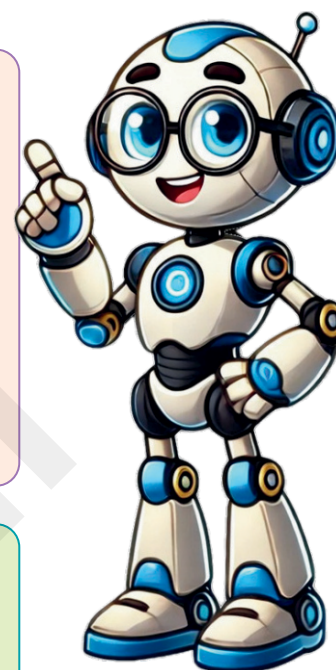# 3 Addition and Subtraction

We'll cover the following key points:

→ Addition

→ Subtraction

→ Addition Strategies

→ Problems on Addition

→ Subtraction Strategies

→ Subtraction of 4-digit Numbers

→ Subtraction with Regrouping

→ Finding the Missing Addend

→ Finding the Missing Minuend or Subtrahend

→ Word Problems on Mixed Operation (Addition and Subtraction)

Do you Remember fundamental concept in previous class:

In class 3rd we learnt

→ Addition of 4-Digit Numbers (Without Carrying)

→ Addition of 4-Digit Numbers

(With Carrying)

→ Properties of Addition

→ Word Problems on Addition

Hi, I'm EeeBee

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Learning Outcomes
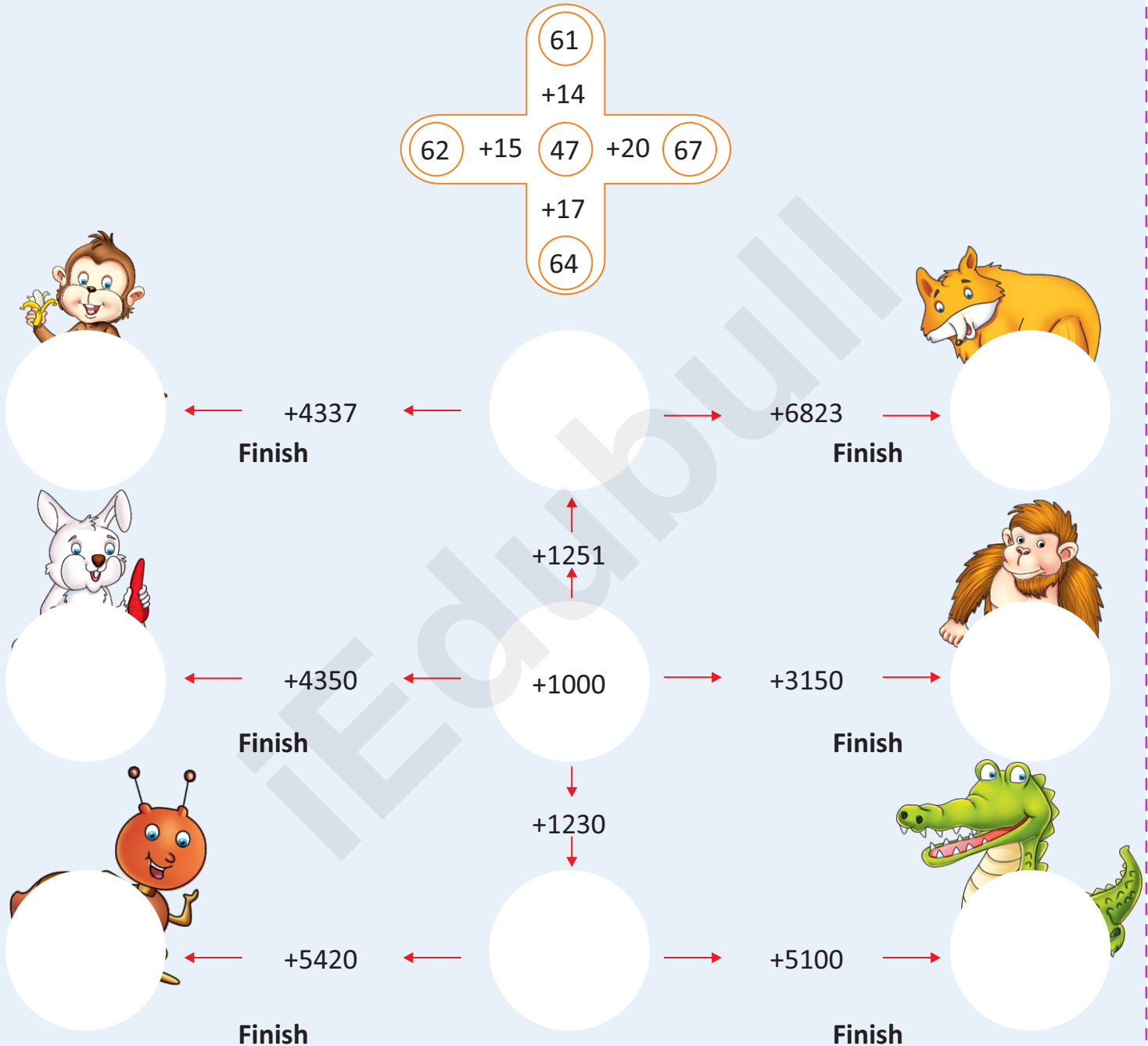
By the end of this chapter, students will be able to:

- Subtract two numbers with and without borrowing (e.g., 562 - 248).
- Understand how to borrow when subtracting numbers (e.g., borrowing from tens or hundreds).
- Subtract 3-digit and 4-digit numbers (e.g., 1,234 - 789).
- Solve word problems involving subtraction of large numbers (e.g., finding the difference in distances).
- Check subtraction answers by adding the result to the subtracted number (inverse operation).
- Subtract numbers by breaking them down into smaller parts (e.g., subtracting tens and ones separately).
- Subtract numbers in real-life situations, such as money, time, or quantities (e.g., subtracting money spent from total amount).

Start at 1000 and move along the paths. Add the numbers. Write the answers.

61
+14
62 +15 47 +20 67
+17
64

+4337 ← +6823
Finish **Finish**

+1251

+4350 +1000 +3150
Finish **Finish**

+1230

+5420 +5100
Finish **Finish**

25

Addition

We already know how to add three or four digits 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**.

We add to find the total value of two or more numbers.

$$4\ 2\ 8\ 7 \longrightarrow \text{The numbers which are}$$
$$+2\ 4\ 1\ 2 \longrightarrow \text{added are called \textbf{addends}.}$$
$$\overline{\quad 6\ 6\ 9\ 9\quad} \longrightarrow \text{The answer that we get on adding two numbers is called the \textbf{sum.}}$$

Addition Facts

1. If zero is added to a number, its value remains the same.

    Examples :   199 + 0 = 199, 0 + 6158 = 6158, 0 + 95238 = 95238

2. Even if we change the order of the numbers to be added, the answer remains the same.

    Examples :   123 + 89 = 212 and 89 + 123 = 212

3. We may group numbers in any order while adding, but the answer remains the same.

    Examples :   75 + 19 + 23 can be written as

(75 + 19) + 23	or	75 + (19 + 23)
= 94 + 23		= 75 + 42
= 117		= 117

4. The numbers being added are called **addends**.
    The result of addition of the addends is called the sum or total.

Subtraction

We subtract to find what is left over, or to find out what is missing.

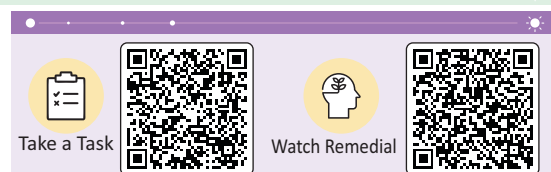| The number which is being subtracted is called the subtrahend.	$9\ 5\ 8$ $-\ 4\ 3\ 3$ $\overline{\quad 5\ 2\ 5\quad}$	The number from another number is subtracted is called the **minuend**.
		The answer that we get on subtracting two numbers is called the **difference**.

Subtraction Facts

1. The value of a number does not change, if zero is subtracted from it.

    Examples: 93 − 0 = 93, 1285 − 0 = 1285, 97284 − 0 = 97284

2.   If a number is subtracted from itself, the difference is always zero.

Examples :   2319—2391 = 0,   98731—98731 = 0,   25008—25008 = 0

Addition Strategies

Let us understand some strategies which will help us doing addition easily.

Strategy 1 : Break Up One Number.

Example 1
36 + 25
= 36 + (20 + 5)
= (36 + 20) + 5
= 56 + 5 = 61

Take a Task

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Strategy 2 : Break Up Two Numbers.

Example 1
56 + 34
= (50 + 6) +(30 + 4)
= (50 + 30) + (6 + 4)
= 80 + 10 = 90

Example 2
725 + 74
= (720 + 5) + (70 + 4)
= (720 + 70) + (5 + 4)
= 790 + 9 = 799

Strategy 3 : Count in 10s.

Example 1
36 + 25
= (36 + 10 + 10 + 5)
= (36 46 56 + 5) = 61

Example 2
154 + 35
= (154 + 10 + 10 + 10 + 5)
= (154→164 174 184 + 5) = 189

Exercise 3.1

Knowledge Application

1.   **Add the following numbers by breaking up one number :**

(a)   53 + 26   (b)   245 + 64   (c)   463 + 38

2.   **Add the following numbers by breaking up both the numbers :**

(a)   139 + 145 = _____   (b)   262 + 48 = _____

(c)   145 + 197 = _____   (d)   256 + 53 = _____

3.   **Add the following numbers by counting in 10s :**

(a)   129 + 46 = _____   (b)   245 + 37 = _____   (c)   328 + 61 = _____

4.   **Add by any suitable rearrangement.**

(a)   65 + 23 = _____   (b)   71 + 45 = _____   (c)   66 + 20 + 25 = _____

(d)   30 + 25 + 45 = _____   (e)   37 + 81 + 20 = _____   (f)   18 + 32 = _____

5. **Try to solve the following sums mentally :**

(a) _____ + 999 = 1,000

(b) The successor of 461 is _____.

(c) 289 + 635 = 635 + _____

(d) (64 + 12) + 35 = (35 + _____) + 64

(e) 619 + (273 + 138) = (619 + 273) + _____

Addition

Example 1: Add 32573, 24115 and 41211.

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

	TTh	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 2 : Add 1567 and 2854 with regrouping.

Solution :

Step 1 : Arrange the numbers in place value columns.

	Th	H	T	O
	1	5	6	7
+	2	8	5	4

Step 2 : Add the ones.

	Th	H	T	O
				①
	1	5	6	7
+	2	8	5	4
				1

7 + 4 = 11 ones

= 1 ten + 1 one

Write 1 in ones place and carry over 1 ten to the tens columns.

Step 3 : Add the tens.

Th	H	T	O
	①	①	
1	5	6	7
+ 2	8	5	4
		2	1

1 + 6 + 5 = 12 tens
= 1 hundred + 2 tens
Write 2 in tens place and
carry over 1 hundred to the
hundreds column.

Step 4 : Add the hundreds.

Th	H	T	O
①	①	①	
1	5	6	7
+ 2	8	5	4
	4	2	1

1 + 5 + 8 = 14 hundreds
= 1 thousand + 4 hundreds
Write 4 in hundreds place and
carry over 1 thousand to the
thousands column.

Step 5 : Add the thousands.

Th	H	T	O
①	①	①	
1	5	6	7
+ 2	8	5	4
4	4	2	1

1 + 1 + 2 = 4 thousands.
Write 4 in thousands place.

Example 3 : Add 296, 754 and 832.

Solution :

Step 1 : Add the ones

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

Step 2 : Add the tens

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

Step 3 : Add the hundreds

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

Example 4 : Find the sum of 246259 and 357252.

Solution :

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

STEPS

1. Addition of ones : 9 + 2 = 11 ones = $\boxed{1}$ ten + 1 one (Write 1 in ones column)

2. Addition of tens : 5 + 5 + $\boxed{1}$ = 11 tens = $\boxed{1}$ hundred + 1 ten (Write 1 in tens column)

3. Addition of hundreds : 2 + 2 + $\boxed{1}$ = 5 hundreds (Write 5 in hundreds column)

4. Addition of thousands : 6 + 7 = 13 thousands = $\boxed{1}$ ten-thousands + 3 thousands

   (Write 3 in thousands column)

5. Addition of ten-thousands : 4 + 5 + $\boxed{1}$ = 10 ten-thousands = $\boxed{1}$ lakh + 0 ten-thousands

   (Write 0 in ten-thousands column)

6. Addition of lakhs : 2 + 3 + $\boxed{1}$ = 6 lakhs (Write 6 in lakhs column)

Hence, the sum of 246259 and 357252 is **603511**.

Example 5 : Add 2456 and 7341

Solution :

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

Step 1 : Arrange the numbers in Place value columns.

Step 2 : Add the ones.

6 + 1 = 7

Write 7 in ones column.

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

Step 3 : Add the tens.

5 + 4 = 9

Write 9 in tens column.

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

Step 4 : Add the hundreds.

4 + 3 = 7

Write 7 in hundreds column.

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

Step 5 : Add the thousands.

2 + 7 = 9

Write 9 in thousands column.

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

Example 6 : Add 3649 and 4573.

Solution :

Step 1 : Arrange the numbers in place value columns.

	Th	H	T	O
	3	6	4	9
+	4	5	7	3

Step 2: Add the ones.

9 + 3 = 12 ones

= 1 ten + 2 ones [Regrouping 12 ones]

Write 2 ones in the ones column
and carry over 1 ten to the tens column.

Th	H	T	O
			①
3	6	4	9
+ 4	5	7	3
			2

Step 3: Add the tens.

1 + 4 + 7 = 12 tens

= 1 hundred + 2 tens [Regrouping 12 tens]

Write 2 tens in the tens column and carry over
1 hundred to the hundred column.

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

Step 4: Add the hundreds.

1 + 6 + 5 = 12 hundreds

= 1 thousand + 2 hundreds

Write 2 hundreds in the hundreds column and carry
over 1 thousand to the thousands column.

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

Step 5: Add the thousands.

1 + 3 + 4 = 8 thousands

Write 8 thousands in the thousands column.

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

Exercise 3.2

Knowledge Application

1. Add the following :

(a)

TTh	Th	H	T	O
	6	3	2	5	3
+		1	2	1	2
+	1	3	2	1	2

(b)

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

(c)

TTh	Th	H	T	O
	1	3	1	0	4
+	1	3	2	5	0
+	2	1	6	3	1

(d)

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

2. Add the following :

(a)

Th	H	T	O
7	9	4	4
+ 1	2	9	3

(b)

Th	H	T	O
1	9	0	9
+ 4	6	2	2

(c)

Th	H	T	O
2	5	9	6
+ 5	7	5	3

(d)

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

(e)

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

(f)

Th	H	T	O
1	1	9	4
4	5	3	8
+ 3	5	4	8

3. Match the columns :

Column A	Column B
(a) 23518 + 4576 + 3387 =	(i) 109162
(b) 12675 + 79753 + 22675 =	(ii) 103213
(c) 12753 + 22932 + 67528 =	(iii) 96686
(d) 62872 + 33945 + 12345 =	(iv) 31481
(e) 47921 + 25834 + 22931 =	(v) 115103

Problems on Addition

Example 7: The cost of a car is ₹182572, the cost of a scooter is ₹21575 and the cost of a bicycle is ₹2560. Find their total cost.
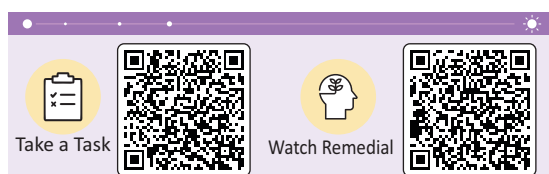
Solution :

The cost of a car = ₹182572
The cost of a scooter = ₹21575
The cost of a bicycle = ₹2560
The total cost = ₹182572 + ₹21575 + ₹2560

Take a Task   Watch Remedial

Working
```
    1 8 2 5 7 2
+     2 1 5 7 5
+       2 5 6 0
    2 0 6 7 0 7
```

$$= ₹206707$$

Thus, the total cost of these vehicles is ₹206707.

Example 8: The cost of a flat is ₹20575 more than a car. If the cost of the car is ₹220575, find the total cost of the flat and the car.

Solution :

The cost of the car = ₹220575

The cost of the flat = ₹220575 + ₹20575

{because the cost of the flat is ₹20575 more than the car }

The cost of the flat = ₹241150

The cost of the car = ₹220575

Their total cost = ₹241150 + ₹220575

= ₹461725

∴ The total cost of the car and the flat is ₹461725.

Working
₹ 2 2 0 5 7 5
+ ₹   2 0 5 7 5
₹ 2 4 1 1 5 0

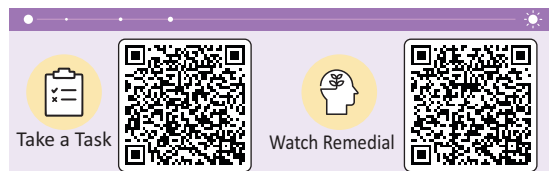| Working |
| --- |
| 2 4 1 1 5 0 |
| + 2 2 0 5 7 5 |
| 4 6 1 7 2 5 |

Exercise 3.3

Problem Solving

1. In a school library, there are 32592 English books, 48544 Hindi books and 25928 books of other languages. How many total books are there in the library?

2. There are 392589 men, 229426 women, and 312151 children in a city. Find the population of that city.

3. A man purchased a house for ₹624598. He sold it for ₹100000 more than what he had paid. At what price he sold the house ?

4. A company made 42912 trucks and 78153 scooters in one year. How many number of vehicles were made altogether in that year ?

5. A company purchased a car for ₹230590 and a van for ₹210580. How much money did the company spend on these vehicles ?

6. A factory produced 25674 toys in January, 57892 toys in February and 22578 toys in March. How many toys did it produce in three months ?

7. In a godown, there are 27358 bags of rice, 12835 bags of wheat and 5269 bags of sugar. Find the total number of bags in that godown.

Subtraction Strategies

Numbers can be subtracted very quickly and easily. You need to know different strategies. Try the following 3 strategies :

Strategy 1: Decompose or Breakdown Numbers.

$98 - 15$	$64 - 26$	$88 - 57$
$= 98 - (10 + 5)$	$= 64 - (20 + 6)$	$= 88 - (50 + 7)$
$= (98 - 10) - 5$	$= (64 - 20) - 6$	$= (88 - 50) - 7$
$= 88 - 5 = 83$	$= 44 - 6 = 38$	$= 38 - 7 = 31$

Strategy 2 : Make a 10s number by adjusting both numbers.

$87 - 19$	$92 - 31$	$81 - 27$
$= (87 + 1) - (19 + 1)$	$= (92 - 1) - (31 - 1)$	$= (81 + 3) - (27 + 3)$
$= 88 - 20 = 68$	$= 91 - 30 = 61$	$= 84 - 30 = 54$

Strategy 3: Count Up !

$54 - 36$	$185 - 93$	$400 - 187$
From 36, count to 54	From 93, count to 185	From 187, count to 400
$36 \rightarrow 40 \, (4)$	$93 \rightarrow 100 \, (7)$	$187 \rightarrow 200 \, (13)$
$40 \rightarrow 50 \, (10)$	$100 \rightarrow 185 \, (85)$	$200 \rightarrow 400 \, (200)$
$50 \rightarrow 54 \, (4)$	$7 + 85 = 92$	$13 + 200 = 213$
$4 + 10 + 4 = 18$		

Subtraction of 4-digit Numbers

Without Regrouping

Example : Subtract 2614 from 9758

Step 1 : Arrange the numbers in place value columns.

Th	H	T	O
9	7	5	8
− 2	6	1	4

Step 2 : Subtract the tens.

$8 - 4 = 4$

Write 4 in the ones column.

Th	H	T	O
9	7	5	8
− 2	6	1	4
			4

Step 3 : Subtract the tens.

5 − 1 = 4

Write 4 in the tens column.

Th	H	T	O
9	7	5	8
− 2	6	1	4
		4	4

Step 4 : Subtract the hundreds.

7 − 6 = 1

Write 1 in the hundreds column.

Th	H	T	O
9	7	5	8
− 2	6	1	4
	1	4	4

Step 5: Subtract the thousands.

9 − 2 = 7

Write 7 in the thousands column.

Thus, 9758 - 2614 = 7144.

Th	H	T	O
9	7	5	8
− 2	6	1	4
7	1	4	4

Exercise 3.4

1.   Subtract by decomposing numbers.

(a) 73 − 38   = _____   (b) 76 − 12   = _____   (c) 97 − 64   = _____

2.   Subtract by making a 10s number by adjusting both numbers.

(a) 87 − 19   = _____   (b) 88 − 39   = _____   (c) 288 − 42   = _____

3.   Subtract by counting up.

(a) 70 − 28   = _____   (b) 225 − 96   = _____   (c) 845 − 585 = _____

4.   Subtract by any suitable adjustment.

(a) 97 − 25   = _____   (b) 38 − 24   = _____   (c) 125 − 35   = _____

(d) 293 − 46 = _____   (e) 108 − 96   = _____   (f) 84 − 33   = _____

(g) 72 − 42   = _____   (h) 286 − 123 = _____   (i) 342 − 161 = _____

5.   Subtract the following :

(a)

Th	H	T	O
8	2	1	7
− 2	1	0	4

(b)

Th	H	T	O
2	5	1	4
− 1	3	1	1

(c)

Th	H	T	O
6	2	1	5
− 5	2	0	3

(d)	Th	H	T	O
	8	9	5	5
−	4	8	3	1

(e)	Th	H	T	O
	8	2	9	6
−	5	1	9	4

(f)	Th	H	T	O
	7	8	3	8
−	3	8	2	5

6. Subtract the following :

(a)	Th	H	T	O
	9	5	4	2
−	4	8	7	9

(b)	Th	H	T	O
	8	1	0	6
−	5	6	7	8

(c)	Th	H	T	O
	6	2	4	3
−	2	8	9	8

(d)	Th	H	T	O
	7	3	2	5
−	3	5	9	9

(e)	Th	H	T	O
	7	4	1	1
−	2	5	6	8

(f)	Th	H	T	O
	5	0	8	3
−	2	4	9	8

Mental Math

Try to solve the following sums mentally :

(a) The difference of the smallest 4-digit number and the largest 3-digit number is _____

(b) $1,000 - 1 =$ _____

(c) 1 thousand − 10 hundreds = _____

(d) We subtract _____ from 5000 to get 2545

(e) $96583 -$ _____ $= 59396$

(f) _____ $- 0 = 79783$

Subtraction with Regrouping

Example : Subtract 3698 from 9542.

Step 1 : Arrange the numbers in place value columns.

Step 2 : Subtract the ones.

8 cannot be subtracted from 2 as 2 is less than 8. So, borrow 1 ten from the tens column and regroup the ones column.

Take a Task

Watch Remedial

	Th	H	T	O
	9	5	4	2
−	3	6	9	8

1 ten + 2 ones = 10 ones + 2 ones

= 12 ones

12 ones − 8 ones = 4 ones

Step 3: Subtract the tens.

3 is less than 9, so borrow 1 hundred from the hundreds column and regroup the tens column.

1 hundred + 3 tens = 10 tens + 3 tens

= 13 tens

13 tens − 9 tens = 4 tens

Step 4 : Subtract the hundreds.

4 is less than 6, so borrow 1 thousand from the thousands column and regroup the hundreds column.

1 thousand + 4 hundreds = 10 hundreds + 4 hundreds

= 14 hundreds

14 hundreds − 6 hundreds = 8 hundreds

Step 5 : Subtract the thousands.

8 thousands − 3 thousands

= 5 thousands

Thus, 9542 − 3698 = 5844.

Th	H	T	O
		③	⑫
9	5	4̸	2̸
− 3	6	9	8
			4

Th	H	T	O
		④	⑬ ⑫
9	5̸	4̸	2̸
− 3	6	9	8
		4	4

Th	H	T	O
⑧	⑭	⑬	⑫
9̸	5̸	4̸	2̸
− 3	6	9	8
	8	4	4

Th	H	T	O
⑧	⑭	⑬	⑫
9̸	5̸	4̸	2̸
− 3	6	9	8
5	8	4	4

Finding the Missing Addend

To find the missing addend in an addition sum, the given addend is subtracted from the sum.
If there are more than two addends, the sum of the given addends is subtracted from the sum.

Example 1: 25 + [?] = 49

Solution : 49 − 25 = [24]

Example 2: 36 + 19 + [?] = 118

Solution : 118 − (36 + 19) = [?]

118 − 55 = [63]

Example 3 : The sum of two numbers is 2530. If one of the numbers is 1936, find the other.

Solution:

Addend one   1 9 3 6

Addend two   – – – –

Sum   [2 5 3 0]

Take a Task

Watch Remedial
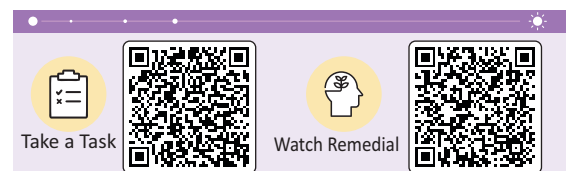
To find the missing addend :

Sum	2	5	3	0
Addend one −	1	9	3	6
Addend two	0	5	9	4

Check your answer as follows :

Addend one		1	9	3	6
Addend two	+		5	9	4
Sum		2	5	3	0

Exercise 3.5

1.   Find the missing addend in each case and check your answer.

(a)   When 3215 was added to a certain number, the sum was 5361. Find the number.

(b)   If the sum of two numbers is 9450 and one number is 4590, find the other.

(c)   If the sum of two numbers is 8295 and one number is 4583, find the other.

(d)   If the sum of two numbers is 7853 and one number is 3420, find the other.

2.   Find the missing minuend or subtrahend in each case and check your answer.

(a)   Find the number from which 4321 must be subtracted to get 1321.

(b)   Find the number which when subtracted from 6384 gives 2891.

(c)   Find the minuend which gives a difference of 4631 when the subtrahend is 1694.

(d)   Find the number from which when 4369 is subtracted gives 2946.

(e)   Find the minuend which gives a difference of 7653 when the subtrahend is 2576.

3.   Match the columns :

	Column A		Column B
(a)	67584 − 9895 =	(I)	55290
(b)	75283 − 29967 =	(ii)	15316
(c)	65285 − 49967 =	(iii)	23550
(d)	76308 − 52758 =	(iv)	45316
(e)	65289 − 9999 =	(v)	57689

Finding the Missing Minuend or Subtrahend

Finding the Missing Minuend

Example 1 : $? - 20 = 80$

To find a missing minuend, the difference is added to the subtrahend, that is,

Difference + Subtrahend = Minuend

$\boxed{?}$	80	Difference
-20 →	$+20$	Subtrahend
80	100	Minuend

REMEMBER

To find the missing minuend, the difference is added to the subtrahend.

Example 2: Find the number from which 1635 must be subtracted to give 1326.

Check your result

Th	H	T	O	
				Minuend
− 1	6	3	5	Subtrahend
1	3	2	6	Difference

Th	H	T	O	
1	3	2	6	Difference
+ 1	6	3	5	Subtrahend
2	9	6	1	Minuend

Th	H	T	O	
2	9	⁵6̸	¹¹1̸	
− 1	6	3	5	
1	3	2	6	

Finding the Missing Subtrahend

Example 1: $90 - ? = 50$

To find the missing subtrahend, the difference is subtracted from the minuend.

Minuend − Difference = Subtrahend.

|		
90	90	Minuend
$-\boxed{?}$ →	-50	Difference
50	40	Subtrahend

REMEMBER

To find the missing subtrahend, subtract the difference from the minuend.

Example 2: Find the number which must be subtracted from 3567 to give a difference of 1234.

Cheek your result

Th	H	T	O	
3	5	6	7	Minuend
−				Subtrahend
1	2	3	4	Difference

Th	H	T	O	
3	5	6	7	Minuend
− 1	2	3	4	Difference
2	3	3	3	Subtrahend

Th	H	T	O	
3	5	6	7	
− 2	3	3	3	
1	2	3	4	

Take a Task

Watch Remedial
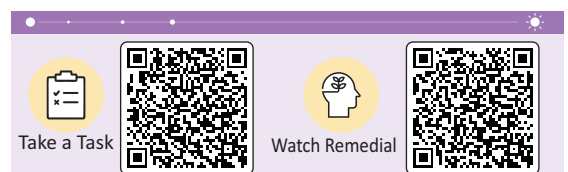
Problems on Subtraction

Example : The sum of two numbers is 245892. If one of them is 183681. Find the other number.

Solution :

Sum of two numbers	= 245892
One number	= 183681
Other number	= 245892 − 183681
	= 62211

Hence, the other number is 62211.

Working

```
   1  14
   2  4  5  8  9  2
−  1  8  3  6  8  1
   0  6  2  2  1  1
```

Example : There are 90981 bags of wheat in a godown. If 24579 bags are taken out, how many bags of wheat remain in the godown ?

Solution :

Total bags in godown	= 90981
Bags taken out	= 24579
Bags remain in godown	= 90981 − 24579
	= 66402

Hence, 66402 bags of wheat are remaining.

Working

```
   8  10     7  11
   9  0  9  8  1
−  2  4  5  7  9
   6  6  4  0  2
```

Take a Task   Watch Remedial

---

Exercise 3.6

Problem Solving

1. What must be added to 257125 to get 400000?

2. Subtract the sum of 40256 and 21512 from 211542.

3. Two candidates contested for election. 567719 votes were polled in all.

   If one of them got 325247 votes, find the number of votes polled in favour of the second candidate.

4. A shopkeeper had 245325 kg of sugar. He sold out 84526 kg and 85943 kg sugar in two days. How much sugar was left in the stock after the sales in the two days?

5. Subtract the sum of 89251 and 24589 from 150000.

6. What must be added in 24589 to get 55555?

7. The population of a town is 75492. If 40548 are males, find the no. of females in that town.

8. The population of a town is 95698. There are 32840 men and 30580 women. The remaining are children. How many children are there in the town?

Word Problems on Mixed Operation
(Addition and Subtraction)
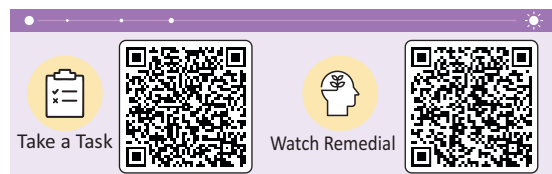
Example :   Price of a car in the year 2008 was ₹459645.
Its price in the year 2009 was increased by ₹64795. But, its price in the year 2010 was reduced by ₹45608. Find price of the car in the year 2010.

Solution :

Price of the car in the year 2008

$$= ₹459645$$

Price of the car in the year 2009

$$= ₹459645 + ₹64795$$

Now, price of the car in the year 2010

$$= ₹524440 - ₹45608$$

$$= ₹478832$$

Hence, price of the car in the year 2010 is ₹478832 .

Working

	1	1	1	1	1	
	4	5	9	6	4	5
+		6	4	7	9	5
	5	2	4	4	4	0

Working

	4	11	13	14	3	10
	5	2	4	4	4	0
−			4	5	6	0	8
	4	7	8	8	3	2

Example :   Rahul had ₹2565 with him. He purchased a furniture for ₹1675 and spent ₹250 on the transportation. How much money is still left with him?

Solution:

Amount spent on furniture	₹ 1675
Amount spent on transportation	+ 250
Total amount spent	₹ 1925
Total money with Rahul	2 5 6 5
Total amount spent	− 1 9 2 5
Money left with Rahul	₹6 4 0

Example :   In a school, 2500 students travel by school bus, 1200 come by their own transport and the rest by public transport. If there are 4200 students in the school, find how many students come by public transport.

Solution:

By school bus	2500 students		School has	4200 students
By own transport	+ 1200 students			− 3700 students
Total	3700 students			500 students

come by public transport

Exercise 3.7

Problem Solving

1.   In a school, there were 1,356 students in the junior block, 2,457 in the middle block and 3,250 in the senior block. How many students were there in all ?

2.   The cost of a sofa set was ₹6,569. The cost of a table was ₹2,092. How much did they cost altogether?

3. The cost of three computer parts was ₹4, 090, ₹736 and ₹5, 048. How much did they cost altogether?

4. A man bought one painting for ₹3,758 and another for ₹4,118. How much more did he pay for the second painting?

5. A chair costs ₹3, 228 and a fridge costs ₹3,667. By how much amount was the fridge more costly ?

6. A lady bought a silver bangle worth ₹3, 480, a chain worth ₹4, 037 and a ring for ₹2, 592. How much did she spend altogether?

7. A shirt costs ₹1, 050 and a jacket costs ₹2, 584. What is the difference between their costs ?

8. Mr. Agrawal had ₹5,700 with him. He spent ₹3, 500 on clothes and ₹2, 000 on food. How much money is left with him ?

Think Tank

Gap Analyzer™

1. **Tick (✓) the correct answer.**

   (a) When 0 is added to a number, the sum is

   (i) 0   (ii) 1

   (iii) The number itself   (iv) 100

   (b) Which of the following is the result when a number is subtracted from 0?

   (i) 0   (ii) 1

   (iii) The number itself   (iv) Cannot say

   (c) 8258 + 9652 + 1108 = _____.

   (i) 20018   (ii) 18018   (iii) 19018   (iv) 17018

   (d) 96352 − 83999 = _____.

   (i) 12353   (ii) 12335   (iii) 12333   (iv) 13335

   (e) 310 + 981 + 309 = 981 + 309 + _____.

   (i) 310   (ii) 918   (iii) 309   (iv) none

   (f) The successor of 3899 is _____.

   (i) 3898   (ii) 3899   (iii) 3900   (iv) 3999

2. **Find the difference between :**

   (a) 68764 and 13254   (b) 995943 and 472323   (c) 98548 and 43225

   (d) 792593 and 52462   (e) 85685 and 33423   (f) 859723 and 645612

3. **Fill in the blanks:**

   (a) The result which we get offer subtraction is called _____.

   (b) _____ added to any number gives number itself.

   (c) If we subtract a number from its _____ , we get 1 as the answer.

   (d) Smallest 6 digit number – 1 = _____ .

   (e) 989891 + _____ = 989898.

4. In an election, four candidates got 125798, 75748, 112345 and 27589 votes respectively. Find the total number of votes polled for the four candidates.

5. Three ropes are 25928 metres, 32596 metres and 40008 metres in length respectively. What is the total length of these ropes ?

6. **Fill in the blanks by inserting correct digits:**

```
  2 1 □ 5 □ 3
    9 5 6 8 □
  □ 8 0 3 7 6
+     6 □ 5 6
  ───────────
  5 9 5 3 2 2
```
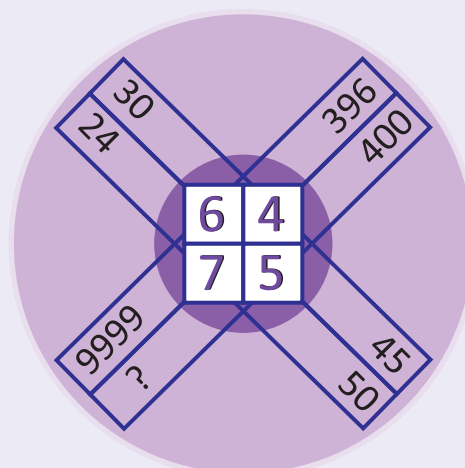
7. In an examination, 85928 candidates passed while 55890 candidates declared failed. How many total number of candidates were appeared in the examination ?

Puzzle

Critical Thinking

Find the missing term in the following:

30 24   396 400

6 4
7 5

9999 ?   45 50

Mental Math

1. Find the four odd numbers to make total 20. You can use a number more than once.
   _____ + _____ + _____ + _____ = 20

2. Replace the ∗ by the correct digit in each of the following:

   (a)
   ```
     7 2 ∗ 8
   − 4 ∗ 6 3
   ─────────
     2 6 4 5
   ```

   (b)
   ```
     2 7 4 ∗ ∗
   −   4 9 4 5
   ───────────
     2 2 ∗ 7 5
   ```

HOTS

1. An Indian Airlines Aeroplane flew 76, 523 km in one week, 67,717 km in the second week and 7,739 km in the third week. Find the distance covered by the plane in these 3 weeks. _____

2. I borrowed ₹3 lakh from a friend. I paid him ₹66,678 in the first instalment and ₹70,871 in the second instalment. How much more do I owe him now?

   _____