



Interactive Learning NCF

Write the marks earned by each student and make a circle to the student that has achieved the highest score.

•

WARM



Addition facts

When you add zero to	When you add 1 to	Numbers can be added		
a number, the sum is	a number, the sum is	in any order. Their sum		
the number itself.	the next number.	will remain the same.		
9 + 0 = 9	6 + 1 =	2 + 3 = <u>5</u>		
10 + 0 =	10 + 1 =	3 + 2 =		

ADDING THREE 2-DIGIT NUMBERS

- **Example 1:** Nikita read 23 pages of a book on Monday, 24 pages on Tuesday and the rest 12 on Wednesday. How many pages did the book have in all?
- *Solution:* We will get the total number of pages by adding the number of pages read on the three days.

	Τ	0
	2	3
	2	4
╀	1	2
	7	9

So, the book has 79 pages.



Exercise	e 3.1)		Skill Development - NCF
Add:			
1. T O	2. T O	3. T O	4. T O
16	2 2	6 4	3 2
2 0	1 1	1 2	4 2
+ 5 2	+ 4 3	+ 1 3	+13
Maths Genius-2		50	



Mental Maths

	Лen	tal	Mat	ths					Cogn	itive Deve	elopment	NCF
Dra	aw a	ı cir	cle a	aroun	d the	sum i	n each rov	w. Writ	e + and	l = sig	gns.	<u> </u>
8	+	4	=	12	14	84	16	8	9	8	17	
												-
5		3		7	15	22	9	11	20	32	41	
												-
17		5		5	8	13	15	10	27	37	54	,

ADDITION WITH REGROUPING

Amit had collected 33 marbles. Kapil gave him 7 more marbles. How many marbles does Amit have in all?



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Checkpoint		Formative Assessment NCF
Add mentally.		<u> </u>
1. 35 + 10 =	4. 20 + 27 =	7. 15 + = 45
2. 17 + = 27	5. 19 + 30 =	8. 24 + = 64
3. 152 + 100 =	6. 152 + 200 =	9. 152 + = 452

WORD PROBLEMS

Example 2:	There are 18 birds on one tree and 24	birds on the otl	ner t	ree.
	How many birds are there on both th	e trees?	Wor	king
Solution:	Number of birds on the first tree	= 18	Τ	0
	Number of birds on the second tree	= 24	1	
	So, number of birds on both the trees	= 18 + 24	1	8
			+ 2	4
		= 42	4	2
			· ·	

Exercise 3.3

----- Skill Development - NCF

----- Critical Thinking NCF

- 1. If there are 32 apples and 24 oranges in a basket, how many fruits are there in total?
- 2. Naresh has 56 marbles and he buys 23 more. How many marbles does he have now?
- 3. Shreya has 47 crayons and her friend gives her 18 more. How many crayons does Shreya have now?
- 4. There are 62 students in a class and 28 of them went on a field trip. How many students are left in the class?
- 5. If a candy store has 45 chocolates and 35 candies, how many treats are there in total?
- 6. A farmer has 59 sheep and he buys 17 more. How many sheep does the farmer have in total?

HOTS

Mother washed 34 towels, 13 sheets and 28 pillow covers. How many items in all did she wash?

ADDING 3-DIGIT NUMBERS (Without Carrying)

Let us add 135 and 254.

We can add the given numbers in the following ways.

1. Using the Expanded Form



2. Using the Short Method

Arrange the numbers one below the other according to place value and add columnwise.

Η	T	0	
1	3	5	
+ 2	5	4	
3	8	9	→ Adding the ones.
			 Adding the tens.
L			 Adding the hundreds.
So	135	ш.	254 - 389

,- % E	xercise 3.4 skill	Development NCF
A. Add	the following sums using expanded form.	
1.	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	() + () + () = ()	383
2.	5 4 8 = 500 + 40 + 8 + 3 5 1 = + 300 + 50 + 1 + + + + + = -	5 4 8 + 3 5 1
3.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	4 3 4 + 1 5 2

54

Maths Genius-2

Δ.

B. Add the followi	ng. One has been	done for you.	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2. H T O	3. H T O	4. H T O
	5 0 1	6 2 3	1 3 5
	+ 1 4 6	+ 1 3 5	+ 4 0 3
5. H T O	6. H T O	7. H T O	
3 2 1	6 0 2	1 4 3	
+ 4 2 5	+ 3 1 4	+ 1 5 2	
8. H T O	9. H T O	10. H T O	
5 2 2	4 2 7	6 1 8	
+ 1 6 3	+ 3 5 1	+ 2 3 0	
11. <u>H</u> TO	12. H T O	13. H T O	14. H T O
6 4 7	1 4 3	3 4 7	6 0 2
+ 2 3 1	+ 5 2 6	+ 4 3 2	+ 2 7 4
15. H T O	16. H T O	H T O	18. H T O
7 1 4	6 3 4	4 3 6	8 3 3
+ 1 6 3	+ 6 6 2	+ 5 8 1	+ 2 7 4

55

ADDING 3-DIGIT NUMBERS (With Carrying) Carrying from ones to tens

Let us add 528 and 239.

Method 1: Using the Expanded Form

We write the numbers in expanded form and then add as follows.

														Writing	17 a	.S
														_	_	
5	2	8	=	500	+	20	+	8	[700	+	50	+ (10 +	7)	
+ 2	3	9	=	200	+	30	+	9		=	700	+	(50	+ 10) +	7	
				700	+	50	+	17		=	700	+	60-	+ 7 = 7	67	

Method 2: Using the Short Form

Write the numbers under each other and add them up by lining up the digits in each column.

Step 1: First, we add the ones place which is 8 + 9. We get 17, which means 1 ten and 7 ones. We write down 7 under ones place and carry 1 ten to the next column which is the tens place.

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H T O

2 8

7 6 7

+239

5

(1) -

- Carry

- Step 2: Then, we add the tens place which is 1 (carried from ones place) + 3 + 2. We get 6 and write it down under the tens place.
- *Step 3:* Finally, we add the hundreds place which is 4 + 3. We get 7 and write it down under the hundreds place.

So, the answer is 767.

Example 3: Add 617 and 328. **Solution: H T O**

Maths Genius-2

Exercise 3.	5	<mark>S</mark>	kill Development
Add the following	g. One has been do	ne for you.	
1. <u>H T O</u>	2. <u>H</u> T O	3. <u>H T O</u>	4. <u>H</u> T O
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	5 0 5 + 1 6 5	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
472			
5. H T O	6. <u>H</u> T O	7. H T O	8. H T O
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
9. <u>H</u> T O	10. <u>H</u> T O	11. H T O	12. <u>H</u> T O
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$5\ 2\ 8$ + <u>6 6</u>	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
		Common	Mistake
13. H T O	14. H T O	H T O	H T O 1
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{rrrrr}1&7&9\\+&5&1&8\end{array}$	3 5 7 + 3 2 6	3 5 7 + 3 2 6
		⋉ 6713	
	57	7	Addition

Carrying from ones to tens and from tens to hundreds *Example 4:* Add 467 and 398. *Solution:*

Method 1: Using the Expanded Form

We can add the numbers as follows. 2 8 3 = 200 + 80 + 3+ 3 4 8 = 300 + 40 + 8 500 + 120 + 11= 600 + 30 + 1 = 631Writing 120 as Writing 120 as = 500 + (100 + 20) + (10 + 1)= (500 + 100) + (20 + 10) + 1)

Method 2: Using the Short Form

Step 1: First, we add the ones place which is 3+8. We get 11, which means 1 ten and 1 one. We write down 1 under ones place and carry 1 ten to the next column which is the tens place.

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Step 2: Then, we add the tens place which is 1 (carried from ones place) + 8 + 4. We get 13, which means 1 hundred and 3 tens. We write down 3 under the tens place and carry 1 hundred to the next column which is the hundreds place.

	Η	Τ	0
	1	1	
	2	8	3
+	3	4	8
	6	3	1

Step 3: Finally, we add the hundreds place which is 1 (carried from tens place) + 2 + 3. We get 6 and write it down under the hundreds place.

So, the answer is 631.

Example 5: Add 759 and 162.

[H	T	0
	1	1	
	7	5	9
+	1	6	2
	9	2	1

Maths Genius-2

Solution:

	Exercise 3.6	5)				- Skill Deve	lopment NCF
Add	the following	One	has been do	ne for	you.		
1.	H T O	2.	H T O	3.	H T O	4.	H T O
	$\begin{array}{c} (1) \\ 1 \\ 1 \\ 1 \\ 9 \\ + \\ 2 \\ 8 \\ 3 \\ \end{array}$		$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		6 2 8 + 9 4		$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
	4 0 2						
5.	H T O	6.	ΗΤΟ	7.	H T O	8.	H T O
	7 2 5 + <u>1 8 9</u>		$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		4 4 6 + 2 6 7
9.	ΗΤΟ	10.	H T O	11.	H T O	12.	HTO
	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		$ \begin{array}{ccccccccccccccccccccccccccccccccccc$		$ \begin{array}{ccccccccccccccccccccccccccccccccccc$

WORD PROBLEMS

Look at the given example.

Chintu has 284 beads. Kritika has 326 beads. How many beads are there in all?



	Exercise 3.7	Development NCF
Sol	ve the following word problems. One has been done fo	r you.
1.	Jaya has 365 marbles. Aakurti has 204 marbles. How many marbles do they have altogether?	H T O 3 6 5 + 2 0 4 5 6 9
2.	One basket contains 325 oranges. Another basket contains 341 mangoes. How many fruits are there in the baskets?	H T O +
3.	One garland has 325 beads. Another garland has 240 beads. Find the total number of beads.	H T O +
4.	A shopkeeper sold 258 mangos on Monday. He sold 321 mangos on Tuesday. How many mangos did he sell in two days?	H T O +
5.	A packet has 256 English books. Another packet has 302 Hindi books. Find the total number of books.	H T O +
6.	There are 463 boys and 225 girls in a school. How many students are there in the school?	H T O +
7.	Roma solved 126 questions. Jatin solved 262 questions. How many questions did they solve?	H T O +

Maths Genius-2

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A. Fill in the blanks.

1.	43 + 5 =
3.	735 + 125 = + 735
5.	574 + 0 =
7.	+ 0 = 845
9.	+ 1 = 1

2.	501 +	10 =	
4.		+ 137 =	+ 56
6.		+ 30 = 730	
8.	903 +	= 17 +	903

10. 332 + ____ = 333

B. Add the following:

1.	H T O	2. HTO	3. HTO	4. HTO
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$5 \ 4 \ 1$ + 2 9 6	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3 2 6 + 3 6 2
5.	H T O	6. H T O	7. H T O	8. HTO
			4 3 0	3 5 1
	3 5 1	2 1 2	3 8 6	4 6 9
	+ 4 6 9	+ 4 9 8	+ 98	+ 2 3

C. Arrange in columns and add.

1. 179 + 845	2. 72 + 336	3. 405 + 279	4. 392 + 752	
H T O	H T O	H T O	H T O	
+	+	+	+	
	[61	Addi	ition

🌉 Mat	hs La	ab Ao	ctivit	y						Exper	iential Learnir	ng NC
ddition	on tl	ne nu	mber	r grid	!!							
	1	2	3	4	5	6	7	8	9	10		
	11	12	13	14	15	16	17	18	19	20		
	21	22	23	24	25	26	27	28	29	30		
	31	32	33	34	35	36	37	38	39	40		
	41	42	43	44-	→45-	→46	47	48	49	50		
	51	52	53	54	55	56	57	58	59	60		
	61	62	63	64	65	66	67	68	69	70		
	71	72	73	74	75	76	77	78	79	80		
	81	82	83	84	85	86	87	88	89	90		
	91	92	93	94	95	96	97	98	99	100		

34 + 12 = ?12 = 10 + 2

Go to 34, move 1 box down (+10) to 44. From 44 move 2 boxes forward (+2). $44 \rightarrow 45 \rightarrow 46$ So, 34 + 12 is the same as 34 + 10 + 2 = 46Use the number grid to add.

 62 + 25 = 19 + 24 =

 36 + 51 = 35 + 25 =

Remember, if you start with the bigger number you will have to move fewer steps.

21 + 48 = _____

73 + 16 = _____

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