

2

Large Numbers

In the previous class, we have learnt upto 4-digit numbers, i.e. 9999. If the numeral for a number is formed by four digits then the numeral is written as a four digits numeral and number is a 4-digit number. If we add 1 to 9999 to get 10000, i.e. ten thousand which is the smallest 5-digit number.



Numbers Beyond 9999

We know that the

greatest 3-digit number $\rightarrow 999 + 1 = 1000$ \leftarrow smallest 4-digit number

greatest 4-digit number $\rightarrow 9999 + 1 = 10000$ \leftarrow smallest 5-digit number

We read 10000 as **ten thousand**.

In the place value chart, the fifth place from the right is called the **ten thousands place**.

T-Th	Th	H	T	O
1	0	0	0	0

Each number beyond 10000 can be obtained by adding 1 to the number.

Look at some of the 5-digit numbers.

Numeral	How we read
10000 + 1 = 10001	Ten thousand one
10999 + 1 = 11000	Eleven thousand
11000 + 1 = 11001	Eleven thousand one
20000 + 1 = 20001	Twenty thousand one
99998 + 1 = 99999	Ninety nine thousand nine hundred ninety nine

99999 is the **largest** 5-digit number.

Now, $99999 + 1 = 100000$ \leftarrow Smallest 6-digit number.

We read 100000 as **one lakh**.





In the place value chart the sixth place from the right is called the **lakhs place**.

L	T-Th	Th	H	T	O
1	0	0	0	0	0

We add 1 to 100000 to get 100001. Further, we add 1 to 100001 to get next number, i.e.

100002. Continuing in this manner, we get 999999—the largest 6-digit number.

We read 999999 as nine lakh ninety nine thousand nine hundred ninety nine.

Again, $999999 + 1 = 1000000$ ← Smallest 7-digit number.

T-L	L	T-Th	Th	H	T	O
1	0	0	0	0	0	0

We read 1000000 as ten lakh.



Face Value and Place Value

Face value

The face value of a digit is the value of that digit in a number.

Place value

A number gets its value according to its place in the number. The product of the digit (face value) and the value of its place is called the **place value** of the digit.

Observe the following.

L	T-Th	Th	H	T	O	Place value of the digit 9 at different places
9	9	9	9	9	9	
						$9 \times 1 = 9$
						$9 \times 10 = 90$
						$9 \times 100 = 900$
						$9 \times 1000 = 9000$
						$9 \times 10000 = 90000$
						$9 \times 100000 = 900000$





Now, take a look at the coloured digits in the given place value chart and fill in the blanks.

Lakhs		Thousands		Ones		
T-L	L	T-Th	Th	H	T	O
	5	6	7	9	2	3
	4	2	8	6	8	5
	3	1	0	8	9	4
	3	5	6	4	9	7

The place value of 7 in 567923 is $7 \times 1000 = 7000$

The place value of 2 in 428685 is $2 \times \dots = \dots$

The place value of 3 in 310894 is $3 \times \dots = \dots$

The place value of 9 in 356497 is $9 \times \dots = \dots$

All large numbers are separated by periods. Look at the place value chart. Ones, tens and hundreds places come in the **ones** period. Thousands and ten thousands places come in the thousands period. Lakhs and ten lakhs places come in the **lakhs** period.



FACTS

Place value of 0 is always 0, whichever place it occupies.

Separating the periods by commas in large numbers help us to read the number easily.

For Example :

Lakhs		Thousands		Ones		
T-L	L	T-Th	Th	H	T	O
		7	5	2	4	9
	8	4	6	3	8	9

75,249 is read as seventy five thousand two hundred forty nine.

8,46,389 is read as eight lakh forty six thousand three hundred eighty nine.

Note that the number names are easy to write when the period are separated by commas.





Writing the Numeral For the Number Name

The place value chart helps to write the numeral correctly.

Example I : Write the following in figures :

- a. Six lakh eighty five thousand four hundred twelve.
- b. Seventy two thousand four

Solution :

	L	T-Th	Th	H	T	O
a.	6	8	5	4	1	2
b.		7	2	0	0	4



FACTS

The empty places are filled by zeros.

EXERCISE 2.1

1. Write the following numbers in a place value chart and give the place value of the circled digits.

- a. 65(3)1 b. 2(9)745 c. 3(6)280 d. (8)4127
- e. (7)2305 f. (4)2630 g. 56(6)12 h. 95(3)20

2. Mark the periods by placing the commas and write the number names for the following.

- a. 25725 b. 308491 c. 571972 d. 374506
- e. 457926 f. 6852512 g. 671241 h. 2174865

3. Write the numerals for the following number names with the help of a place value chart.

- a. Thirty eight thousand two hundred forty nine
- b. Fifty nine thousand two hundred sixty
- c. Six lakh twenty thousand fifteen
- d. Four lakh five thousand three hundred nine





4. Write the smallest 7-digit number in figures by separating periods.
5. Write the greatest 5-digit number in words.



Numbering System

There are two numbering systems.

1. Indian System
2. International System

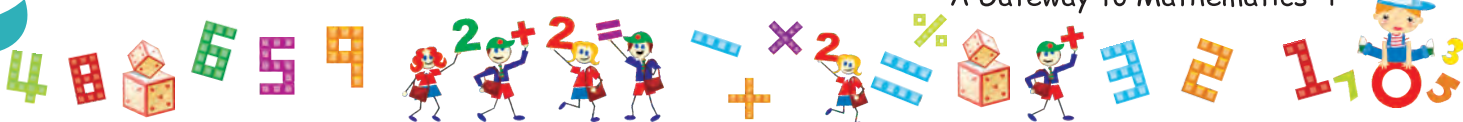
Indian system :

Periods	Crores		Lakhs		Thousands		Ones		
Place Value	Ten Crores	Crores	Ten lakhs	Lakhs	Ten Thousands	Thousands	Hundreds	Tens	Ones
Numbers ↓									
One									1
Ten								1	0
Hundred							1	0	0
1 Thousand						1	0	0	0
10 Thousands					1	0	0	0	0
1 Lakh				1	0	0	0	0	0
10 Lakhs			1	0	0	0	0	0	0
1 Crore		1	0	0	0	0	0	0	0
10 Crores	1	0	0	0	0	0	0	0	0

Periods : In Indian system, the periods from right to left are ones, thousands, lakhs, crores.

In this system :

1. The first three places make the ones period.
2. The next two places make the thousands period.
3. The next two places after thousands make the lakhs period in a given number, the periods are separated by comma (,).





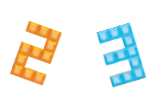
International System :

Periods \longrightarrow	Billions			Millions			Thousands			Ones		
Place Value \longrightarrow	Hundred Billions	Ten Billions	Billions	Hundred Millions	Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
Numbers												
One												1
Ten											1	0
Hundred										1	0	0
1 Thousand									1	0	0	0
10 Thousands								1	0	0	0	0
100 Thousands							1	0	0	0	0	0
1 Million						1	0	0	0	0	0	0
10 Millions					1	0	0	0	0	0	0	0
100 Millions				1	0	0	0	0	0	0	0	0
1 Billion			1	0	0	0	0	0	0	0	0	0
10 Billions		1	0	0	0	0	0	0	0	0	0	0
100 Billions	1	0	0	0	0	0	0	0	0	0	0	0

Periods: In International system, the periods from right to left are ones, thousands, millions and billions.

In this system :

1. The first three places make the ones period.
2. The next three places make the thousands period.
3. The next three places after thousands make the millions period.
4. The next three places after millions make the billions period.
In a given number, each period is separated by comma (,).





Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
3	2	4	5	6	7	1	8

Number name in Indian place value chart is 3 crore, 24 lakh, 56 thousand, 7 hundred and eighteen.

Number name in International place value chart is 32 million, 456 thousand, 7 hundred and eighteen.

EXERCISE 2.2

- Rewrite the numbers by putting comma in Indian system.**
 - 273264
 - 325211
 - 23654715
 - 1369458
 - 201634579
- Rewrite the numbers by putting comma in International system.**
 - 43658
 - 675269
 - 6189532
 - 92961485
 - 535315212
- Write the numerals for the following numbers with comma in proper places.**
 - One lakh, seven thousand and eighty
 - Three lakh, eleven thousand, three hundred and sixty three
 - Sixteen lakh, five thousand, three hundred and four
 - Six lakh, five thousand and seven hundred
 - Nine lakh, fourteen thousand, three hundred and sixty two
- Write the number name for each of the following numerals in Indian system.**
 - 8,43,972
 - 14,00,009
 - 4,05,000
 - 8,97,810
 - 25,75,621
- Write the following number in words in International system.**
 - 65,637,413
 - 5,716,146
 - 302,405,978
 - 45,064,875
 - 863,120,350





Successor and Predecessor

Successor : The number that comes just after a given number is known as its successor.

Predecessor : The number that comes just before a given number is known as its predecessor.

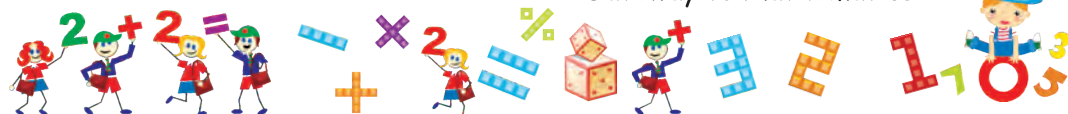
For Example :

Number	Successor	Number	Predecessor
659	660	835	834
4,548	4,549	5,769	5,768
53,652	53,653	64,651	64,650
7,64,387	7,64,388	8,75,468	8,75,467
80,56,356	80,56,357	97,60,354	97,60,353



Order Relation

Let us learn to compare numbers upto seven digits. First compare the digits in the ten lakhs place, if a number has greater digit at ten lakh place is greater than the numbers which have smaller digits at that place. If these places are equal then compare the digits in the lakhs place. If a number has greater digit at lakhs place is greater than the number which have smaller digits at that place. If these places are equal then compare the ten thousands place and so on upto ones place. It is also noted that a number having greater number of digits is greater than the number having lesser number of digits.





Example V : Compare the number 54,392 and 71,568.

Solution : Now, first arrange the given numbers in place value chart.

T-Th	Th	H	T	O
5	4	3	9	2
7	1	5	6	8

54,392 has 5 ten thousands at its highest place, while 71,568 has 7 ten thousands at its highest place.

7 ten thousands are greater than 5 ten thousands.

Therefore, $71,568 > 54,392$.

Example VI : Which one is greater 2,36,450 or 2,17,340?

Solution : Arranging the given numbers in place value chart.

L	T-Th	Th	H	TO
2	3	6	4	5
2	1	7	3	4

At their highest place value, both the numbers have 2 lakh which is equal. So, compare the ten thousands place. Since, both the numbers at their ten thousands place have 3 ten thousands and 1 ten thousand respectively.

Since, 3 ten thousands $>$ 1 ten thousand,

therefore, $2,36,450 > 2,17,340$.



Ascending Order and Descending Order

We can compare a set of given numbers in ascending order starting with the smallest given number.

We can compare a set of given numbers in descending order starting with the greatest given number.

Example VII : Arrange the following given numbers in ascending order.

21,035; 41,009; 65,107; 31,105; 50,009; 12,978





Solution

: Arranging the given numbers in place value chart.

T-Th	Th	H	T	O
2	1	0	3	5
4	1	0	0	9
6	5	1	0	7
3	1	1	0	5
5	0	0	0	9
1	2	9	7	8

Comparing the digits at ten thousands place, we find $1 < 2 < 3 < 4 < 5 < 6$.

Therefore, the given numbers in ascending order are 12,978; 21,035; 31,105; 41,009; 50,009; 65,107.

Example VIII : Arrange the following numbers in descending order.

51,067; 1,35,467; 3,24,516; 68,574; 77,874; 98,036

Solution

: Arranging the given numbers in place value chart.

L	T-Th	Th	H	T	O
	5	1	0	6	7
1	3	5	4	6	7
3	2	4	5	1	6
	6	8	5	7	4
	7	7	8	7	4
	9	8	0	3	6

Comparing the digits at lakhs place, we find $3 > 1$.

Therefore, the number in descending order are 3,24,516; 1,35,467; 98,036; 77,874; 68,574; 51,067.

Skip-Counting

Writing the series of numbers starting with a given number with a fixed difference between two successive numbers is known as **skip-counting**.





Example IX : Write the numbers from 67454 to 67464 by skip counting of two.

Solution : We can skip in the counting of two by adding in succession.

$$67454, 67454 + 2, 67454 + 2 + 2, 67454 + 2 + 2 + 2$$

$$67454 + 2 + 2 + 2 + 2, 67454 + 2 + 2 + 2 + 2 + 2$$

$$67454, 67456, 67458, 67460, 67462, 67464$$

E X E R C I S E 23

1. Write the successor of the following numbers.

- | | | | |
|-------------|-------------|-------------|--------------|
| a. 82,120 | b. 48,061 | c. 19,000 | d. 97,89,329 |
| e. 9,50,200 | f. 1,30,509 | g. 5,47,480 | h. 83,619 |

2. Write the predecessor of the following numbers.

- | | | | |
|-------------|--------------|-----------|-------------|
| a. 41,000 | b. 39,000 | c. 75,219 | d. 2,86,231 |
| e. 4,75,020 | f. 58,67,500 | g. 19,400 | h. 85,006 |

3. Fill in the blanks with <, > or =.

- | | |
|----------------------------|----------------------------|
| a. 41,643 41,739 | b. 59,427 95,724 |
| c. 38,403 38,403 | d. 40,329 49,969 |
| e. 98,300 98,200 | f. 69,063 69,063 |
| g. 7,90,126 7,90,026 | h. 8,89,026 8,97,826 |

4. Arrange the following in ascending order.

- | | | | | |
|---------------|------------|------------|------------|-----------|
| a. 61,009; | 61,097; | 61,089; | 61,807; | 61,908 |
| b. 4,05,709; | 4,07,509; | 4,09,509; | 4,05,907; | 4,07,905 |
| c. 73,07,908; | 73,09,708; | 73,07,980; | 73,00,987; | 73,08,970 |

5. Write the following in descending order.

- | | | | | |
|--------------|-----------|-----------|-----------|-----------|
| a. 1,99,001; | 2,06,709; | 2,07,603; | 2,09,709; | 2,08,704; |
| b. 3,01,090; | 3,04,000; | 3,09,010; | 3,02,090; | 3,08,010 |
| c. 60,309; | 60,039; | 60,930; | 60,703; | 60,390 |

6. Counting by fives, write the numbers from 2,570 to 2,600.

7. Counting by twos, write the numbers from 6,10,250 to 6,10,260.





8. Write the place value of each circled digit in the following numbers in Indian system :
- a. $\textcircled{6}$,56,36,557 b. 1 $\textcircled{6}$,36,403 c.7,36, $\textcircled{5}$ 21 d.7,1 $\textcircled{4}$,786
9. Write the place value of each circled digit in the following numbers in International system :
- a. $\textcircled{4}$ 3,215,306 b. $\textcircled{2}$,537,403 c. $\textcircled{4}$ 38,632 d.34,10 $\textcircled{7}$,562



Rounding off Numbers

The process of expressing a number to its nearest convenient number is called **rounding off** a number and the expressed nearest value of a number is known as the **rounded value** of the number.

Rounding off Number Nearest to Ten

While rounding off numbers to the nearest ten, follow the rules given below:

- If the digit in the ones place in a number is 5, 6, 7, 8 or 9, then round it to the nearest multiple of ten which is greater than the given number.
- If the digit in the ones place in a number is 1, 2, 3 or 4, then round it to the nearest multiple of ten which is smaller than the given number.

For Example : Each of the following number is rounded to the nearest ten.

52	is nearest to	50,	so we round it to 50
104	is nearest to	100,	so we round it to 100
1316	is nearest to	1320,	so we round it to 1320
3557	is nearest to	3560,	so we round it to 3560
5068	is nearest to	5070,	so we round it to 5070

Rounding off Number Nearest to Hundred

While rounding off numbers to the nearest hundred, follow the rules given below :

- If the digit in the tens place in a number is 5, 6, 7, 8 or 9, then round it to the nearest multiple of hundred which is greater than the given number.





- b. If the digit in the tens place in a number is 0, 1, 2, 3 or 4, then round it to the nearest multiple of hundred which is smaller than the given number.

For Example : Each of the following numbers is rounded to the nearest hundred.

281 is rounded to 300	1540 is rounded to 1500
203 is rounded to 200	1522 is rounded to 1500
240 is rounded to 200	1543 is rounded to 1500

Rounding off Number Nearest to Thousand

While rounding off numbers to the nearest thousand, follow the rules given below:

- a. If the digit in the hundreds place in a number is 5, 6, 7, 8 or 9, then round it to the nearest multiple of thousand which is greater than the given number.
- b. If the digit in the hundreds place in a number is 0, 1, 2, 3 or 4, then round it to the nearest multiple of thousand which is smaller than the given number.

For Example : Each of the following numbers is rounded to the nearest thousand.

4100 is rounded to 4000	6500 is rounded to 7000
5200 is rounded to 5000	5600 is rounded to 6000
6300 is rounded to 6000	4700 is rounded to 5000

EXERCISE 2.4

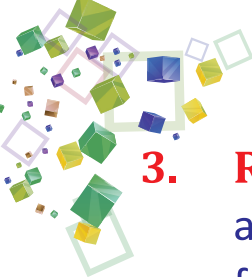
1. Round each of the following numbers to the nearest ten.

- a. 13 b. 25 c. 76 d. 51 e. 76
 f. 46 g. 57 h. 69 i. 91 j. 93

2. While rounding to the nearest ten, what numbers could be rounded to?

- a. 218 b. 632 c. 994 d. 5085 e. 867
 f. 529 g. 188 h. 2527 i. 3975 j. 1828





3. Round each of the following to the nearest hundred?

- a. 141 b. 222 c. 330 d. 634 e. 743
- f. 1892 g. 5676 h. 4350 i. 2488 j. 9765

4. While rounding to the nearest hundred, what numbers could be rounded to?

(E.g. : 800, numbers from 750 to 799 and numbers from 801 to 849)

- a. 1600 b. 4200 c. 32500 d. 54600 e. 72200

5. Round each of the following to the nearest thousand?

- a. 8930 b. 9010 c. 4453 d. 19890
- e. 15790 f. 18701 g. 51643 h. 13299
- i. 19175 j. 26318 k. 31513 l. 28963

6. While rounding to the nearest thousand, what numbers could be rounded to?

(E.g. : 10,000, numbers from 9500 to 9999 and numbers from 10001 to 10499)

- a. 15000 b. 27000 e. 50000 d. 85000



Roman Numerals

Roman is an ancient civilization which had its own symbols for writing various numbers. Sometimes, we see these symbols on the faces of clocks, at the railway and bus stations.

The Romans used seven letters of the English alphabet in place of numbers. The letters with their corresponding Hindu-Arabic numerals are given below:

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

Using the seven symbols, all the numerals were built by adopting certain rules.



Rule 1 : Repetition of letters means addition. Some letters are repeated up to 3 times. The letters I, X, C and M can be repeated at one given time.

For Example : $III = 1 + 1 + 1 = 3$; $XXX = 10 + 10 + 10 = 30$

Rule 2 : When a smaller letter is placed on the left of the bigger letter it means subtraction.

- I can be subtracted from V and X only.

For Example : $IV = 5 - 1 = 4$, $IX = 10 - 1 = 9$.

- X can be subtracted from L and C only.

For Example : $XL = 50 - 10 = 40$, $XC = 100 - 10 = 90$.

- C can be subtracted from D and M only.

For Example : $CD = 500 - 100 = 400$

$CM = 1000 - 100 = 900$

Rule 3 : The value of some numbers can be found by addition. Actually, it is like our expanded form.

For Example :

a.

L	X	X	X	V	I	I
↓	↓	↓	↓	↓	↓	↓
50	10	10	10	5	1	1
$= 50 + 10 + 10 + 10 + 5 + 1 + 1$						
$= 50 + 30 + 5 + 2 = 80 + 7 = 87$						

b.

X	C	V	I
└───┘		↓	↓
90		5	1
$= 90 + 5 + 1 = 96$			

c.

C	D	III
└───┘		↓
400		3
$= 400 + 3 = 403$		



INFO ZONE



- When a Roman numeral of small value is put between two numerals of greater value, it is subtracted from the numeral on its right.
e.g. $XIV = 10 + 5 - 1 = 14$ $XXIX = 10 + 10 + (10 - 1) = 29$
- The symbol V is never repeated. Also it is never subtracted.





Defects of the Roman system of numeration

1. There is no symbol for 0 in the Roman system.
2. The Romans used only seven symbols, which are not sufficient to write large numbers.
3. We have to use many symbols even to write small numbers, e.g. : 8 is written as VIII and 48 as XLVIII.

EXERCISE 2.5

1. Write the Roman numerals for each of the following.

- a. 51 b. 16 c. 29 d. 25 e. 39 f. 42
g. 49 h. 55 i. 500 j. 205 k. 170 l. 183

2. Write the Hindu-Arabic numerals for each of the following.

- a. XXXV b. XXXIII c. LXXI d. XL e. XIX
f. XLV g. LXXX h. XC i. LIV j. XCVI
k. CX l. DCI m. CCC n. DCCCI o. CMXVI

3. Write the sum in Roman numerals.

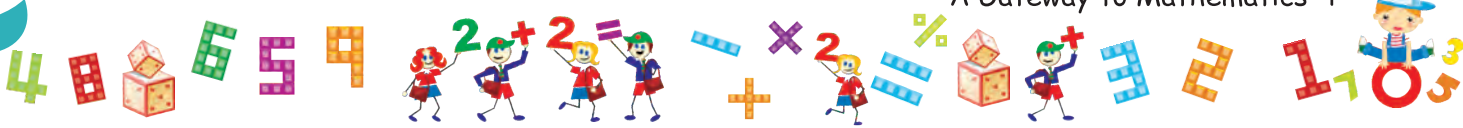
- a. XXXI + IX = b. XXIX + XV =
c. XL + X = d. L + XXX =
e. XIII + VII + VII = f. LX + XI =

4. Change the Hindu-Arabic numerals into Roman numerals and find the difference. Write the answer in Roman numerals.

- a. $40 - 20 = \dots = \dots$ b. $50 - 21 = \dots = \dots$
c. $35 - 15 = \dots = \dots$ d. $45 - 18 = \dots = \dots$
e. $41 - 30 = \dots = \dots$ f. $100 - 70 = \dots = \dots$

5. Fill in the blanks with Roman numerals.

- a. A day hours.
b. January has days.
c. February or days.
d. There are weeks in a year.
e. An hour has minutes.



POINTS TO REMEMBER

- ❖ The face value of a digit is the value of that digit in a number.
- ❖ A number gets its value according to its place in the number.
- ❖ There are two numbering systems : Indian system and International system.
- ❖ Successor is the number that comes just after a given number.
- ❖ Predecessor is the number that comes just before a given number.
- ❖ The process of expressing a number to its nearest convenient number is called rounding off a number.
- ❖ The symbol V is never repeated. Also it is never subtracted.

RECAP EXERCISE

1. Multiple Choice Questions (MCQs)

Tick (✓) the correct options:

- a. The value of a place to the left of any digit in a number is greater.
- | | | | |
|----------------|--------------------------|----------------|--------------------------|
| (i) 5 times | <input type="checkbox"/> | (ii) 10 times | <input type="checkbox"/> |
| (iii) 50 times | <input type="checkbox"/> | (iv) 100 times | <input type="checkbox"/> |
- b. The greatest 5-digit number is
- | | | | |
|--------------|--------------------------|-------------|--------------------------|
| (i) 999989 | <input type="checkbox"/> | (ii) 99999 | <input type="checkbox"/> |
| (iii) 999999 | <input type="checkbox"/> | (iv) 999998 | <input type="checkbox"/> |
- c. The successor of the smallest 5-digit number is.....
- | | | | |
|--------------|--------------------------|-------------|--------------------------|
| (i) 100001 | <input type="checkbox"/> | (ii) 10001 | <input type="checkbox"/> |
| (iii) 999999 | <input type="checkbox"/> | (iv) 100010 | <input type="checkbox"/> |
- d. 1 Lakh is same as.....
- | | | | |
|------------------|--------------------------|--------------------|--------------------------|
| (i) 100 thousand | <input type="checkbox"/> | (ii) 50 thousand | <input type="checkbox"/> |
| (iii) 1000 | <input type="checkbox"/> | (iv) none of these | <input type="checkbox"/> |
- e. The Roman numeral for 39 is.....
- | | | | |
|--------------|--------------------------|------------|--------------------------|
| (i) XXVII | <input type="checkbox"/> | (ii) XXXIX | <input type="checkbox"/> |
| (iii) XXVIII | <input type="checkbox"/> | (iv) XXIX | <input type="checkbox"/> |



Lab Activity

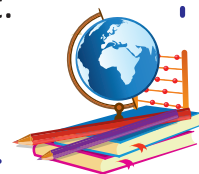
Objective : To explore the writing of large number.

Materials : A 10×10 squared paper per child, a red and blue crayon for each child and a scale.

Presentalion :

- ❖ Each child marks out an outline of 10×10 square with the red crayon.
- ❖ The teacher calls out 5-digit and 6-digit numbers.
- ❖ All 5-digit numbers are to be written horizontally with a red crayon, e.g. seventy three thousand four hundred ninety eight.
- ❖ All 6-digit numbers to be written vertically in blue, e.g. five lakh ninety one thousand eight hundred six.
- ❖ To build the cross number puzzle, a space of an empty square should be kept.
- ❖ At least five or six numbers of 5 digits and 6 digits should be called out.
- ❖ All empty squares to be shaded.
- ❖ Cross number puzzles should be checked and displayed in the class.

7	3	4	9	8		5			
						9			
						1			
						8			
						0			
						6			



We already know how to add two or more 4-digit numbers. Now let's learn the method of addition of 5-digit numbers and 6-digit numbers.

The numbers which are added together are known as **addends** and the result after addition is known as **sum**.



Addition of 5-digit Numbers and 6-digit Numbers (without Carry Over)

Example I : Add 52,416 and 43,373.

Solution : Put the numbers in the columns correctly.

	T-Th	Th	H	T	O	
	5	2	4	1	6	→ Addend
+	4	3	3	7	3	→ Addend
	9	5	7	8	9	→ Sum

Step 1 : Add the ones ; 6 ones + 3 ones = 9 ones
Write 9 in the ones column.

Step 2 : Add the tens ; 1 ten + 7 tens = 8 tens
Write 8 in the tens column.

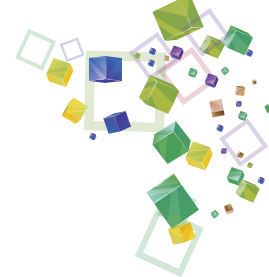
Step 3 : Add the hundreds ; 4 hundreds + 3 hundreds = 7 hundreds
Write 7 in the hundreds column.

Step 4 : Add the thousands.
2 thousands + 3 thousands = 5 thousands
Write 5 in the thousands column.

Step 5 : Add the ten thousands.
5 ten thousands + 4 ten thousands = 9 ten thousands
Write 9 in the ten thousands column.
Therefore, $52,416 + 43,373 = 95,789$.



EXERCISE 3.1



1. Add the following numbers.

a.

T-Th	Th	H	T	O
8	5	4	6	2
+ 6	7	3	8	4

b.

L	T-Th	Th	H	T	O
7	6	5	4	8	6
+ 9	8	3	4	7	5

c.

T-Th	Th	H	T	O
5	4	7	6	4
+ 4	1	2	3	1

d.

L	T-Th	Th	H	T	O
8	3	2	1	3	5
+ 7	8	6	9	4	7

2. Arrange the following in column and add.

a. 7,56,124; 31,442 and 1,230

b. 32,031; 20,306 and 1,312

c. 2,10,413; 1,34,212 and 43,230

d. 21,430; 17,214 and 30,323



Addition of 5-digit Numbers and 6-digit Numbers (with Carry Over)

Example II : Add 259453 and 578539.

Solution : Put the numbers in the columns correctly.

	L	T-Th	Th	H	T	O
	1	1			1	
	2	5	9	4	5	3
+	5	7	8	5	3	9
	8	3	7	9	9	2

Step 1 : Add the ones ; 3 ones + 9 ones = 12 ones = 1 ten + 2 ones.
Write 2 in the ones column and carry over 1 ten to the tens column.

Step 2 : Add the tens; 5 tens + 3 tens + 1 ten (carried over) = 9 tens.
Write 9 in the tens column.

Step 3 : Add the hundreds ; 4 hundreds + 5 hundreds = 9 hundreds.
Write 9 in hundreds column.





Step 4

: Add the thousands ; 9 thousands + 8 thousands = 17 thousands = 1 ten thousand + 7 thousands. Write 7 in the thousands column and carry over 1 ten thousand to ten thousands column.

Step 5

: Add the ten thousands ; 5 ten thousands + 7 ten thousands + 1 ten thousand (carried over) = 13 ten thousand = 10 ten thousands + 3 ten thousands = 1 lakh + 3 ten thousands. Write 3 in ten thousands column and carry over 1 lakh to the lakhs column.

Step 6

: Add the lakhs: 2 lakhs + 5 lakhs + 1 lakh (carried over) = 8 lakhs. Write 8 in the lakhs column. Therefore, $259453 + 578539 = 837992$.

Example III : Find the sum of 4,32,152 ; 3,26,748 and 1,73,425.

Solution :

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

Therefore, $4,32,152 + 3,26,748 + 1,73,425 = 9,32,325$.

E X E R C I S E 3.2

1. Add the following numbers.

a.

	L	T-Th	Th	H	T	O
	7	9	8	2	6	6
+	1	7	9	9	6	5

b.

	L	T-Th	Th	H	T	O
	4	3	7	8	8	5
+	3	2	4	9	5	9

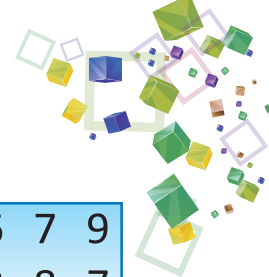
c.

	L	T-Th	Th	H	T	O
	3	3	9	8	8	8
+	2	8	7	5	4	5

d.

	L	T-Th	Th	H	T	O
	7	5	2	3	5	5
	9	6	7	7	4	9
+	8	7	9	8	6	9





2. Find the sum of the following numbers.

a.

6	3	8	6	7	
+	7	8	1	3	9

b.

3	6	9	5	2	
+	4	7	8	6	8

c.

5	5	6	7	9	
+	2	7	8	8	7

d.

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

e.

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

f.

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

3. Find the sum of the numbers given below.

- 48,285; 61,500 and 76,178
- 1,59,878; 32,456 and 1,45,871
- 25,732; 4,27,931 and 13,456
- 18,25,140; 21,50,511 and 32,75,767
- 4,67,464; 3,24,505 and 1,28,634
- 2,74,876; 3,06,452 and 3,18,514



Properties of Addition

- The sum of two numbers does not change, if the order of addends is changed.

For Example :

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

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

Therefore, $44353 + 23476 = 23476 + 44353 = 67829$.

- The sum of three or more numbers does not change if their order is changed.

For Example :

- $24638 + 39235 + 13436 = 77309$
- $24638 + 13436 + 39235 = 77309$
- $13436 + 24638 + 39235 = 77309$
- $39235 + 24638 + 13436 = 77309$





In the example, it is observed that if the addends are arranged in different order even then their sum is always the same, i.e. 77309.

3. Additive Property of Zero (0): Addition of zero (0) to any number is the number itself.

For Example :

$$\begin{array}{r} 65142 \\ + \quad \quad 0 \\ \hline 65142 \end{array}$$

Therefore, $65142 + 0 = 0 + 65142 = 65142$.



Addition of Numbers in Expanded Form

Example IV : Add 9 hundreds and 73 tens.

Solution :

$$\begin{array}{r} 9 \text{ hundreds} = 9 \text{ hundreds} \\ + 73 \text{ tens} = 7 \text{ hundreds} + 3 \text{ tens} \\ \hline = 16 \text{ hundreds} + 3 \text{ tens} \end{array}$$

Example V : Add 18 thousands, 12 hundreds and 46 tens.

Solution :

$$\begin{array}{r} 18 \text{ thousands} = 18 \text{ thousands} \\ 12 \text{ hundreds} = 1 \text{ thousand} + 2 \text{ hundreds} \\ + 46 \text{ tens} = \quad \quad \quad 4 \text{ hundreds} + 6 \text{ tens} \\ \hline 19 \text{ thousands} + 6 \text{ hundreds} + 6 \text{ tens} \\ 1 \text{ ten thousand } 9 \text{ thousands } 6 \text{ hundreds } 9 \text{ tens} \end{array}$$

Example VI : Find the sum of 6 ten thousands, 16 thousands and 24 hundreds.

Solution :

$$\begin{array}{r} 6 \text{ ten thousands} = 6 \text{ ten thousands} \\ 16 \text{ thousands} = 1 \text{ ten thousand} + 6 \text{ thousands} \\ + 24 \text{ hundreds} = \quad \quad \quad + 2 \text{ th.} \quad + 4 \text{ hun.} \\ \hline 7 \text{ ten thousand} + 8 \text{ th.} \quad + 4 \text{ hun.} \end{array}$$

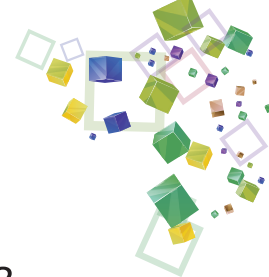
Answer : 7 ten thousands 8 thousands 4 hundreds

EXERCISE 3.3

1. Fill in the blanks.

- a. $51117 + 30251 = \dots\dots\dots + 51117$
 b. $85803 + \dots\dots\dots = 85883$





- c. $12435 + \dots = 4265 + 12435$
- d. $0 + \dots = 61212$
- e. $16458 + 23487 + 0 = \dots + 0 + 16458$
- f. $2450 + 24568 + 3250 = 24568 + \dots + 2450$
- g. $71201 + \dots + 607 = 607 + 71201 + 70594$

2. Find the sum of following.

- a. 25 thousands and 14 hundreds
- b. 34 thousands, 2 thousands and 25 hundreds
- c. 52 thousands, 14 hundreds and 13 tens
- d. 86 ten thousands, 13 thousands and 57 hundreds



Word Problems on Addition

Example VII : The price of a car is ₹ 2,87,970; the price of a bike is ₹34,536 and the price of a van is ₹ 93,365. Find the total price of three vehicles.

Solution :

	2	1	1	1	1	
The price of a car =	₹ 2	8	7	9	7	0
The price of a bike =	₹	3	4	5	3	6
The price of a van =	+ ₹	9	3	3	6	5
	₹ 4	1	5	8	7	1

Thus, total price = ₹(2,87,970 + 34,536 + 93,365)

Answer : Total price of three vehicles is ₹ 4,15,871.

Example VIII : In a city, there are 2,82,678 men; 1,98,972 women and 4,32,176 children. Find the total population of the city.

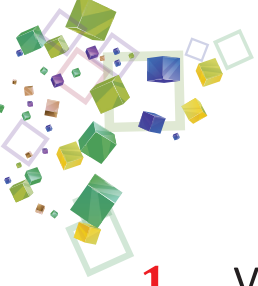
Solution :

	2	1	1	2	1	
Number of men =	2	8	2	6	7	8
Number of women =	1	9	8	9	7	2
Number of children =	+ 4	3	2	1	7	6
The population of the city =	9	1	3	8	2	6

=(2,82,678 + 1,98,972 + 4,32,176)

Answer : Total population of the city is 9,13,826.





EXERCISE 3.4

1. Vikram bought a washing machine for ₹ 41,250, a camera for 18,999 and a Microwave oven for ₹ 19,999. How much did he spend in all?
2. In an Examination five students got 419; 397; 416; 535 and 487 marks respectively. How many marks, in all, they got?
3. On a book fair 3,26,118 people visited a book fair on Monday. 1,42,325 peoples visited the book fair on Tuesday. How many people visited the book fair on the both days?
4. A public library has 29,520 books in Science and 5,12,503 books in other languages. How many book does the public library have?
5. Nisha earned ₹ 1,52,500 last year and ₹ 2,25,200 this year. What is her total earning altogether in the both years?
6. In an examination, 1,12,428 students passed, while 81,093 students failed. How many students appeared in the examination?
7. A door-lock manufacturing factory produced 61,975 door-locks in 2012; 1,12,121 door-locks in 2013 and 6,01,228 door-locks in 2014. How many door-locks did the factory produce in three consecutive years?
8. According to a report, there are 7,55,812 men; 4,42,189 women and 3,95,013 kids in a city. What is the population of city as per report?

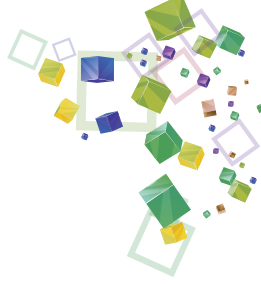
POINTS TO REMEMBER

- ❖ The numbers which are added together are called addends and the result of addition is called their sum.
- ❖ If we add zero to any number, the answer is the number itself.
- ❖ If we add 1 to any number, we get the successor of the number.
- ❖ In addition, the order of addends can be changed, but the sum will remain the same.





RECAP EXERCISE



1. Multiple Choice Questions (MCQs)

Tick (✓) the correct options:

- a. Add 9 hundreds and 96 tens is equal to.....
- | | | | |
|----------------------------|--------------------------|--------------------------|--------------------------|
| (i) 18 hundreds + 6 ones | <input type="checkbox"/> | (ii) 9 hundreds + 6 tens | <input type="checkbox"/> |
| (iii) 18 hundreds + 6 tens | <input type="checkbox"/> | (iv) 9 hundreds + 2 tens | <input type="checkbox"/> |
- b. $3,52,460 + 1,79,997 = 3,52,460 + \dots$
- | | | | |
|----------------|--------------------------|---------------|--------------------------|
| (i) 5,29,521 | <input type="checkbox"/> | (ii) 1,79,460 | <input type="checkbox"/> |
| (iii) 3,52,460 | <input type="checkbox"/> | (iv) 1,79,997 | <input type="checkbox"/> |
- c. Add 6,73,492 and 2,96,819 is equal to.....
- | | | | |
|----------------|--------------------------|---------------|--------------------------|
| (i) 8,70,311 | <input type="checkbox"/> | (ii) 9,71,312 | <input type="checkbox"/> |
| (iii) 9,70,301 | <input type="checkbox"/> | (iv) 9,70,311 | <input type="checkbox"/> |
- d. Add 4,98,728 and 3,85,478 is equal to.....
- | | | | |
|----------------|--------------------------|---------------|--------------------------|
| (i) 8,84,306 | <input type="checkbox"/> | (ii) 8,84,216 | <input type="checkbox"/> |
| (iii) 8,82,406 | <input type="checkbox"/> | (iv) 8,84,206 | <input type="checkbox"/> |
- e. If zero is added to a number, its value remains the.....
- | | | | |
|------------|--------------------------|--------------------|--------------------------|
| (i) same | <input type="checkbox"/> | (ii) different | <input type="checkbox"/> |
| (iii) zero | <input type="checkbox"/> | (iv) none of these | <input type="checkbox"/> |

2. Write each of the following in columns and add.

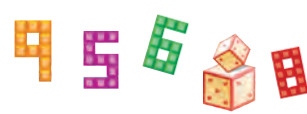
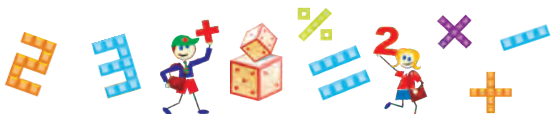
- a. $83081 + 36937$ b. $72363 + 24556$ c. $44538 + 51834$
 d. $264263 + 54028$ e. $73859 + 8918289$ f. $192875 + 452648$

3. Add the numbers in (i) and (ii) of each and compare the sums.

- a. (i) $53289 + 23598$ (ii) $23598 + 53289$
 b. (i) $29238 + 47508$ (ii) $47508 + 29238$

4. Fill in the blanks to make the statements true :

- a. $26572 + 27873 = 27873 + \dots$ b. $307899 + \dots = 307899$
 c. $24573 + 12780 + 11992 = 12780 + 24573 + \dots$
 d. $45325 + 23719 = 45325 + \dots$ e. $0 + \dots = 245792$
 f. $317 + 32578 + 124679 = 32578 + \dots + 124679$
 g. $82881 + 71991 = 71991 + \dots$





- h. $32742 + 25732 + 12724 = 25732 + 12724 + \dots$
 i. $\dots + 24678 + 3253 = 24678 + \dots + 2468$
 j. $11220 + \dots + 1244 = 1244 + \dots + 3452$

5. Estimate the sum by rounding off the numbers to nearest thousand and compare the sum with the actual sum also.

- a. $3571 + 4385$ b. $5813 + 1768$ c. $11093 + 22365$
 d. $6715 + 3238$ e. $50945 + 66045$ f. $62873 + 51025$

6. Solve the following.

- a. Sher khan bought a plot of land for ₹ 567160. A building was constructed on it for ₹ 412112. Find the total cost.
 b. A function is to be attended by 60000 people. On the ground 31250 red chairs and 52850 blue chairs have been arranged. How many chairs have been arranged in all?



I am the greatest 5-digit number in which each digit is greater than the one before it. Which number am I?

Lab Activity

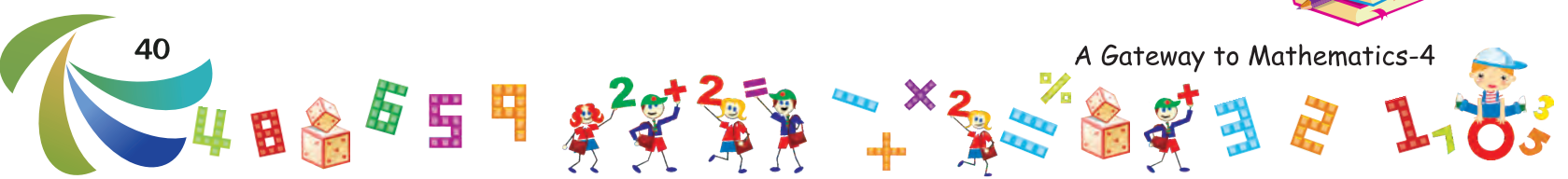
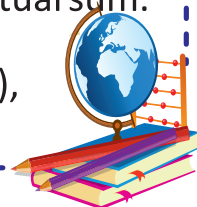
Objective : To understand in estimation and addition of 5-digit numbers.
Materials : Papers and pencils

Presentation :

- ❖ This activity will be done in pairs.
- ❖ The teacher will write many addition problems on the blackboard.
E.g. $31852 + 42836$
- ❖ One of the students from the pair will do the addition sum.
- ❖ The partner will round off the numbers and give the estimated sum.
- ❖ Both the answers will be compared.
- ❖ The results will be noted in the notebook.

Find the sum	Rounding off numbers	Estimated sum	Actual sum	Which is greater?
$31852 + 42836$	$30000 + 40000$	70000	74688	74688

- ❖ Many such sums will be done.
- ❖ The partners can take turns for finding the estimated sum and the actual sum.
- ❖ Accuracy in finding the sum is important.
- ❖ The pair which completes all the given problems first (accurately), will be the winners.



4

Subtraction

We have learnt the subtraction of numbers upto four digits. Now, let us learn the subtraction of 5-digit numbers and 6-digit numbers.

Minuend: The large number from which the smaller number is subtracted is known as minuend.

Subtrahend: The number which is subtracted is known as subtrahend.

The Result of Subtraction: Difference between the minuend and the subtrahend is known as the result of subtraction.

Subtraction of 5-digit and 6-digit Numbers (without Borrowing)

Example I: Subtract 32,274 from 65,497.

Solution : Write the given numbers in columns with the greater number on top. Put the numbers in the columns correctly.

Step 1 : Subtract the ones.

$$7 \text{ ones} - 4 \text{ ones} = 3 \text{ ones}$$

Write 3 in the ones column.

Step 2 : Subtract the tens.

$$9 \text{ tens} - 7 \text{ tens} = 2 \text{ tens}$$

Write 2 in the tens column.

Step 3 : Subtract the hundreds.

$$4 \text{ hundreds} - 2 \text{ hundreds} = 2 \text{ hundreds}$$

Write 2 in the hundreds column.

Step 4 : Subtract the thousands.

$$5 \text{ thousands} - 2 \text{ thousands} = 3 \text{ thousands}$$

Write 3 in the thousands column.

Step 5 : Subtract the ten thousands.

$$6 \text{ ten thousands} - 3 \text{ ten thousands} = 3 \text{ ten thousands}$$

Write 3 in the ten thousands column.

Therefore, $65,497 - 32,274 = 33,223$.

	Th	H	T	O
	5	4	9	7
-	2	2	7	4
	3	2	2	3

→ Minuend

→ Subtrahend

→ Difference



Example II : Write the missing numbers in the given subtraction.

	L	T-Th	Th	H	T	O	
	7	6	8	5	9	4	← Minuend
-	5	□	□	1	3	□	← Subtrahend
	□	5	4	□	□	3	← Difference

Solution : If the subtrahend is missing, then the difference is subtracted from the minuend.

i.e.

Minuend	-	Difference	=	Subtrahend
4	-	3	=	1
8	-	4	=	4
6	-	5	=	1

and

Minuend	-	Subtrahend	=	Difference
9	-	3	=	6
5	-	1	=	4
7	-	5	=	2

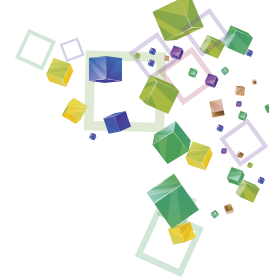
Therefore,

L	T-Th	Th	H	T	O	=	L	T-Th	Th	H	T	O
7	6	8	5	9	4		7	6	8	5	9	4
-	5	□	□	1	3	-	5	1	4	1	3	1
	□	5	4	□	□	2	5	4	4	6	3	

EXERCISE 4.1

1. Subtract the following numbers.

<p>a.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">T-Th</td><td style="text-align: center;">Th</td><td style="text-align: center;">H</td><td style="text-align: center;">T</td><td style="text-align: center;">O</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">5</td><td style="text-align: center;">6</td><td style="text-align: center;">8</td><td style="text-align: center;">7</td></tr> <tr><td style="text-align: right;">-</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">5</td><td style="text-align: center;">5</td></tr> <tr><td style="text-align: center;">1</td><td style="text-align: center;">1</td><td style="text-align: center;">3</td><td style="text-align: center;">3</td><td style="text-align: center;">1</td></tr> </table>	T-Th	Th	H	T	O	3	5	6	8	7	-	2	3	5	5	1	1	3	3	1	<p>b.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">T-Th</td><td style="text-align: center;">Th</td><td style="text-align: center;">H</td><td style="text-align: center;">T</td><td style="text-align: center;">O</td></tr> <tr><td style="text-align: center;">6</td><td style="text-align: center;">6</td><td style="text-align: center;">5</td><td style="text-align: center;">7</td><td style="text-align: center;">9</td></tr> <tr><td style="text-align: right;">-</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td><td style="text-align: center;">2</td><td style="text-align: center;">4</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">5</td><td style="text-align: center;">5</td></tr> </table>	T-Th	Th	H	T	O	6	6	5	7	9	-	2	3	2	4	2	4	5	5	5	<p>c.</p> <table style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">T-Th</td><td style="text-align: center;">Th</td><td style="text-align: center;">H</td><td style="text-align: center;">T</td><td style="text-align: center;">O</td></tr> <tr><td style="text-align: center;">7</td><td style="text-align: center;">4</td><td style="text-align: center;">5</td><td style="text-align: center;">7</td><td style="text-align: center;">6</td></tr> <tr><td style="text-align: right;">-</td><td style="text-align: center;">3</td><td style="text-align: center;">1</td><td style="text-align: center;">4</td><td style="text-align: center;">6</td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">3</td><td style="text-align: center;">4</td><td style="text-align: center;">3</td><td style="text-align: center;">0</td></tr> </table>	T-Th	Th	H	T	O	7	4	5	7	6	-	3	1	4	6	4	3	4	3	0												
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2. Arrange in columns and subtract the following.

- a. $82,150 - 39,250$ b. $37,563 - 24,151$
 c. $2,31,568 - 1,00,314$ d. $57,889 - 36,643$
 e. $5,21,320 - 3,17,205$ f. $1,56,876 - 41,451$

3. Find the difference when...

- a. Minuend = 94,765 and Subtrahend = 42,132.
 b. Subtrahend = 3,23,517 and Minuend = 7,48,859.
 c. Subtrahend = 35,241 and Minuend = 59,678.
 d. Minuend = 7,67,894 and Subtrahend = 3,45,461.

4. Write the missing numbers in the given subtraction.

<p>a. L T-Th Th H T O</p> <p> 6 7 8 8 9 5</p> <p>– □ □ 2 8 □ 3</p> <p> 4 3 □ 0 8 □</p>	<p>b. L T-Th Th H T O</p> <p> 6 8 5 9 7 4</p> <p>– 4 □ 1 4 □ 1</p> <p> □ 2 □ □ 3 □</p>	<p>c. L T-Th Th H T O</p> <p> 4 5 8 7 6 3</p> <p>– 3 □ 2 □ 5 1</p> <p> □ 1 □ 3 □ 2</p>
<p>d. T-Th Th H T O</p> <p> 6 4 5 8 7</p> <p>– □ □ 2 □ 3</p> <p> 2 1 □ 3 □</p>	<p>e. T-Th Th H T O</p> <p> 5 4 3 6 7</p> <p>– □ 3 □ 4 □</p> <p> 3 □ 1 □ 2</p>	<p>f. T-Th Th H T O</p> <p> 7 6 8 5 4</p> <p>– 4 4 □ 1 □</p> <p> □ □ 5 □ 2</p>

 **Subtraction of 5-digit and 6-digit Numbers (with Borrowing)**

Example III: Find the difference between 146762 and 84528.

Solution :

	L	T-Th	Th	H	T	O	
	(0)	(14)			(5)	(12)	← After borrowing
	1	4	6	7	6	2	← Minued
–		8	4	5	2	8	← Subtranend
	6	2	2	3	4		← Difference





Step 1

: Subtracting the ones :- we can not subtract 8 ones from 2 ones.

So, we borrow 1 ten from 6 tens leaving behind 5 tens.

$2 \text{ ones} + 1 \text{ ten} = 2 + 10 = 12 \text{ ones.}$

Now, $12 \text{ ones} - 8 \text{ ones} = 4 \text{ ones.}$

Step 2

: Subtracting the tens :- $5 \text{ tens} - 2 \text{ tens} = 3 \text{ tens.}$

Step 3

: Subtracting the hundreds :- $7 \text{ hundreds} - 5 \text{ hundreds} = 2 \text{ hundreds.}$

Step 4

: Subtracting the thousand :- $6 \text{ thousands} - 4 \text{ thousands} = 2 \text{ thousands.}$

Step 5

: Subtracting the ten thousands :- We can not subtract 8 ten - thousands from 4 ten - thousands.

we borrow 1 lakh from lakhs place and hence nothing remains there.

$4 \text{ ten - thousands} + 1 \text{ lakh} = (4+10) \text{ ten - thousands}$

$= 14 \text{ ten - thousands.}$

Now, $14 \text{ ten thousand} - 8 \text{ ten - thousands.}$

$= 6 \text{ ten - thousands.}$

Hence, therefore , $146762 - 84528 = 62234$



Example IV : What number is 4,069 less than 57,034?

Solution : Required number is the difference between the given numbers.

	T-Th	Th	H	T	O
	6	9	12	14	
	5	7	0	3	4
-		4	0	6	9
	5	2	9	6	5

Therefore the required number =

Hence, required number is 52,965.





Example V : What number should be added to 16587 to get 18345?

Solution : Required number is the difference between the given numbers.

Therefore, 1758 should be added to 16587 to get 18345.

	T-Th	Th	H	T	O
		7	12	13	15
	1	8	3	4	5
-	1	6	5	8	7
		1	7	5	8

1. Subtract the following.

EXERCISE 4.2

a.	T-Th	Th	H	T	O	b.	T-Th	Th	H	T	O	c.	T-Th	Th	H	T	O
	8	4	3	4	5		8	5	3	2	4		9	8	7	5	3
-	4	5	8	9	8	-	4	5	7	2	7	-	5	7	8	6	9

2. Arrange the numbers in columns and subtract.

- a. 24,056 and 43,741 b. 31,537 and 65,948
 c. 57,687 and 82,345 d. 68,670 and 1,45,250

3. What number is 1,013 less than 15,002?
 4. What number is 2,787 less than 18,000?
 5. What number should be added to 14,357 to get 19,236?



Rules of Subtraction

1. Order of numbers

The order of the numbers, to be subtracted and the number from which it is to be subtracted is important.

For Examples : $98 - 10 = 88$ but $10 - 98 = ?$

Similarly, $6,534 - 297 = 6,237$ but $297 - 6534 = ?$

2. Subtracting zero

If we subtract 0 from any number, the answer is the number itself.

For Examples : a. $95 - 0 = 95$ b. $892 - 0 = 892$ c. $7,538 - 0 = 7,538$



3. Subtracting 1

Find the difference between 254382 and 368997

Here, the number 368997 is the minuend and 254382 is the subtrahend.

L	T-TH	TH	H	T	O	
3	6	8	9	9	7	← Minuend
- 2	5	4	3	8	2	← Subtrahend
1	1	4	6	1	5	← Difference

Steps

Subtracting ones :	$7 - 2 = 5$
Subtracting tens :	$9 - 8 = 1$
Subtracting hundreds :	$9 - 3 = 6$
Subtracting thousands :	$8 - 4 = 4$
Subtracting ten-thousands :	$6 - 5 = 1$
Subtracting lakhs :	$3 - 2 = 1$

Thus, $368997 - 254382 = 114615$.

4. Subtracting a number from itself

If a number is subtracted from itself, the answer we get is zero.

For Examples : a. $8,573 - 8,573 = 0$ b. $14,585 - 14,585 = 0$
c. $4,22,427 - 4,22,427 = 0$

5. Subtracting 10, 100, 1000 etc.

While subtracting 10, 100, 1000 etc. from a number, notice the change that comes about in the digits in the appropriate places only.

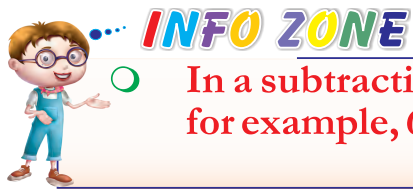
For Examples : a. $12,365 - 10 = 12,355$
b. $12,365 - 100 = 12,265$
c. $12,365 - 1,000 = 11,365$

6. Subtraction facts

For each addition fact, we get two subtraction facts.

For Examples : a. If $4,310 + 5,415 = 9,725$,
then, $9,725 - 4,310 = 5,415$ and $9,725 - 5,415 = 4,310$.
b. If $32,314 + 55,163 = 87,477$,
then, $87,477 - 32,314 = 55,163$ and $87,477 - 55,163 = 32,314$.





INFO ZONE

In a subtraction problem, the order of the numbers is very important for example, 6-5 is not the same as 5-6.

EXERCISE 4.3

1. Fill in the blanks :

- a. The greater number in subtraction is called
- b. The smaller number in subtraction is called
- c. Minuend - = Difference.

2. Subtract the following :

- a. 38657 - 24325 b. 23578 - 12422 c. 24895 - 20044
- d. 834594 - 323453 e. 25723 - 14412 f. 456794 - 325324
- g. 78956 - 34515 h. 785489 - 342356 i. 957528 - 743417
- j. 875690 - 324210

3. Find the difference between :

- a. 58764 and 43254 b. 895943 and 672323 c. 98548 and 43225
- d. 792593 and 52462 e. 75685 and 43423 f. 859723 and 645612



Addition and Subtraction Together

While doing a sum where both addition and subtraction are involved, we first rearrange the numbers which are to be added and then subtract from the result. We solve the sum step by step to make it easy.

Example VI : Add 32573, 24115 and 41211.

Solution : Write the given numbers in proper columns and go on adding ones, tens, hundreds, thousands and ten thousands.

	T-Th	Th	H	T	O	
	3	2	5	7	3	← Addends
+	2	4	1	1	5	← Addends
+	4	1	2	1	1	← Addends
	9	7	8	9	9	← Sum

→ 3 + 5 + 1 = 9 ones

→ 7 + 1 + 1 = 9 tens

→ 5 + 1 + 2 = 8 hundreds

→ 2 + 4 + 1 = 7 thousands

→ 3 + 2 + 4 = 9 ten-thousands

Hence, 32573 + 24115 + 41211 = 97899.





Example VII : Subtract 34217 from 87045, and check the answer by addition.

Solution : The difference of 87045 and 34217 is 52828. If we add this difference (52828) to the subtrahend (34217), we get the minuend.

	T-Th	Th	H	T	O
	8	7 ⁶	0 ¹⁰	4 ³	5 ¹⁵
-	3	4	2	1	7
	5	2	8	2	8

	T-Th	Th	H	T	O
	5	¹ 2	8	¹ 2	8
+	3	4	2	1	7
	8	7	0	4	5

← Difference

← Subtrahend

← Minuend

The given sum shows that our answer is correct.

EXERCISE 4.4

1. Fill in the blanks :

- The numbers to be added are called
- The result obtained after adding is called
- $41527 + 0 = \dots\dots\dots$
- $13240 + 1751 = \dots\dots\dots$

2. Add :

a.

	T-Th	Th	H	T	O
	7	3	2	5	4
+		1	2	1	2
+	1	3	2	1	2

b.

	T-Th	Th	H	T	O
	2	3	3	2	4
+	3	1	2	3	0
+	1	2	1	1	2

c.

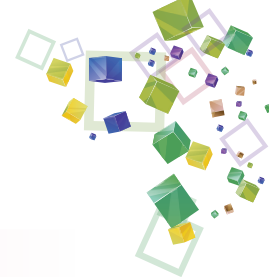
	T-Th	Th	H	T	O
	2	3	1	0	5
+	1	3	2	5	0
+	3	1	6	3	2

d.

	T-Th	Th	H	T	O
	2	3	4	1	2
+	3	2	1	4	3
+	1	0	0	0	1

3. Find the sum :

- 23123, 11001 and 21302
- 32101, 12301 and 1032
- 21031, 12301 and 32211
- 301242, 123310 and 10002



Word Problems on Subtraction

Example VIII: Nisha deposited ₹ 56,870 in her bank account. Later on, she withdrew ₹ 32,965 from the bank. How much money is there in her bank account now?

Solution :

Total amount deposited	=	₹	5	6	8	7	0
Amount withdrawn	=	- ₹	3	2	9	6	5
The balance in her bank account now	=	₹	2	3	9	0	5

Example IX : The price of a mobile is ₹ 56,850 and the price of a Laptop is ₹ 98,540. How much more is the price of laptop than that of mobile?

Solution :

The price of laptop	=	₹	9	8	5	4	0
The price of mobile	=	- ₹	5	6	8	5	0
The difference in their price	=	₹	4	1	6	9	0
Therefore, ₹ 98,540 - ₹ 56,850	=	₹	41,690				

EXERCISE 4.5

1. There were 84,678 people in a village. Out of this 27,546 were children. How many adults were there in the village?
2. The difference of two numbers is 6,284. If the larger number is 53,975. Find the smaller number.
3. If the annual income of Nitin is ₹ 2,45,875 and his annual expenditure is ₹ 88,975. Find the annual saving of the Nitin.
4. There are 7,95,008 apples in a cold storage. If 3,72,976 apples are sold out of them, then how many apples are left in the cold storage?
5. What must be added to 66,842 to get 80,000?
6. The population of a city is 6,35,188. There are 1,34,775 men and 2,45,928 are women. The remaining are children. How many childrens are there in the city?
7. If a number is subtracted from 48,632 and the result is 32,428. Find the number which is subtracted?



8. Sneha has ₹ 8,99,001 with her. She buys a house for ₹ 6,88,994. How much balance does she have now?

POINTS TO REMEMBER

- ❖ When we subtract zero from a number, the answer is the number itself.
- ❖ When we subtract 1 from a number, we get the predecessor of the number.
- ❖ When a number is subtracted from itself, the answer is zero.
- ❖ There are two subtraction facts, for each addition fact.
- ❖ In a subtraction problem, the order of the numbers is very important.
For example : $75 - 30$ is not the same as $30 - 75$.



1. Multiple Choice Questions (MCQs)

Match the following:

- | | | | | |
|-----|-------------------|---|----|-------|
| i | $84345 - 45897$ | ← | a. | 2206 |
| ii | $2454 - 248$ | | b. | 62210 |
| iii | $146762 - 84529$ | → | c. | 38448 |
| iv | $245892 - 183682$ | | d. | 62233 |

2. Subtract the following:

- | | | | |
|----|--|----|--|
| a. | $\begin{array}{r} 6\ 7\ 5\ 4\ 3\ 8 \\ -2\ 3\ 4\ 2\ 8\ 9 \\ \hline \end{array}$ | b. | $\begin{array}{r} 5\ 4\ 3\ 8\ 2\ 9 \\ -2\ 3\ 5\ 2\ 9\ 2 \\ \hline \end{array}$ |
| c. | $\begin{array}{r} 5\ 7\ 4\ 3\ 8\ 2 \\ -\ 2\ 4\ 0\ 5\ 9 \\ \hline \end{array}$ | d. | $\begin{array}{r} 7\ 8\ 2\ 9\ 5\ 4 \\ -2\ 3\ 5\ 2\ 9\ 2 \\ \hline \end{array}$ |

- | | | | | | |
|----|-------------------|----|------------------|----|-------------------|
| e. | $40588 - 31944$ | f. | $894532 - 52466$ | g. | $246802 - 129468$ |
| h. | $230494 - 151247$ | i. | $254329 - 24965$ | j. | $405090 - 295468$ |

3. Subtract and verify the answer:

- | | | | |
|----|--------------------|----|--------------------|
| a. | 342578 from 825219 | b. | 246589 from 725492 |
|----|--------------------|----|--------------------|





- c. 123578 from 342542
 e. 200006 from 423285

d. 246802 from 300000

4. For each of the following addition facts, write two subtraction facts.

a. $6,312 + 1,136 = 7,448$

b. $1,065 + 7,232 = 8,297$

c. $23,323 + 15,169 = 38,492$

d. $34,164 + 43,265 = 77,429$

5. Solve the following.

a. $2,319 + 5,368 - 3,479$

b. $1,865 + 2,973 - 946$

c. $58,641 - 16,329 + 24,986$

d. $27,989 - 14,674 - 11,008$

6. Subtract each of the following and check the answer by suitable addition.

a.

Th	H	T	O
8	0	0	0
- 6	3	2	5

+

Th	H	T	O
6	3	2	5

b.

T-Th	Th	H	T	O
2	9	1	2	1
- 1	6	8	7	4

+

T-Th	Th	H	T	O
1	6	8	7	4

7. Solve the following word problems.

- a. A train was travelling from Jaipur to Lucknow 375 km away. There were 9,756 passengers in the train, of which 1,268 were children. How many adults were there in the train?
- b. In a courtyard 15 metres long and 12 metres broad, a rangoli was made with 2689 flowers. There were 1956 red flowers and the rest were white. How many white flowers were there in the rangoli?

8. Solve the following.

- a. What should be added to 6928 to make it 10000?
- b. From which number should we subtract 4813 to get 3247 as the difference?
- c. What number is 2794 less than 15000?





INFO ZONE

Place value of 0 is always 0, Whichever place it occupies. Rearrange the digits of the number 9,2,8,0,5 to form the greatest and the smallest possible numbers. Also find their sum and difference.

Lab Activity

Objective : To understand the concept of addition and subtraction as opposite operations, by checking subtraction using addition.

Materials Required : Spike abacus with 4 spikes and four different coloured beads (many beads of each colour)

Presentation :

- ❖ This activity will be done in groups of 7 to 8 children.
 - ❖ Each group will be given a spike abacus and many different coloured beads.
 - ❖ The teacher will write a subtraction sum on the blackboard.
- For Example :** $6795 - 3462$. The students will put the beads as per the first number, i.e. 6795 on the abacus.
- ❖ Then, another student will remove the beads from those on the abacus as per the second number, i.e. 3462. So, the number of beads left is 3333.
 - ❖ The result will be noted as $6795 - 3462 = 3333$.
 - ❖ All the beads will then be removed.
 - ❖ The teacher will write on the blackboard 3462 and 3333 and ask the children to add to find out if subtraction is correct or not.
 - ❖ The student will put the beads on the abacus as per the first number which is 3462.
 - ❖ Another student will add more beads as per the second number which is 3333.
 - ❖ The result will be noted as $3462 + 3333 = 6795$.
 - ❖ The subtraction sum is thus verified.
- More such problems will be given and solved.

Th	H	T	O
6	7	9	5

Th	H	T	O
3	3	3	3





Concept of Multiplication

Multiplication is a short form of repeated addition of the same number.

For example :- $11 + 11 + 11 + 11 + 11 + 11 = 66$ or $11 \times 6 = 66$.

1. Numbers can be multiplied in any order, the product remains the same.

For Example :

a. $7 \times 5 = 35$ and $5 \times 7 = 35$

b. $9 \times 8 = 72$ and $8 \times 9 = 72$

Therefore, $7 \times 5 = 5 \times 7$

Therefore, $9 \times 8 = 8 \times 9$

2. If the multiplication method, the product remains the same even it order of multiplicand and multiplier is changed. On changing the grouping of numbers.

For Example :

a. $7 \times 11 = 77$

b. $(3 \times 10) \times 7 = 3 \times (10 \times 7) = 210$

This property is also known as **associative** property of multiplication.

3. The product of any number and 1 is the number itself.

For Example :

a. $12 \times 1 = 1 \times 12 = 12$

b. $15 \times 1 = 1 \times 15 = 15$

These facts well known as **unitary** property of multiplication.

4. When a number is multiplied by 0, the product is 0. Hence the product of a number and zero is zero.

For Example :

a. $16 \times 0 = 0 \times 16 = 0$,

b. $8 \times 0 = 0 \times 8 = 0$

This is known as **zero** property of multiplication.





Multiplication by 10, 100, 1000 etc.

In order to multiply a number by 10, we write the number and 0 to the right side of the number. Similarly, we add 00 to the right side of the number while multiplying a number by 100. In the same way, we can multiply a number by any multiple of 10.

For Example :

a. $135 \times 10 = 1350$

b. $243 \times 100 = 24300$

c. $6485 \times 1000 = 6485000$

Multiplication by 20, 30, 40, 50 etc.

To multiply a number by 20, 30, 40, 50 etc., we multiply the number by 2, 3, 4, 5 etc. and add a zero (0) to the right side of the product.

For Example :

a. $375 \times 20 = 7500$

b. $997 \times 30 = 29910$

c. $289 \times 40 = 11560$

Multiplication by 200, 300, 400, 500 etc.

To multiply a number by 200, 300, 400, 500 etc., we multiply the number by 2, 3, 4, 5 etc. and add two zero (00) to the right side of the product.

For Example :

a. $214 \times 200 = 42800$

b. $234 \times 300 = 70200$

In the same way, we can multiply a number by 2000, 3000, 4000 and so on.

Multiplication of 3-digit Number by a 2-digit Number



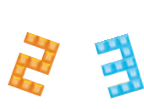
Example I : Multiply 232 by 32.

Solution : Arranging the numbers for multiplication.

2 3 2	←	Multiplicand	
× 3 2	←	Multiplier	
① ①	←		

4 6 4	←	(Product of 232 × 2	= 4 6 4)
+ 6 9 6 0	←	(Product of 232 × 30	= + 6 9 6 0)
7 4 2 4	←	(Sum of the product	= 7 4 2 4)
	←		-----

Therefore, $232 \times 32 = 7424$.





Multiplication of 3-digit Number by a 3-digit Number

Example II : Multiply 225 by 120.

Solution :

We know that $120 = 100 + 20$

$$\begin{aligned} \text{Now, } 225 \times 120 &= 225 \times (100 + 20) \\ &= 225 \times 100 + 225 \times 20 \\ &= 22500 + 4500 = 27000 \end{aligned}$$

Thus, the product of 225 and 120 is **27000**.

Direct method

$$\begin{array}{r} 225 \\ \times 120 \\ \hline 000 \leftarrow (225 \times 0) \\ 4500 \leftarrow (225 \times 20) \\ 22500 \leftarrow (225 \times 100) \\ \hline 27000 \leftarrow (225 \times 120) \end{array}$$

Example III : Multiply 2342 by 125.

Solution : We know that $125 = 100 + 20 + 5$.

$$\begin{aligned} \text{Now, } 2342 \times 125 &= 2342 \times (100 + 20 + 5) \\ &= 2342 \times 100 + 2342 \times 20 + 2342 \times 5 \\ &= 234200 + 46840 + 11710 = \mathbf{292750} \end{aligned}$$

This can be put as follows :

$$\begin{array}{r} 2342 \\ \times 125 \\ \hline 11710 \leftarrow (2342 \times 5) \\ 46840 \leftarrow (2342 \times 20) \\ 234200 \leftarrow (2342 \times 100) \\ \hline 292750 \leftarrow (2342 \times 125) \end{array}$$

Hence, $2342 \times 125 = \mathbf{292750}$.

EXERCISE 5.1

1. Find the products of the following.

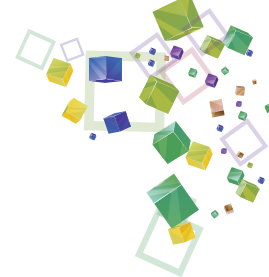
- a. 6×180 b. 15×1800 c. 22×2200 d. 5×400
 e. 3×1200 f. 17×3000 g. 24×240 h. 19×900

2. Fill in the blanks.

- a. $65 \times 200 = \dots\dots\dots$ b. $11 \times 900 = \dots\dots\dots$
 c. $15 \times 7000 = \dots\dots\dots$ d. $28 \times 1000 = \dots\dots\dots$

3. Multiply the following.

- a. 175×15 b. 225×225 c. 121×221 d. 321×35
 e. 175×70 f. 158×212 g. 250×150 h. 325×275



Multiplication of 4-digit Number by 1-digit Number

Example III : Multiply 3596 by 7.

Solution :

	Th	H	T	O
3	5	9	6	
			×	7
2	5	1	7	2

(Product of $3596 \times 7 = 25172$)



Multiplication of 4-digit Number by a 2-digit Number

Example IV : Multiply 3462 by 34.

Solution :

	Th	H	T	O	
3	4	6	2		
			×	34	
	①	①			
1	3	8	4	8	
+	10	3	8	6	0
1	1	7	7	0	8

(3462×4)	=	①①	1 3 8 4 8
(3462×30)	=	+	10 3 8 6 0
(Sum of Product)	=		11 7 7 0 8



Multiplication of 4-digit Number by a 3-digit Number

Example V : Multiply 3247 by 131.

Solution :

	Th	H	T	O		
3	2	4	7			
			×	131		
	①	①	①			
3	2	4	7			
	9	7	4	1	0	
+	3	2	4	7	0	0
4	2	5	3	5	7	

(1×3247)	=	①①①	3 2 4 7
(30×3247)	=		9 7 4 1 0
(100×3247)	=	+	3 2 4 7 0 0
(Sum of Product)	=		4 2 5 3 5 7

Therefore, $3247 \times 131 = 425357$





Example VI : There are 256 flats in a colony. The cost of white washing one flat is 280.

What will be the total cost of white washing all the flats?

Solution : Number of flats in the colony = 256
 Cost of white washing one flat = 280.
 Cost of white washing all the flats = ₹ (280 x 256)
 = ₹ 71680

$$\begin{array}{r}
 280 \\
 \times 256 \\
 \hline
 1680 \\
 + 14000 \\
 + 56000 \\
 \hline
 71680
 \end{array}$$

Thus, the cost of white washing 256 flats = ₹ 71680.

E X E R C I S E 52

1. Multiply the following.

- a. 6246×5 b. 2758×7 c. 2628×8 d. 6258×9

2. Multiply the following.

- a. 7892×32 b. 3268×24 c. 5816×19 d. 2127×62

3. Multiply the following.

- a. 1887×121 b. 5172×267 c. 3879×155 d. 6246×325



Continued Product (Multiplication)

Example VII: Find $184 \times 12 \times 4$.

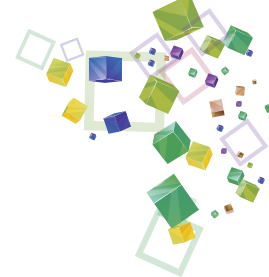
Solution : Multiply the first number 184 by the second number 12.

	H	T	O
	1	8	4
	×	1	2

①	3	6	8
+	1	8	4
	2	2	0
	8	8	8

The product is 2208.

Multiply the product 2208 by the third number 4.



$$2208$$

$$\times 4$$

$$8832$$

$$\therefore 184 \times 12 \times 4 = 8832.$$

Example VIII: Find the continued product of 275, 52, 62, 9.

Solution :

$\begin{array}{r} 275 \\ \times 52 \\ \hline 550 \\ 13750 \\ \hline 14300 \end{array}$	$\begin{array}{r} 14300 \\ \times 62 \\ \hline 28600 \\ 858000 \\ \hline 886600 \end{array}$	$\begin{array}{r} 886600 \\ \times 9 \\ \hline 7979400 \end{array}$
--	--	---

$$\therefore 275 \times 52 \times 62 \times 9 = 7979400.$$



Simplification



Can you do the following sum?

Example IX : Simplify $80 - 7 \times 2 + 4 \times 3 + 6 - 35$.

Solution : You have done sums involving both addition and subtraction. In the sum given above, you have to do multiplication as well. For proceeding ahead, you need to follow some steps in the following order.

Step 1 : First do the multiplication and write the product.
The sum is now simplified into one involving only addition and subtraction.

Step 2 : Separate all the numbers with '+' sign in front and all the numbers with '-' sign in front. The first number in the sum does not have a sign. It is considered to have the '+' sign.

Step 3 : Add all the numbers with '+' signs. Add all the numbers with '-' signs.





Step 4

: Now, you have two numbers. Subtract to get the simplified number.

$$= 80 - 14 + 12 + 6 - 35 \quad (\text{Step 1 - after doing multiplication})$$

$$= 80 + 12 + 6 - 14 - 35 \quad (\text{Step 2 - after separating numbers with '+' and '-' signs})$$

$$= 98 - 49 \quad (\text{Step 3 - Adding numbers with '+' signs, adding number with '-' signs})$$

$$= 49: \text{Answer}$$

Example X : Simplify $7 \times 5 - 5 \times 4 - 9 \times 7 + 10 \times 11 + 8 \times 2$.

Solution : $7 \times 5 - 5 \times 4 - 9 \times 7 + 10 \times 11 + 8 \times 2$

$$= 35 - 20 - 63 + 110 + 16$$

$$= 35 + 110 + 16 - 20 - 63$$

$$= 161 - 83 = 78$$

Answer: 78



Word Problems on Multiplication

Example XI : There are 156 sticks in a box. How many sticks are there in 112 such boxes?

Solution : Number of sticks in one box = 156

Number of sticks in 112 boxes = 156×112

Therefore, number of sticks in 112 boxes

$$= 17472$$

Answer: 17472 sticks

			H T O
			1 5 6
			× 1 1 2
			① 3 1 2
			1 5 6 0
			+ 1 5 6 0 0
			1 7 4 7 2

Example XII : Vibha saves ₹1438 every month. How much will she save in 4 years?

Solution : Vibha saves every month = ₹ 1438

Her savings in 4 years = $4 \times 12 = 48$ months

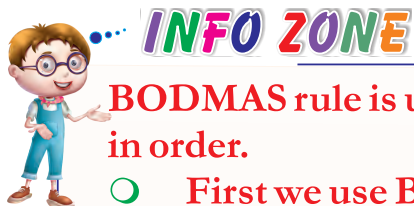
$$= ₹ 1438 \times 48$$

Therefore, Vibha will save in 4 years =

Answer: ₹ 69024

				Th H T O
				1 4 3 8
				× 4 8
				①
				1 1 5 0 4
				+ 5 7 5 2 0
				6 9 0 2 4





INFO ZONE

BODMAS rule is used to simplify a sum. We use the following operations in order.

- First we use **B** that stands for **Bracket**.
- Then, we use **O** that stands for 'Of'.
- Then, we use **D** that stands for **Division**.
- Then **M**, that stands for **Multiplication**.
- Then **A**, that stands for **Addition**.
- Finally **S**, that stands for **Subtraction**.

EXERCISE 5.3

1. Find the continued product of the following.

a. $48 \times 28 \times 7$

b. $121 \times 44 \times 18$

c. $217 \times 18 \times 17 \times 3$

d. $400 \times 11 \times 5 \times 6$

2. Simplify the following.

a. $275 - 13 \times 3 - 7 \times 5 - 11 \times 7$

b. $9 \times 8 - 5 \times 9 - 4 \times 3$

c. $17 \times 3 - 12 \times 3 + 6 \times 2$

d. $13 \times 5 + 18 \times 3 - 17 \times 3$

3. A scanner costs ₹ 7880. Find the cost of 21 such scanner.

4. The capacity of oil tank is 1155 litre. Find the capacity of 70 such oil tanks.

5. There are 175 tubes in a bundle. How many tubes are there in 188 such bundles?

6. There are 5141 students in a school. If every student contributes ₹ 175 for picnic, then how much amount gets collected?

POINTS OF REMEMBER

- ❖ Numbers can be multiplied in any order, the product remains the same.
- ❖ The product of any number and 1 is the number itself.
- ❖ When a number is multiplied by 0, the product is 0.
- ❖ To multiply a number by 200, 300, 400, 500 etc. we multiply the number by 2,3,4,5 etc. and add two zero (00) to the right side of the product.
- ❖ We follow BODMAS rule to simplifying a sum.



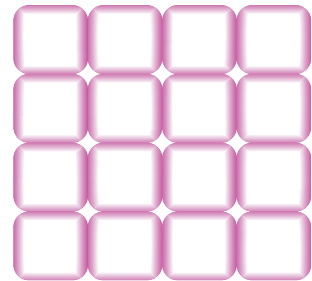
Lab Activity

Objective : To enable the children to recall the multiplication tables from 2 to 10.

Materials : Two sets of number cards from 2 to 10 and blank grids of 4×4 squares as shown :

1 2 3 4 5 6 7 8 9 10

Number cards



Grid

Presentation :

- ❖ All the products from 2 to 10 should be written on the board. Students should play in pairs.
 - ❖ The students copy any 16 numbers from the board on to their own grids.
 - ❖ Both sets of number cards are mixed and then turned over.
 - ❖ The partners take turns in picking up two number cards at a time.
 - ❖ The partners then multiply the numbers picked.
 - ❖ Whoever has the product, crosses it on his/her own grid.
 - ❖ The number cards are then replaced.
 - ❖ The student who crosses out all the numbers on his/her grid is declared winner.
- E.g. : In Round 1, Student A picks up cards 7 and 3 and Student B picks up cards 9 and 7.

Record the activity :

Student A's grid



21	36	12	35
8	16	10	14
54	15	28	25
66	24	18	45

25	24	32	65
10	8	16	14
18	15	9	60
20	30	63	77



Student B's grid

Try this out :

Round	Cards picked by Student A	Product 1	Cards picked by Student B	Product 2
1	7 and 3	$7 \times 3 = 21$	9 and 7	$9 \times 7 = 63$
2				

