3 Addition

Revision : Addition is putting together and counting.
To add means to combine. The sign of addition is '+' (plus).
The answer we get after adding is called the **sum**.

Properties of Additon

1. The sum obtained upon addition of 2 or more numbers remains the same even after changing their order.

Example

$24 + 32 = 56$
$32 + 24 = 56$

2. The sum obtained after adding 0 to any number is the number itself.

Examples

$97 + 0 = 97$
$48 + 0 = 48$

3. The sum obtained after adding 1 to any number is the next number, also called the **successor** of that number.

Examples

$83 + 1 = 84$
$51 + 1 = 52$

Exercise

1. By actual calculation, prove that the sum of the following remain same after reversing the order.
   (a) $32 + 45$ (b) $95 + 21$ (c) $125 + 3$ (d) $29 + 39$
2. Add the following :
   (a) $83 + 0$ (b) $94 + 0$ (c) $21 + 0$ (d) $45 + 0$
3. Find the successors of the following :
   (a) 25 (b) 39 (c) 123 (d) 145 (e) 44

Addition of Two 2-digit Numbers (without carry over)

Example Add 12 and 15.

T	O
1	2
+ 1	5
2	7

Method :

Step 1 : Write the tens digit below tens' column and the ones digit below ones' column.

Step 2 : First, add the ones together and write below ones' column.

2 ones + 5 ones = 7 ones

Step 3 : Then, add the tens together and write below tens' column.

1 ten + 1 ten = 2 tens

Ans. 27

Exercise

Add the following.

T	O
3	5
+ 1	2
4	7

T	O
1	3
+ 2	5
3	8

T	O
5	4
+ 3	2
8	6

T	O
4	2
+ 3	5
7	7

T	O
2	3
+ 2	0
4	3

T	O
4	4
+ 2	2
6	6

T	O
2	5
+ 3	3
5	8

T	O
5	5
+ 2	2
7	7

T	O
7	2
+ 2	0
9	2

T	O
6	0
+ 2	0
8	0

T	O
3	3
+ 1	1
4	4

T	O
7	9
+ 2	0
9	9

T	O
7	6
+ 1	1
8	7

T	O
9	5
+ 0	2
9	7

T	O
8	5
+ 1	0
9	5