

# Chapter- 6

## Addition

### STUDY NOTES

**LEARNING OBJECTIVE:** Learners will be able to get a piece of knowledge about adding by counting forward, adding on a number line, Addition of a 1-digit and a 2-digit number (without carrying over), Addition of 2-digit numbers (without carrying over), Addition of Three, 2-digit numbers (without carrying over), Addition of a 1-digit number and a 2-digit number (with carryover), Addition of Two 2-digit numbers (with carryover), Addition of Two 3-digit numbers, Word problems.

**Add by counting forward:** To add we have to count forward.

**Example 1:**

**Addition, using forward counting**

Let us add 4 and 2.

$4 + 2 = ?$

Observe an ant at step 4.  
It moves 2 steps forward.  
It moves from step 4 to step 5,  
then it moves to step 6.

That is,

**Example 2:**

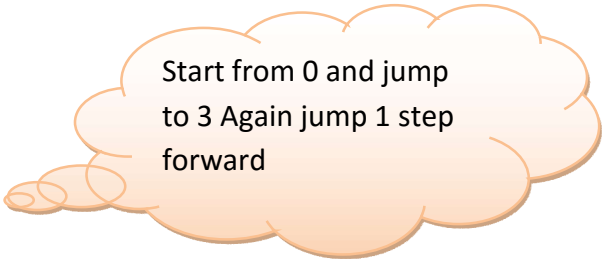
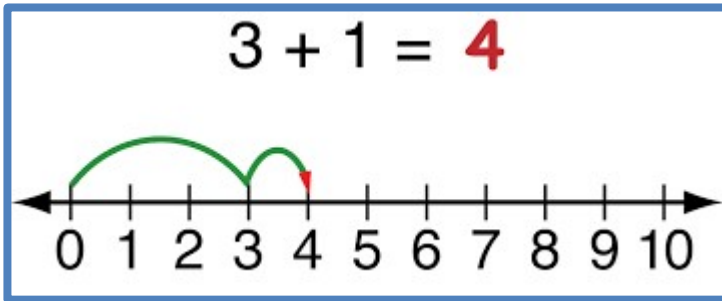
$4 + 3 = 7$

**Example 3:** Keeping bigger numbers in mind and count fingers for a smaller number.

$5 + 9 = 14$

**Addition on number line:**

**Example:** Add 3 and 1 = 4



**Addition of a 1-digit number and a 2-digit number. (without carrying over):**

**Example:** Add 45 and 3

	T	O
	4	5
+		3
	4	8

Step 1: Add Ones place digits and write the answer in Ones column.

Step 2: As there nothing to add in tens column, bring down 4 as it is.

4 tens and 8 ones make 48

**Addition of Two 2-digit numbers. ( Without carrying over):**

**Example:** Add 67 and 23

	T	O
	6	7
+	2	2
	8	9

Step 1: Add Ones place digits and write the answer in Ones column.

Step 2: Now add tens digits and write the answer in tens column.

8 tens and 9 ones make 89

**Addition of Three 2-digit numbers. ( Without carrying over):**

**Example:** Add 25,12 and 10

	T	O
	2	5
+	1	2
	1	0
	4	7

Step 1: Add Ones place digits and write the answer in Ones column.

Step 2: Now add tens digits and write the answer in tens column.

4 tens and 7 ones make 47

**Addition of a 1-digit number and a 2-digit number. (with carryover):**

**Example:** Add 57 and 6

	T	O
	5	7
+		6
	6	13

Step 1: Add Ones place digits and write the answer in Ones column.  
7 ones + 6 ones = 13 ones = 1 ten and 3 ones.

Step 2: Now carry 1 ten from ones place to tens place and keep 3 ones in ones place.

Step 3: Now add tens column digit. 1 ten + 5 tens = 6 tens

6 tens and 3 ones make 63

**Addition of Two 2-digit numbers. ( With carrying over):**

**Example:** Add 34 and 58

	T	O
	1	
	3	4
+	5	8
	9	12

Step 1: Add Ones place digits and write the answer in Ones column.  
 $4\text{ones} + 8\text{ones} = 12\text{ones} = 1\text{ten and } 2\text{ones.}$

Step 2: Now carry 1 ten from ones place to tens place and keep 2 ones in ones place.

Step 3: Now add tens column digits.  $1\text{ten} + 3\text{tens} + 5\text{tens} = 9\text{tens}$

9 tens and 2 ones make 92

**Addition of Two 2-digit numbers. ( With carry over):**

**Example:** Add 635 and 264

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

Step 1: Add Ones place digits and write the answer in Ones column.  
 $5\text{ones} + 4\text{ones} = 9\text{ones}$

Step 2: Now add tens digits and write the answer in tens column.  
 $3\text{tens} + 6\text{tens} = 9\text{tens.}$

Step 3: Now add hundreds place digits.

$6\text{hundreds} + 2\text{hundreds} = 8\text{hundreds}$      **Answer 899**

So, the answer is **899**

**Word Problems:**

**Example:**

There are 23 birds on a tree and 16 birds on another tree. How many birds are there in all?



	T	O
Number of birds on one tree	2	3
Number of birds on another tree	+	6
Total number of birds	3	9

So, there are 39 birds in all

**KEY WORDS FOR ADDITION**



**LEARNING OUTCOME:**

Learners can add different 1- digit, 2-digits, and 3-digit numbers. They can also solve word problems by finding the keywords.