

Chapter- 6

Addition

STUDY NOTES

- 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.

$$4 + 2 = ?$$

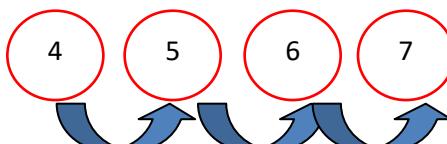
Observe an ant at step 4.
It moves 2 steps forward.
It moves from **step 4 to step 5**,
then it moves to **step 6**.

That is, 



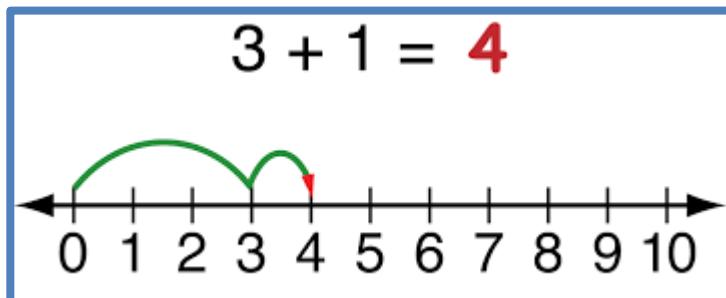
Example 2:

$$4 + 3 = 7$$



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

Start from 0 and jump to 3 Again jump 1 step forward

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

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.

T	O
6	7
2	2
8	9

8 tens and 9 ones

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
1	
5	7
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

9 tens and 2 ones make 92

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

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. $1 \text{ ten} + 3 \text{ tens} + 5 \text{ tens} = 9 \text{ tens}$

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	1	6
Total number of birds	3	9

So, there are 39 birds in all

**KEY WORDS FOR ADDITION**

MIND MAP

ADDITION

Adding by counting froward

Addition of a 1-digit and a 2-digit number

Addition of 2-digit numbers

Addition of Three, 2-digit numbers

Addition of 2-digit numbers (without carrying over)

Adding on a number line

Addition of a 1-digit number and a 2-digit number

Addition of Two 2-digit numbers

Addition of Two 3-digit numbers

Word problems

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