is less than the number with more digits.

Rule 2: Suppose we have to compare two numbers with the same number of digits.

Step 1: First compare the digits at the leftmost place in both the numbers.

Step 2: If they are equal in value, then compare the second digits from the left.

Step 3: If the second digits from the left are equal, compare the third digits from the left.

Step 4: Continue until you come across unequal digits at the corresponding places. Now, the number with greater such digit is the greater of the two.

The following examples will make the ideas clear.

Example 1: Which is greater 25476801 or 6789968?

Solution: Here, we have to compare 25476801 and 6789968.

Clearly, 25476801 consists of 8 digits while 6789968 contains 7 digits.

∴ 25476801 > 6789968.

Example 2: Which is greater 96580734 or 96721643?

Solution: Let us arrange the given numbers in a place value chart.

C	TL	L	TTh	Th	H	T	O
9	6	5	8	0	7	3	4
9	6	7	2	1	6	4	3

Both the numbers have 8 digits.

At the crores place both have the same digit, namely 9.

At the ten-lakhs place both have the same digit, namely 6.

But, at the lakhs place, the first number has 5 while the second has 7.

Clearly, 5 < 7.

∴ 96580734 < 96721643.

Numbers in Ascending Order means the numbers from smallest to greatest.

Numbers in Descending Order means the numbers from greatest to smallest.

Example 3: Arrange the following numbers in ascending order.

3751234, 15267302, 143605217, 15458314, 4062341

Solution: Let us arrange the given numbers in a place value chart.

TC	C	TL	L	TTh	Th	H	T	O	
		3	7	5	1	2	3	4	← (1)
	1	5	2	6	7	3	0	2	← (3)
1	4	3	6	0	5	2	1	7	← (5)
	1	5	4	5	8	3	1	4	← (4)
		4	0	6	2	3	4	1	← (2)

Out of the given numbers two are 7-digit numbers, two are 8-digit numbers and one is a 9-digit number.

In 7-digit numbers, clearly 3751234 < 4062341 (Since 3 TL < 4 TL)

In 8-digit numbers, clearly 15267302 < 15458314 (Since 2 L < 4 L)

Clearly, the 9-digit number is the largest.

∴ 3751234 < 4062341 < 15267302 < 15458314 < 143605217

Hence, the given numbers in ascending order are:

3751234, 4062341, 15267302, 15458314, 143605217

Example 4: Arrange the following numbers in descending order.

483672906, 74635618, 483910257, 9876879, 74613898

Solution: Let us arrange the given numbers in a place value chart.

TC	C	TL	L	TTh	Th	H	T	O	
4	8	3	6	7	2	9	0	6	← (2)
	7	4	6	3	5	6	1	8	← (3)
4	8	3	9	1	0	2	5	7	← (1)
		9	8	7	6	8	7	9	← (5)
	7	4	6	1	3	8	9	8	← (4)

Out of the given numbers two are 9-digit numbers, two are 8-digit numbers and one is a 7-digit number.

In 9-digit numbers, clearly 483910257 > 483672906 (Since 9 L > 6 L)

In 8-digit numbers, clearly 74635618 > 74613898 (Since 3 TTh > 1 TTh)

Clearly, the 7-digit number is the smallest.

∴ 483910257 > 483672906 > 74635618 > 74613898 > 9876879

Hence, the given numbers in descending order are:

483910257, 483672906, 74635618, 74613898, 9876879

Exercise 4

1. Fill in each of the following boxes with appropriate symbol > or <.

(a) 1002456 ☐ 987896 (b) 23507104 ☐ 14536523
(c) 54836903 ☐ 103213102 (d) 203645817 ☐ 164786938
(e) 35672416 ☐ 35670590 (f) 478907506 ☐ 478913401
(g) 613054901 ☐ 613045989 (h) 750890315 ☐ 750890410
(i) 89276584 ☐ 101625302 (j) 917263954 ☐ 917260954

2. Arrange the following numbers in descending order.

(a) 12965784, 3076897, 129654503, 2789988, 21345603
(b) 245368009, 45639918, 93216723, 53791325, 245370119
(c) 62790568, 627905480, 62791023, 627905623, 62790931
(d) 63082318, 30728510, 27169237, 50643701, 7987689
(e) 7546890, 23150014, 998765, 23149925, 7546785

3. Arrange the following numbers in ascending order.

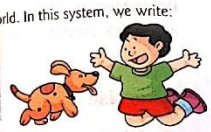
(a) 14865710, 20507106, 30008215, 2786789, 2876879
(b) 9368516, 10540603, 91032401, 9367839, 10541201
(c) 2537928, 101002301, 20547946, 100515602, 14035710
(d) 38715206, 129405817, 73678314, 7876589, 69721656
(e) 743162109, 304288713, 561945107, 89590788, 602357100

4. **Encircle the largest number in each of the following.**
   (a) 31650829, 307482134, 4536794, 41035106, 238590746
   (b) 102234102, 93645753, 27810591, 102240003, 93646800
   (c) 9037848, 12345716, 101010706, 91537964, 100718967
   (d) 9000009, 90000001, 9935469, 87590909, 88888888

International Place Value System

This system is followed by a large number of countries in the world. In this system, we write:

1 lakh	=	100 thousands
10 lakhs	=	1 million
1 crore	=	10 millions
10 crores	=	100 millions



In this system, we have periods of ones, thousands and millions.

In a given numeral, proceeding from right to the left, first three places make ones period, next three places make thousands period and the next three places make the millions period.

Given below is the international place value chart.

International Place Value Chart

Millions			Thousands			Ones		
Hundred Millions 100000000	Ten Millions 10000000	Millions 1000000	Hundred Thousands 100000	Ten Thousands 10000	Thousands 1000	Hundreds 100	Tens 10	Ones 1
HM	TM	M	HTh	TTh	Th	H	T	O

Example 1: Rewrite the following numbers with proper commas, using International system of numeration.
(a) 94536708 (b) 765049813 (c) 400835029

Solution: Arranging the given numerals in an International place value chart and then separating the periods, we may write them as shown.

	Given Numeral								
	Millions			Thousands			Ones		Notation
	HM	TM	M	HTh	TTh	Th	H	T	O	
(a)		9	4	5	3	6	7	0	8	94,536,708
(b)	7	6	5	0	4	9	8	1	3	765,049,813
(c)	4	0	0	8	3	5	0	2	9	400,835,029

Example 2: Write the number names of the following.
(a) 56,472,083 (b) 120,907,406 (c) 374,006,035
(d) 30,805,107 (e) 10,001,001 (f) 450,000,045

Solution: We know that in each numeral, starting from the right, we have periods of ones, thousands and millions. So, we may write the given numbers as under.

Numeral	Number Name
(a) 56, 472, 083	Fifty-six million four hundred seventy-two thousand eighty-three
(b) 120, 907, 406	One hundred twenty million nine hundred seven thousand four hundred six
(c) 374, 006, 035	Three hundred seventy-four million six thousand thirty-five
(d) 30, 805, 107	Thirty million eight hundred five thousand one hundred seven
(e) 10, 001, 001	Ten million one thousand one
(f) 450, 000, 045	Four hundred fifty million forty-five

Exercise 5

1. **Rewrite the following numerals with proper commas, using the International system.**
   (a) 35684129 (b) 50968302 (c) 103854179
   (d) 42560247 (e) 491560543 (f) 793654182
   (g) 300700006 (h) 100006001 (i) 90007010
2. **Write the number names of the following.**
   (a) 25,863,475 (b) 30,807,541 (c) 81,923,054
   (d) 140,905,319 (e) 231,600,148 (f) 490,300,007
   (g) 101,010,001 (h) 23,006,100 (i) 560,001,010
3. **Write the following in figures.**
   (a) Sixty-four million one hundred nineteen thousand eighteen
   (b) Two hundred eighty-nine million sixty-nine thousand forty-eight
   (c) One hundred five million one hundred eight thousand seven
   (d) Seven hundred sixteen million six hundred five
   (e) Three hundred one million two thousand thirty-one
   (f) Ten million three thousand thirty-six
   (g) Nineteen million nineteen
   (h) Sixty million forty-four thousand sixty-four
   (i) Two hundred million two thousand twenty

MULTIPLE CHOICE QUESTIONS

1. What is the place value of 4 in 98,74,265?
a) Hundred
b) Thousand
c) Ones
d) Tens
2. Which is the largest 6-digit number?
a) 99999
b) 100000
c) 999999
d) none of these
3. Which is the smallest 5 number digit formed using 4,6,0,3,2?
a) 23046
b) 02346
c) 20346
d) 64302
4. What will be the successor 29999?
a) 29998
b) 30000
c) 0
d) 28888

5. Commas are inserted in a number after each _____.

a) Digit

b) Place

c) Period

d) Group

SOLVE THE FOLLOWING

1. **Write the number in expanded form: 23,09,519**
2. **Arrange in descending order**
   12965784, 3076897, 129654503 ,2789988 ,21345603
3. **Arrange in ascending order**
   14865710, 20507106, 30008215, 2786789, 2876879
4. **Find the place value of each digits in the number 5267389**

4 Operations On Large Numbers

You are already familiar with four basic mathematical operations– Addition, Subtraction, Multiplication and Division. Now, we shall perform the same operations on large numbers.

Addition

We know that in a problem on addition, each one of the numbers to be added is called an addend and the result of addition is called their sum.

In Class 4, we have learnt the addition of 6-digit numbers. In the same way we add numbers having 7 or more digits.

The following examples will make the ideas more clear.

Example 1: **Add 5436289 and 2578657 and write the sum in words.**

Solution: Arranging the digits of the given numbers in column form and adding columnwise, we get:

	TL	L	TTh	Th	H	T	O	
	①	①	①		①	①		← Carry
	5	4	3	6	2	8	9	
+	2	5	7	8	6	5	7	
	8	0	1	4	9	4	6	

∴ The sum of the given numbers = 8014946.

The sum in words is 'Eighty lakh fourteen thousand nine hundred forty-six.'

Explanation: **Adding ones:**

9 ones + 7 ones = 16 ones

= 10 ones + 6 ones

= 1 ten + 6 ones.

Write 6 under ones column and carry over 1 to the tens column.

Adding tens:

1 ten (carried over) + 8 tens + 5 tens

= 14 tens

= 10 tens + 4 tens

= 1 hundred + 4 tens.

Write 4 under tens column and carry over 1 to the hundreds column.

Adding hundreds:

1 hundred (carried over) + 2 hundreds + 6 hundreds = 9 hundreds.

Write 9 under hundreds column.

Adding thousands:

6 thousands + 8 thousands = 14 thousands

= 10 thousands + 4 thousands

= 1 ten thousand + 4 thousands.

Write 4 under thousands column and carry over 1 to the ten thousands column.

Adding ten thousands:

1 ten thousand (carried over) + 3 ten thousands + 7 ten thousands

= 11 ten thousands

= 10 ten thousands + 1 ten thousand

= 1 lakh + 1 ten thousand.

Write 1 under ten thousands column and carry over 1 to the lakhs column.

Adding lakhs:

1 lakh (carried over) + 4 lakhs + 5 lakhs

= 10 lakhs

= 1 ten lakh + 0 lakhs.

Write 0 under lakhs column and carry over 1 to the ten lakhs column.

Adding ten lakhs:

1 ten lakh (carried over) + 5 ten lakhs + 2 ten lakhs

= 8 ten lakhs.

Write 8 under ten lakhs column.

Example 2. **Add 57085639 and 34768596 and write the sum in words.**

Solution: Arranging the digits of the given numbers in columns and adding columnwise, we get:

C	TL	L	TTh	Th	H	T	O
①		①	①	①	①	①	← Carry
5	7	0	8	5	6	3	9
+ 3	4	7	6	8	5	9	6
9	1	8	5	4	2	3	5

∴ The sum of the given numbers is:

'Nine crore eighteen lakh fifty-four thousand two hundred thirty-five'.

Example 3. **Find the sum: 367285109 + 481827825 + 2368789.**

Solution: Arranging the digits of the given numbers in column form and adding columnwise, we get:

TC	C	TL	L	TTh	Th	H	T	O
①	①	①	①	②	①	①	②	← Carry
3	6	7	2	8	5	1	0	9
4	8	1	8	2	7	8	2	5
+		2	3	6	8	7	8	9
8	5	1	4	8	1	7	2	3

Hence, the sum of the given numbers is 851481723.

Exercise 6

Add:

1. 3 6 7 5 2 1 8 + 2 5 1 7 6 7 3

2. 7 4 5 3 6 1 9 + 1 8 7 6 9 8 4

3. 7 5 4 3 6 9 4 8 + 2 7 8 4 2 3 6

4. 3 8 2 5 6 7 1 4 + 3 9 6 7 4 8 9

5. 4 3 2 6 8 9 7 4 + 6 7 9 4 3 4 7 + 3 1 6 5 5 4

6. 1 6 8 7 5 3 0 9 + 2 3 4 2 6 7 9 3 + 4 2 3 1 5 1 8

7. 1 3 4 5 2 6 7 2 9 + 2 4 3 6 4 7 3 9 4 + 6 9 3 1 8 4 5 3

8. 2 4 5 7 1 9 5 6 3 + 4 6 3 2 6 7 4 7 8 + 7 1 9 3 2 3 4 5

9. 5 7 6 4 2 3 9 + 4 3 0 7 5 7 8 6 + 1 3 9 6 0 8 9 4 5 + 9 6 5 7 8

10. 5 4 6 2 7 1 2 8 5 + 1 7 3 8 2 7 4 9 3 + 1 0 3 7 4 6 7 8 + 2 9 9 2 7 8 9

Find the sum of the following.

11. 13256978 + 6975684 + 23679

12. 343851728 + 166452675 + 3672563 + 935

13. 474361279 + 236554385 + 53168837 + 20716314

Word Problems on Addition

Example 1: **A company earned ₹ 14632739 in the year 2011. Next year the earning of the company increased by ₹ 3974687. How much did the company earn in the year 2012?**

Solution: Earning of the company in the year 2011 = ₹ 14632739

Increase in the earning during next year = ₹ 3974687

∴ Earning of the company in the year 2012 = ₹ (14632739 + 3974687).

C	TL	L	TTh	Th	H	T	O
	①	①		①	①	①	← Carry
1	4	6	3	2	7	3	9
+	3	9	7	4	6	8	7
1	8	6	0	7	4	2	6

Hence, in 2012, the company earned ₹ 18607426.

Example 2: **A survey shows that the population of Andhra Pradesh is 96304854, Karnataka 84617398 and Kerala 45038237. What is the total population of these three states?**

Solution: Population of Andhra Pradesh = 96304854.

Population of Karnataka = 84617398.

Population of Kerala = 45038237.

Total population of 3 states = (96304854 + 84617398 + 45038237)

TC	C	TL	L	TTh	Th	H	T	O
②	①			②	①	①	①	← Carry
	9	6	3	0	4	8	5	4
	8	4	6	1	7	3	9	8
+	4	5	0	3	8	2	3	7
2	2	5	9	6	0	4	8	9

Hence, the total population of the three states is 225960489.

Example 3: **The difference between two numbers is 8974568. If the smaller number is 6468457, find the greater number.**

Solution: Difference between the two numbers = 8974568.

Smaller number = 6468457.

∴ Greater number = 8974568 + 6468457.

C	TL	L	TTh	Th	H	T	O
①	①	①	1	①	①	①	← Carry
	8	9	7	4	5	6	8
+	6	4	6	8	4	5	7
1	5	4	4	3	0	2	5

Hence, the greater number is 15443025.

Exercise 7

1. The number of persons who visited the holy shrine of Mata Vaishno Devi during last two consecutive years was 6378907 and 7865089 respectively. How many persons visited the shrine during these two years?
2. Last year, three sugar factories in a town produced 23807575 bags, 19728686 bags and 8962347 bags respectively. How many bags in all were produced by all the three factories during last year?
3. In a city, there are 5726439 men, 4439675 women and 2016348 children. What is the total population of the city?
4. In a particular year, the male population of a city was 2359324 more than the female population. The number of females was 6813675. What was the male population? What was the total population of the city during that year?

5. The sales-receipt of a company during the year 2011 was ₹ 13047546. Next year, it increased by ₹ 7973674. What was the sales-receipt of the company in the year 2012? What was the total sales-receipt of the company during these two years?
6. In a particular year an industry produced 6736265 bicycles. Next year, the number of bicycles produced was 1374589 more than those produced in the preceding year. How many bicycles were produced during these two years?

7. There were three candidates in an election. They received 678509 votes, 462397 votes and 97685 votes respectively. The number of invalid votes was 16489 and 45716 persons did not vote. How many votes were registered?
8. A survey conducted on an Indian state shows that 1623540 people have only primary education; 9768678 people have secondary education; 6437945 people have higher education and 2682635 people are illiterates. If the number of children below the age of school admission be 698781, find the population of that state.
9. A number exceeds 35637844 by 7674156. What is that number?

Arranging the digits of the given numbers in column form and subtracting columnwise, we get

C	TL	L	TTh	Th	H	T	O
⑤	⑫	⑬	⑭	⑯	⑩	⑭	← After borrowing
5 6	2 3	3 4	4 5	6 7	0 1	4	8
− 2	6	8	7	9	3	5	4
3	6	5	7	7	7	9	4

Hence, the difference between the given numbers = 36577794.

Exercise 8

Subtract:

1. 5 6 4 7 8 1 2 − 2 7 8 5 7 4 5

2. 7 8 5 6 4 2 9 − 3 6 9 8 3 6 7

3. 9 3 4 2 5 1 7 − 7 4 5 6 7 8 9

4. 6 3 5 4 7 2 4 − 9 6 8 8 3 6

5. 3 4 2 7 5 0 6 3 − 9 7 8 9 1 7 4

6. 5 0 3 0 4 6 0 1 − 8 7 3 6 7 2 4

7. 2 3 1 6 2 9 5 4 7 − 1 9 2 7 3 9 7 8 9

8. 7 1 3 0 5 0 0 4 − 2 4 6 1 7 0 5 8

9. 9 0 4 0 0 0 1 3 − 6 0 5 0 2 4 1 7

10. 3 0 2 4 1 5 2 0 6 − 2 0 3 5 1 6 4 3 8

Find the difference.

11. 5826704 − 3927815

12. 8134205 − 5146307

13. 6010036 − 5419947

14. 12034504 − 8075698

Word Problems on Subtraction

Example 1: **The sum of two numbers is 3148654. If one of the numbers is 1952789, find the other number.**

Solution: The sum of two numbers = 3148654

One number = 1952789

The other number = 3148654 − 1952789.

TL	L	TTh	Th	H	T	O	
②	⑩	⑭	⑦	⑮	⑭	⑭	← After borrowing
2 3	0 1	4	7 8	5 6	4 5	4	
− 1	9	5	2	7	8	9	
1	1	9	5	8	6	5	

Hence, the other number is 1195865.

Example 2: **The population of a city in the year 2011 was 8793675. In the following year, the population became 11005200. Find the increase in the population.**

Solution: The population of the city in the year 2012 = 11005200

The population of the city in the year 2011 = 8793675

∴ Increase in population = 11005200 − 8793675

C	TL	L	TTh	Th	H	T	O	
⓪	⑩	⑨	⑩	④	⑪	⑨	⑩	← After borrowing
0 1	0 1	9 0	0	4 5	1 2	9 0	0	
−	8	7	9	3	6	7	5	
	2	2	1	1	5	2	5	

Hence, the increase in population of the city is 2211525.

Example 3: **There was a stock of 3567123 quintals of wheat in a godown of the Food Corporation of India. Out of this stock, 956341 quintals of wheat was sent to Haryana and**

Solution: Total stock of wheat = 3567123 quintals.

Quantity of wheat sent to Haryana = 956341 quintals.

Quantity of wheat sent to Punjab = 823658 quintals.

Total quantity of wheat taken out of the godown

= (956341 + 823658) quintals

= 1779999 quintals.

∴ Balance stock of wheat in the godown

= (3567123 − 1779999) quintals

= 1787124 quintals.

Working

9 5 6 3 4
+ 8 2 3 6 5
1 7 7 9 9 9

3 5 6 7 1 2 3
− 1 7 7 9 9 9
1 7 8 7 1 2 4

Exercise 9

1. By how much is 6437859 less than 7016418?
2. By how much does 7102340 exceed 6824572?
3. What must be added to 5678469 to make 6164324?
4. What must be subtracted from 9005413 to get 7906547?
5. The sum of two numbers is 13604050. If one of the numbers is 7824361, find the other number.
6. In an examination conducted by a board of secondary education, 1008314 candidates appeared. Out of these 789425 candidates passed. How many failed?
7. A factory produced 5365129 switches in a particular year and 6010016 switches in the following year. Find the increase in the production of switches.
8. An election was contested by two candidates. The winning candidate received 6872403 votes and won by a margin of 983516 votes. How many votes did the other candidate receive?
9. In an Indian state, a survey shows that there are in all 7651234 students in all the secondary schools. Out of these, there are 2963459 girl-students. How many boys are there in these schools?
10. The total population of a city is 15207635. There are 6751574 men and 6036425 women and the remaining are children. How many children are there in the city?
11. In an examination, 506212 candidates could get through. Out of these, 197538 passed in first division, 238604 passed in second division. How many passed in third division?

Multiplication

We know that in a multiplication sum, the number to be multiplied is called multiplicand and the number by which we multiply is called multiplier.

And, the result of multiplication is called product.

Example: In 125 × 3 = 375, we have:

multiplicand = 125, multiplier = 3 and product = 375.

Now, we recall the various properties of multiplication.

Properties of Multiplication

I. Order Property of Multiplication

The product of two numbers does not change when the order of the numbers is changed.

Thus, 63 × 27 = 27 × 63; 137 × 125 = 125 × 137 etc.

II. Grouping Property of Multiplication

The product of three numbers does not change when the grouping of the numbers is changed.

Thus, 15 × (16 × 17) = (15 × 16) × 17;

125 × (240 × 265) = (125 × 240) × 265 etc.

III. Distributive Property of Multiplication over Addition

We have: 23 × (100 + 25) = (23 × 100) + (23 × 25);

130 × (145 + 245) = (130 × 145) + (130 × 245) etc.

IV. Multiplicative Property of 1

(Any number) × 1 = the number itself.

Thus, 536 × 1 = 536, 10641 × 1 = 10641 etc.

V. Multiplicative Property of 0

(Any number) × 0 = 0.

Multiplication by 10, 100, 1000

Multiplication of a Number by 10

Rule: To multiply a given number by 10, insert one zero on the right of the given number.

Thus, 27 × 10 = 270, 147 × 10 = 1470, 2485 × 10 = 24850 etc.

Multiplication of a Number by 100

Rule: To multiply a given number by 100, insert two zeros on the right of the given number.

Thus, 76 × 100 = 7600, 382 × 100 = 38200, 2895 × 100 = 289500 etc.

Multiplication of a Number by 1000

Rule: To multiply a given number by 1000, insert three zeros on the right of the given number.

Thus, $87 \times 1000 = 87000$; $435 \times 1000 = 435000$; $4967 \times 1000 = 4967000$ etc.

Multiplication of a Number by a Multiple of 10, 100, 1000 etc.

The following examples will make the ideas clear.

Example 1: **Find the products.**

(a) 589×20 (b) 1356×90

Solution: We have:

(a) 589×20
$= 589 \times 2 \times 10$
$= (589 \times 2) \times 10$
$= 1178 \times 10 = 11780.$

(b) 1356×90
$= 1356 \times 9 \times 10$
$= (1356 \times 9) \times 10$
$= 12204 \times 10 = 122040.$

Example 2: **Find the products.**

(a) 294×300 (b) 4567×500

Solution: We have:

(a) 294×300
$= 294 \times 3 \times 100$
$= (294 \times 3) \times 100$
$= 882 \times 100 = 88200.$

(b) 4567×500
$= 4567 \times 5 \times 100$
$= (4567 \times 5) \times 100$
$= 22835 \times 100 = 2283500.$

Example 3: **Find the products.**

(a) 378×4000 (b) 2503×7000

Solution: We have:

(a) 378×4000
$= 378 \times 4 \times 1000$
$= (378 \times 4) \times 1000$
$= 1512 \times 1000 = 1512000.$

(b) 2503×7000
$= 2503 \times 7 \times 1000$
$= (2503 \times 7) \times 1000$
$= 17521 \times 1000 = 17521000.$

Example 4: **Using suitable grouping, find the following products.**

(a) $4 \times 237 \times 25$ (b) $8 \times 1047 \times 125$

Solution: We have:

(a) $4 \times 237 \times 25$
$= (4 \times 25) \times 237$
$= 100 \times 237 = 23700.$

(b) $8 \times 1047 \times 125$
$= (8 \times 125) \times 1047$
$= 1000 \times 1047 = 1047000.$

Exercise 10

1. Fill in the blanks.

(a) $1485 \times$ ☐ $= 2346 \times 1485$ (b) $2947 \times 4508 = 4508 \times$ ☐

(c) $2772 \times$ ☐ $= 2772$ (d) $4358 \times$ ☐ $= 0$

(e) $35 \times (100 + 37) = (35 \times 100) + (35 \times$ ☐ $)$

(f) $146 \times (1000 + 48) = (146 \times$ ☐ $) + (146 \times$ ☐ $)$

(g) $375 \times (147 \times 903) = (375 \times 147) \times$ ☐

(h) (☐) $\times (1030 \times 975) = (2460 \times 1030) \times 975$

2. Fill in the blanks.

(a) $2718 \times 10 =$ ☐ (b) $16875 \times 10 =$ ☐ (c) $3875 \times 100 =$ ☐

(d) $29272 \times 100 =$ ☐ (e) $6087 \times 1000 =$ ☐ (f) $47385 \times 1000 =$ ☐

Find the following products.

3. 6540×50 **4.** 9784×60 **5.** 15235×70

6. 7892×300 **7.** 8986×700 **8.** 26305×800

9. 2981×4000 **10.** 7897×6000 **11.** 99999×2000

By using suitable grouping, find the following products.

12. $2 \times 467 \times 5$ **13.** $5 \times 1986 \times 20$ **14.** $4 \times 829 \times 25$

15. $4 \times 248 \times 125$ **16.** $8 \times 3472 \times 125$ **17.** $2 \times 5726 \times 500$

Multiplication of Larger Numbers

We have already learnt the multiplication of a number by a 2-digit or 3-digit number. In the same way, we multiply with larger numbers.

Solved Examples

Example 1: **Multiply 5347 by 486.**

Solution: We have: $486 = 400 + 80 + 6.$

$\therefore 5347 \times 486 = 5347 \times (400 + 80 + 6)$
$= 5347 \times 400 + 5347 \times 80 + 5347 \times 6$
$= 2138800 + 427760 + 32082 = 2598642.$

Shorter form:

		5	3	4	7
		×	4	8	6
	3	2	0	8	2 ← (5347 × 6)
4	2	7	7	6	0 ← (5347 × 80)
2	1	3	8	8	0 0 ← (5347 × 400)
2	5	9	8	6	4 2 ← (5347 × 486)

Example 2: **Multiply 9896 by 2347.**

Solution: We have:

		9	8	9	6
		×	2	3	4 7
	6	9	2	7	2 ← (9896 × 7)
3	9	5	8	4	0 ← (9896 × 40)
2	9	6	8	8	0 0 ← (9896 × 300)
1	9	7	9	2	0 0 0 ← (9896 × 2000)
2	3	2	2	5	9 1 2 ← (9896 × 2346)

Exercise 11

Find the following products.

1. 6854×89 **2.** 26857×68 **3.** 9675×925

4. 23689×137 **5.** 12456×784 **6.** 19847×354

7. 2467×1359 **8.** 4873×1708 **9.** 3943×2356

10. 9356×2431 **11.** 3265×2784 **12.** 12874×1386

Multiply:

13. 10654 by 875 **14.** 14567 by 1065 **15.** 8985 by 1789

16. 10023 by 1034 **17.** 20185 by 1648 **18.** 15487 by 1526

Word Problems on Multiplication

Example 1: **The cost of a steel almirah is ₹ 5975. What is the cost of 864 such almirahs?**

Solution: Cost of 1 almirah = ₹ 5975.

Cost of 864 almirahs = ₹ (5975×864).

		5	9	7	5
		×	8	6	4
	2	3	9	0	0
3	5	8	5	0	0
4	7	8	0	0	0 0
5	1	6	2	4	0 0

Hence, the cost of 864 almirahs = ₹ 5162400.

Example 2: **4912 screws can be packed in one carton. How many screws can be packed in 1475 such cartons?**

Solution: Number of screws in 1 carton = 4912.

Number of screws in 1475 cartons = 4912×1475.

		4	9	1	2
		×	1	4	7 5
	2	4	5	6	0
3	4	3	8	4	0
1	9	6	4	8	0 0
4	9	1	2	0	0 0
7	2	4	5	2	0 0

Hence, the number of screws to be packed in 1475 cartons is 7245200.

Exercise 12

1. The cost of a scooter is ₹ 36453. Find the cost of 270 scooters.
2. The cost of a bicycle is ₹ 2895. Find the cost of 1486 bicycles.
3. A truck can carry 6785 kg of goods. How much can 759 trucks carry?
4. There are 1483 bags of wheat in a godown. If each bag weighs 108 kg, find the total weight of these bags.
5. A cloth mill produces 3746 metres of cloth in a day. How much cloth will it produce in 286 days?
6. A box contains 2748 pencils. How many pencils are there in 1674 such boxes?
7. A bundle of rope measures 548 metres. How much rope will be there in 2367 such bundles?

Exercise 13

Divide and find the quotient and remainder.

1. 83254 ÷ 58
2. 547802 ÷ 97
3. 673900 ÷ 86
4. 333624 ÷ 137
5. 598613 ÷ 243
6. 1808016 ÷ 359
7. 2265737 ÷ 479
8. 5419307 ÷ 396
9. 8670863 ÷ 561
10. 9362596 ÷ 594
11. 6932570 ÷ 642
12. 9736215 ÷ 937
13. 8203015 ÷ 798
14. 11911100 ÷ 697
15. 12340560 ÷ 971

Find the dividend when:

16. Divisor = 187, Quotient = 3078, Remainder = 96
17. Divisor = 429, Quotient = 5237, Remainder = 248
18. Find the quotient and the remainder when the largest 7-digit number is divided by the largest 3-digit number.
19. Find the quotient and the remainder when the smallest 8-digit number is divided by the largest 2-digit number.

Word Problems on Division

Example 1: **A packet can hold 144 pens. How many packets are required to pack 3845952 pens?**

Solution: Total number of pens = 3845952.

Number of pens that can be packed in 1 packet = 144.

Number of packets required to pack 3845952 pens = 3845952 ÷ 144.

```
      26708
144)3845952
   -288
    965
   -864
    1019
   -1008
     1152
    -1152
       0
```

Example 2: **The cost of 125 refrigerators is ₹ 6710625. What is the cost of one refrigerator?**

Solution: The cost of 125 refrigerators = ₹ 6710625.

∴ The cost of 1 refrigerator = ₹ (6710625 ÷ 125)

```
      53685
125)6710625
  -625
    460
   -375
    856
   -750
     1062
    -1000
      625
     -625
        0
```

Hence, the cost of one refrigerator is ₹ 53685.

Example 3: **An industrial organisation collected ₹ 7568825 from its shareholders. If the value of each share is ₹ 425, what is the total number of shares issued by the organisation?**

Solution: Total amount collected = ₹ 7568825.

Value of each share = ₹ 425.

Number of shares issued = 7568825 ÷ 425.

```
      17809
425)7568825
  -425
    3318
   -2975
     3438
    -3400
      3825
     -3825
        0
```

MULTIPLPLE CHOICE QUESTIONS

1. What will be the product of 12345 and 0?
a) 0
b) 12345
c) 1
d) None of these
2. If 0 is subtracted from a number the result is_____.
a) Number itself
b) 0
c) 1
d) None of these
3. The result of multiplication is called ____?
a) Product
b) Divisor
c) Quotient
d) None of these
4. Which among the following is correct?
a) When we divide number by 0, we obtain 0 as the quotient.
b) The sum is always greater than each of the addends.
c) Dividend is always greater than the divisor.
d) a x (b + c) = (a x b) + (a x c)
5. The result of subtraction is called _____.
a) Sum
b) Difference
c) Product
d) Dividend

SOLVE THE FOLLOWING

1. **Add: 11,111 + 10,10,101 + 1,10,11,011**
2. **What should be added to 34,76,415 to get 67,43 ,109?**
3. **Divide 26,525 by 28.**
4. **Divide 13,254 by 33.**
5. **Find the product of 2503 x 7000.**

SOLVE THE WORD PROBLEMS WITH PROPER STATEMENT

1. **In a city, there are 5726439 men. 4439675 women and 2016348 children. What is the total population of the city?**
2. **Mrs. Agrawal won a lottery worth Rs 2, 23,63,890 . Out of this , she spent Rs 10,75,637 on renovating her house , Rs 4,73,811 on buying gold jewelry and Rs6,36,790 on buying new car . How much money is left with her?**
3. **If the sum of two numbers is 13604050. If one of the numbers is 7824361, find the other number.**
4. **The cost of a scooter is Rs 36453. Find the cost of 270 scooters.**
5. **A cartoon can hold 275 screws. How many cartoons are required to pack 4426125 screws?**
6. **The cost of 125 refrigerators is Rs 6710625. What is the cost of one refrigerator?**
7. **A muffins manufacturing company makes 6,321 vanilla muffins in a day. How many will be made in a non- leap year?**
8. **5,56,63 copies of a book were printed. Out of these, 8,096 copies were distributed as complimentary copies and 2,89,917 copies were sold. How many copies are left with the publisher?**
9. **Harry plants 3 trees on four rows. How many trees does he plants?**
10. **The difference between two number is 8,76,089. If the smaller number is 25,76,977. Find the larger one.**
11. **Find the product of largest 4-digit number and smallest 4 digit number.**
12. **A cloth mill produces 3746 metres of cloth in a day. How much cloth will it produce in 28 days?**
13. **A number exceeds 35637844 by 7674156. What is the number?**
14. **249 trucks can carry 1711875 kg weight. How much weight can be carried by one can?**
15. **By how much is 6437859 less than 7016418?**

DEFINE THE TERMS WITH EXAMPLES

1. **Addend**
2. **Minuend**
3. **Subtrahend**
4. **Multiplicand**
5. **Multiplier**

HEIGHER ORDER THINKING QUESTION

1. **If Rahul's present age is 27. What was be his age 2 years ago?**
2. **With which place does 7 – digit number start in the Indian system?**

a) **Lakhs**
b) **Ten thousand**
c) **Ten lakhs**
d) **crores**

3. find the place value of 0 in 36, 04, 85 ,298
a) ten lakhs
b) lakhs
c) zero
d) 6 crores
4. By how many times does the place value increase from right to left in a number?
a) 100
b) $\frac{1}{10}$
c) 1000
d) 100
5. How many zeroes follow 1 in the numeral for 10 million?
a) 8
b) 7
c) 6
d) 9
6. Identify the equivalent of 10 crores from the following.
a) 10 million
b) 100 million
c) 1 million
d) 1000 millions
7. What is the missing digit in 3 □ 6013 if the expanded form is 300000 + 70000 + 6000 + 0 + 10 + 3?
a) 3
b) 6
c) 1
d) 7
8. Which of the following is correct?
a) 200 + 75 = 20 + 75
b) 200 + 75 = 250 + 7
c) 200 + 75 = 205 + 70
d) 200 + 75 = 207 + 5
9. By adding 1 to the greatest _____ digit number, we get 10 lakhs.
10. Identify the smallest 7-digit number.
a) 10,00,000
b) 1 + greatest 6-digit number
c) Both (a) and (b)
d) Neither (a) nor (b)
11. What is the difference between the place value and face value of 5 in 91,25,678?
a) 4995
b) 0
c) 4095
d) 5000
12. Study the following equation $792 \times 650 = 800 \times 650 - \square \times \square$.
What is the value of the product of missing numbers?
a) 520
b) 5020
c) 5200
d) 8650

13. What is the difference between the smallest 6- digit odd number and the largest 4-digit number?

a) 90002
b) 90003
c) 101113
d) 101121

14. For which digit is the place value and face value always the same?

a) 0
b) 10
c) Any digit
d) 100

15. Which of the following is equal to 75 x 100?

a) 75 x 20 x 5
b) 70 + 5 x 100
c) 75 x 10 + 90
d) (75 x 20) + (75 x 5)