**Class - IV**

**Subject - Mathematics**

**Note-** Complete your work in fair copy, and do practice of remaining questions by your own in rough copy.

## Chapter – 3

## Addition and Subtraction

**Important points :**

- The numbers to be added are called addends.
- The answer in addition is called the sum.
- The number to be subtracted is called the subtrahend.
- The number from which another number is subtracted is called minuend.
- The answer in subtraction is called the difference.

**Ex.**

| | |
|---|---|
| 5 3 7 4 – addend | 6 8 7 4 - minuend |
| + 4 4 1 5 – addend | -2 4 5 3 - subtrahend |
| 9 7 8 9 – sum | 4 4 2 1 – difference |

**Properties od addition:**

- When we add zero to a number , the sum is the number itself.
  Ex. 7254 + 0 = 7254
- When 1 is added to a number , the sum is the successor of the number.
  Ex. 3270 + 1 = 3271
- A change in the order of the addends does not change the sum of the two numbers.
  Ex. 42310 + 23410 = 65720
  23410 + 42310 = 65720
- A change in the grouping of the addends does not change the sum of the three numbers.

Ex. ( 12345 + 54321 ) +11111 = 12345 + (54321 + 11111)

**Properties of subtraction:**

- When zero is subtracted from a number, the difference is the number itself .
  Ex. 23459 – 0 = 23459
- When 1 is subtracted from a number , the difference is the predecessor of the number.
  Ex. 38478 – 1 = 38477
- When a number is subtracted from itself , the difference is zero.

  Ex. 78172 – 78172 = 0

## Exercise – 1

**Q.1 Add the following**

**(a) Th H T O**

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

**(b) Th H T O**

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

**(c) Th H T O**

5 9 9 5
+2 5 3 8

( Practice ( c) )

**Q.2 Find the sum of;**

**(a) 4,292 and 3,105**

**Sol. Th H T O**

4 2 9 2
+3 1 0 5
7 3 9 7

**(b) 6,205 and 2,304**

**Sol. Th H T O**

6 2 0 5
+ 2 3 0 4
8 5 0 9

**( c) 4,114 and 3,763**

**Sol.** **Th H T O**

4 1 1 4

+3 7 6 3

7 8 7 7

**(d) 8,653 and 1,059**

**Sol. Th H T O**

8 6 5 3

**+** 1 0 5 9

9 7 1 2

**( e) 4,198 and 2,275**

**Sol.** Practice

**( f) 5,224 and 3,275**

**Sol.** Practice

## Exercise – 2

**Q.1 Find the sum of ;**

**(a) 23,312 and 35,233**

**Sol.** **TTh Th H T O**

2 3 3 1 2

+3 5 2 3 3

5 8 5 4 5

**(b) 40,718 and 57, 161**

**Sol.** **TTh Th H T O**

4 0 7 1 8

**+** 5 7 1 6 1

9 7 8 7 9

**( c) 72, 354 and 13,215**

**Sol.** **TTh Th H T O**

7 2 3 5 4

**+** 1 3 2 1 5

8 5 5 6 9

**(d) 52,735 and 35,025**

**Sol. TTh Th H T O**

5 2 7 3 5

+3 5 0 2 5

8 7 7 6 0

**(e ) 15,427 and 67, 553**

**Sol .** Practice

**( f) 49,999 and 26,745**

**Sol.** Practice

**Q. 2 Add the following**

**(a)**

| TTh | Th | H | T | O |
|---|---|---|---|---|
| 3 | 3 | 0 | 2 | 1 |
| + 2 | 3 | 5 | 6 | 8 |
| 5 | 6 | 5 | 8 | 9 |

**(b)**

| TTh | Th | H | T | O |
|---|---|---|---|---|
| 3 | 8 | 4 | 2 | 7 |
| + 4 | 2 | 8 | 1 | 2 |
| 8 | 1 | 2 | 3 | 9 |

**(c)**

| TTh | Th | H | T | O |
|---|---|---|---|---|
| 5 | 2 | 7 | 6 | 8 |
| + 1 | 6 | 7 | 2 | 0 |

( Practice (c) )

**Exercise – 3**

**Q.1 Add the following**

**(a)**

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

**(b)**

| L | TTh | Th | H | T | O |
|---|---|---|---|---|---|
| 5 | 3 | 1 | 7 | 8 | 6 |
| + 1 | 7 | 3 | 4 | 3 | 8 |

( Practice (b) )

**Q.2 Find the sum of ;**

**(a) 1,54,023 and 4,21,746**

**Sol.**

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

**(b) 2,40,125 and 3,47,521**

**Sol.**

| L | TTh | Th | H | T | O |
|---|---|---|---|---|---|
| 2 | 4 | 0 | 1 | 2 | 5 |
| + 3 | 4 | 7 | 5 | 2 | 1 |
| 5 | 8 | 7 | 6 | 4 | 6 |

**(c) 5,27,123 and 3,17,298**

**Sol.** Practice

**(d) 4,97,513 and 3,48,789**

**Sol.** Practice

## Exercise – 4

**Q. 1 Fill in the blanks**

(1) 4634 + _____ = 4634

(2) 21346 + 1 = _____

(3) 34567 + _____ = 34568

(4) 14357 + 19235 = 19235 + _____

(5) 82547 + ( 35458 + 10000) = ( 82547 + _____ ) + 10000

(6) (112000 + 135400) + 234567 = 112000 + (135400 + _____)

**Note:** Write the answer by using property of addition

## Exercise – 5

**(1) The cost of motorcycle is ₹ 42,850 and the cost of a scooter is ₹ 28,350. What is the total cost of both the vehicles?**

**Sol.** The cost of motorcycle = ₹ 42,850

The cost of scooter = ₹ 28,350

Total cost of both the vehicles = 42,850 + 28,350

$$\begin{array}{r} 42850 \\ +\ 28350 \\ \hline 71200 \end{array}$$

Thus cost of both the vehicles is ₹ 71,200.

**(2) A factory manufactured 72,584 locks in 2013 and 37,846 locks in 2014. How many locks did the factory manufacture in the two years?**

**Sol.** Practice

**(3) During a census, it was found that there were 2,34,786 males and 1,93,877 females in a town. Find the total population of the town.**

**Sol.** No. of males in the town = 2,34,786

No. of females in the town = 1,93,877

Total population of the town = 2,34,786 + 1,93, 877

$$\begin{array}{r} 234786 \\ + \ 193877 \\ \hline 428663 \end{array}$$

Thus total population of a town is 4,28,663.

**(4) A number exceeds 8,76,543 by 12,345. Find the number.**

**Sol.** A number exceeds 8,76,543 by 12,345

So the number = 8,76,543 + 12,345

$$\begin{array}{r} 876543 \\ + \ 12345 \\ \hline 888888 \end{array}$$

Thus the number is 8,88,888.

## Exercise – 6

**Q. 1 Subtract**

| **(a) Th H T O** | **(b) Th H T O** | **(c) Th H T O** |
|---|---|---|
| 8 4 5 6 | 7 9 1 3 | 7 7 7 7 |
| **-** 4 2 3 2 | **-** 4 6 8 1 | **-** 2 9 2 5 |
| 4 2 2 4 | 3 2 3 2 | |

(Practice (c) )

**Q.2 Subtract**

**(a) 5,834 – 2,512**

**Sol.**

| Th | H | T | O |
|---|---|---|---|
| 5 | 8 | 3 | 4 |
| - 2 | 5 | 1 | 2 |
| 3 | 3 | 2 | 2 |

**(b) 9,462 – 7,230**

**Sol.**

| Th | H | T | O |
|---|---|---|---|
| 9 | 4 | 6 | 2 |
| - 7 | 2 | 3 | 0 |
| 2 | 2 | 3 | 2 |

**(c) 3,332 – 2,321**

**Sol.**

| Th | H | T | O |
|---|---|---|---|
| 3 | 3 | 3 | 2 |
| - 2 | 3 | 2 | 1 |
| 1 | 0 | 1 | 1 |

**(e) 2,982 – 1,988**

**Sol.**

| Th | H | T | O |
|---|---|---|---|
| 2 | 9 | 8 | 2 |
| - 1 | 9 | 8 | 8 |
| 0 | 9 | 9 | 4 |

**(d) 4,156 – 2,913**

**Sol.** Practice

**(f) 7,980 – 6,992**

**Sol.** Practice

## Exercise – 7

**Q.1 Subtract**

**(a)**

| TTh | Th | H | T | O |
|---|---|---|---|---|
| 2 | 8 | 4 | 5 | 6 |
| - 1 | 4 | 2 | 3 | 2 |
| 1 | 4 | 2 | 2 | 4 |

**(b)**

| TTh | Th | H | T | O |
|---|---|---|---|---|
| 6 | 0 | 0 | 0 | 0 |
| - 4 | 5 | 4 | 5 | 4 |
| 1 | 4 | 5 | 4 | 6 |

**(c)**

| TTh | Th | H | T | O |
|---|---|---|---|---|
| 7 | 5 | 4 | 6 | 7 |
| - 4 | 1 | 3 | 5 | 8 |

( Practice (c) )

**Q.2 Subtract**

**(a) 51,834 – 20,512**

**(b) 89,462 – 27,230**

**Sol.** TTh Th H T O

5 1 8 3 4

- 2 0 5 1 2

3 1 3 2 2

**Sol.** TTh Th H T O

8 9 4 6 2

- 2 7 2 3 0

6 2 2 3 2

**(e) 78,378 – 36,089**

**Sol.** TTh Th H T O

7 8 3 7 8

- 3 6 0 8 9

4 2 2 8 9

**(f) 24,008 – 21,778**

**Sol.** TTh Th H T O

2 4 0 0 8

- 2 1 7 7 8

0 2 2 3 0

**(c) 33333 - 12321**

**Sol.** Practice

**(d) 93115 – 87767**

**Sol.** Practice

**Q.3 Subtract the greatest 5-digit number from the smallest 6-digit number.**

**Sol**. Greatest 5-digit number = 99,999

Smallest 6-digit number = 1,00,000

Difference = 100000 - 99999

100000

- 99999

000001

Thus the answer is 1

## Exercise – 8

**Q.1 Find the difference between**

**(a) 4,83,695 and 1,51,343**

**Sol.**

| | L | TTh | Th | H | T | O |
|---|---|---|---|---|---|---|
| | 4 | 8 | 3 | 6 | 9 | 5 |
| - | 1 | 5 | 1 | 3 | 4 | 3 |
| | 3 | 3 | 2 | 3 | 5 | 2 |

**(c) 7,14,345 and 5,37,705**

**Sol.**

| | L | TTh | Th | H | T | O |
|---|---|---|---|---|---|---|
| | 7 | 1 | 4 | 3 | 4 | 5 |
| - | 5 | 3 | 7 | 7 | 0 | 5 |
| | 1 | 7 | 6 | 6 | 4 | o |

**(b) 6,31,296 and 4,61,053**

**Sol.** Practice

**(d) 6,67,800 and 3,45,925**

**Sol.** Practice

**Q.2 Subtract**

**(a)**

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

**(b)**

| L | TTh | Th | H | T | O |
|---|---|---|---|---|---|
| 5 | 3 | 2 | 6 | 4 | 0 |
| - 2 | 7 | 5 | 3 | 2 | 4 |
| 2 | 5 | 7 | 3 | 1 | 6 |

**(c)**

| L | TTh | Th | H | T | O |
|---|---|---|---|---|---|
| 6 | 4 | 3 | 6 | 7 | 2 |
| - 3 | 1 | 9 | 5 | 1 | 7 |

(Practice (c) )

**Q.3 Fill in the blanks with correct digit**

**(a)**

| | | | | | | |
|---|---|---|---|---|---|---|
| | 7 | 6 | **3** | 1 | **4** | 5 |
| - | **4** | 2 | 1 | **3** | 0 | 8 |
| | 3 | **4** | 1 | 8 | 3 | **7** |

**(b)**

| | | | | | | |
|---|---|---|---|---|---|---|
| | 8 | _ | 6 | 7 | _ | 4 |
| - | 2 | 5 | _ | 5 | 4 | 2 |
| | _ | 4 | 3 | _ | 3 | _ |

( Practice (b) )

## Exercise - 9

**Q.1 Solve the following**

**(a)** **5 4 3 2**

**+ 6 3 1 4**

**1 1 7 4 6**

Check :

| | | | | | |
|---|---|---|---|---|---|
| | 1 | 1 | 7 | 4 | 6 |
| - | | 5 | 4 | 3 | 2 |
| | | 6 | 3 | 1 | 4 |

| | | | | | |
|---|---|---|---|---|---|
| | 1 | 1 | 7 | 4 | 6 |
| - | | 6 | 3 | 1 | 4 |
| | | 5 | 4 | 3 | 2 |

**(b)** **8 9 6 4 3**

**+ 5 4 3 9 2**

**1 4 4 0 3 5**

Check :

| | | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 4 | 4 | 0 | 3 | 5 |
| - | | 8 | 9 | 6 | 4 | 3 |
| | | 5 | 4 | 3 | 9 | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 4 | 4 | 0 | 3 | 5 |
| - | | 5 | 4 | 3 | 9 | 2 |
| | | 8 | 9 | 6 | 4 | 3 |

**(c)** **6 7 4 3 1**

**+5 9 9 8 1**

(Practice (c) )

## Exercise – 10

**Q.1 Fill in the blanks**

**(a)** 28,172 – 0 = _____

**(b)** 72,999 – 1 = _____

**(c)** 98,233 - _____ = 98,232

**(d)** 1,14,234 - _____ = 1,14,234

**(e)** 47,235 – 47,235 = _____

**(f)** 72,998 - _____ = 0

**Note :** Write answer by using property of subtraction

## Exercise – 11

**(1) The sum of two numbers is 57,295. If one number is 25,487. Find the other number.**

**Sol.** Sum of two numbers = 57,295

One number = 25,487

Other number = 57,295 – 25,487

57295

**-** 25487

31808

Thus the other number is 31,808.

**(2) The population of a town is 4,75,173 . If the number of males is 2,58,745. Find the number of females in the town.**

**Sol.** The population of a town = 4,75,173

No. of males = 2,58,745

No. of females = 4,75,173 – 2,58,745

475173

**-** 258745

216428

Thus 2,16,428 females in the town

**(3) What must be added to 43,172 to get 82,054?**

**Sol.**

$$\begin{array}{r} 82054 \\ - \underline{43172} \\ 38882 \end{array}$$

Thus 38,882 should be added.

**(4) Mrs. Khanna has ₹ 8,28,050 in her bank account . She used ₹ 4,57,375 to buy a new car. How much money is left with her?**

**Sol.** Practice

**(5) 1,45,280 students appeared in an examination. 1,28,425 students passed the examination . How many students failed?**

**Sol.** Practice

**(6) Raja bought a television set for ₹ 38,450. He gave ₹ 40,000 to the shopkeeper. How much money will he get back?**

**Sol.** Cost of television = ₹ 38,450

Raja gave to the shopkeeper = ₹ 40,000

Money he will get back = 40,000 – 38,450

$$\begin{array}{r} 40000 \\ - \underline{38450} \\ 01550 \end{array}$$

Thus he will get back ₹ 1550.

**(7) A dictionary has 88,728 words. Mohan has read 37,487 words out of these. How many words are left to read?**

**Sol.** A dictionary has words = 88,728

Mohan has read = 37,487

Words are left to be read = 88,728 – 37,487

$$\begin{array}{r} 88728 \\ -\ 37487 \\ \hline 51241 \end{array}$$

Thus 51,241 words are left to be read.