



Warm Up

Raj and his friends are cleaning the park.



What is the total number of items they have collected? **ANS**

AHAN	
1	7
+	2
_____	_____

RAJ	
_____	_____
+	_____
_____	_____

JEVINA	
_____	_____
+	_____
_____	_____

EKJYOT	
_____	_____
+	_____
_____	_____

_____ has collected the most number of items.

ADDITION FACTS



The sum is always greater than the numbers being added.

This is not true if one of the two numbers is zero.



- Numbers can be added in any order. Their sum will remain the same.
 $3 + 7 = 10$ and $7 + 3 = 10$
- When 1 is added to a number, the sum is the number after (successor).
 $18 + 1 = 19$
19 is the successor of 18.
- When 0 is added to a number, the sum is the number itself.
 $4 + 0 = 4$ $0 + 51 = 51$

ADDITION BY EXPANDING NUMBERS

EXAMPLE 1 Find $45 + 23$.

$$\begin{array}{r} 45 \\ + 23 \\ \hline 60 + 8 \\ \hline 68 \end{array}$$

ANS. 68

EXAMPLE 2 Add 64 and 35 .

$$\begin{array}{r} 64 \\ + 35 \\ \hline 90 + 9 \\ \hline 99 \end{array}$$

ANS. 99



Exercise 2.1

A. Fill in the blanks. ANS

1. $8 + 16 = \underline{\quad} + 8$ 2. $4 + 19 = 19 + \underline{\quad}$ 3. $1 + 99 = \underline{\quad}$
4. $143 + \underline{\quad} = 144$ 5. $61 + 0 = \underline{\quad}$ 6. $0 + 440 = \underline{\quad}$

B. Add by expanding numbers. ANS

1. $34 + 48 = \underline{\quad}$ 2. $28 + 34 = \underline{\quad}$ 3. $35 + 27 = \underline{\quad}$
4. $21 + 67 = \underline{\quad}$ 5. $84 + 42 = \underline{\quad}$ 6. $97 + 11 = \underline{\quad}$
7. $13 + 50 = \underline{\quad}$ 8. $31 + 56 = \underline{\quad}$ 9. $77 + 53 = \underline{\quad}$



I Can Do It!

Add. ANS

$$\begin{array}{r} 1. \begin{array}{r} 453 \\ + 438 \\ \hline \end{array} \quad 2. \begin{array}{r} 656 \\ + 228 \\ \hline \end{array} \quad 3. \begin{array}{r} 112 \\ + 119 \\ \hline \end{array} \quad 4. \begin{array}{r} 329 \\ + 221 \\ \hline \end{array} \end{array}$$

Regrouping tens

EXAMPLE 5 Find the sum of 172 and 144.

- Step 1 Add the ones.
 $2 + 4 = 6$ ones.

$$\begin{array}{r} \text{H T O} \\ 172 \\ + 144 \\ \hline 6 \end{array}$$

When there are more than 9 tens, regroup 10 tens into 1 hundred.



- Step 2 Add the tens. $7 + 4 = 11$ tens.

Regroup 11 tens into 1 hundred and 1 ten.
Carry over 1 hundred to the hundreds place.

$$\begin{array}{r} \text{H T O} \\ 172 \\ + 144 \\ \hline 16 \end{array}$$

- Step 3 Add the hundreds. 1 (carried over from tens) + $1 + 1 = 3$ hundreds

$$\begin{array}{r} \text{H T O} \\ 172 \\ + 144 \\ \hline 316 \end{array}$$

ANS. 316



Quick TIP

To add 99 to a number, add 100 and subtract 1.
 $437 + 99$
 $= 437 + 100 - 1$
 $= 537 - 1$
 $= 536$



Get It Right!

Do not forget to add the number carried over.

$$\begin{array}{r} 35 \\ + 99 \\ \hline 124 \end{array} \quad \begin{array}{r} 35 \\ + 99 \\ \hline 134 \end{array}$$



ADDING 3-DIGIT NUMBERS

Addition without regrouping

EXAMPLE 3 Add 456 and 231.

$$\begin{array}{r} \text{H T O} \\ 456 \\ + 231 \\ \hline 7 \end{array} \quad \begin{array}{r} \text{H T O} \\ 456 \\ + 231 \\ \hline 87 \end{array} \quad \begin{array}{r} \text{H T O} \\ 456 \\ + 231 \\ \hline 687 \end{array}$$

Add the ones.
 $6 + 1 = 7$ ones

Add the tens.
 $5 + 3 = 8$ tens

Add the hundreds.
 $4 + 2 = 6$ hundreds

ANS. 687

Addition with regrouping

Regrouping ones

EXAMPLE 4 Add 236 and 147.

- Step 1 Add the ones.

$6 + 7 = 13$ ones.
Regroup 13 ones into 1 ten and 3 ones.
Carry over 1 ten to the tens place.

$$\begin{array}{r} \text{H T O} \\ 236 \\ + 147 \\ \hline 3 \end{array}$$

- Step 2 Add the tens.

1 (carried over from ones) + $3 + 4 = 8$ tens

$$\begin{array}{r} \text{H T O} \\ 236 \\ + 147 \\ \hline 83 \end{array}$$

- Step 3 Add the hundreds.

$2 + 1 = 3$ hundreds.

$$\begin{array}{r} \text{H T O} \\ 236 \\ + 147 \\ \hline 383 \end{array}$$

When there are more than 9 ones, regroup 10 ones into 1 ten.



ANS. 383



Regrouping hundreds

$$\begin{array}{r} 11 \text{ hundreds} \\ \rightarrow \\ 1 \text{ thousand} \quad 1 \text{ hundred} \end{array}$$

When there are more than 9 hundreds, regroup 10 hundreds into 1 thousand.



EXAMPLE 6 Add 758 and 531.

$$\begin{array}{r} \text{Th H T O} \\ 758 \\ + 531 \\ \hline 9 \end{array} \quad \begin{array}{r} \text{Th H T O} \\ 758 \\ + 531 \\ \hline 89 \end{array} \quad \begin{array}{r} \text{Th H T O} \\ 758 \\ + 531 \\ \hline 1289 \end{array}$$

Add the ones.
 $8 + 1 = 9$ ones

Add the tens.
 $5 + 3 = 8$ tens

Add the hundreds.
 $7 + 5 = 12$ hundreds

ANS. 1289

Regrouping ones, tens and hundreds

EXAMPLE 7 Find the sum of 112, 435 and 699.

- Step 1 Add the ones.

$2 + 5 + 9 = 16$ ones.
Regroup 16 ones into 1 ten and 6 ones.
Carry over 1 ten to the tens place.

$$\begin{array}{r} \text{Th H T O} \\ 112 \\ 435 \\ + 699 \\ \hline 6 \end{array}$$

- Step 2 Add the tens.

1 (carried over from ones) + $1 + 3 + 9 = 14$ tens.
Regroup 14 tens into 1 hundred and 4 tens.
Carry over 1 hundred to the hundreds place.

$$\begin{array}{r} \text{Th H T O} \\ 112 \\ 435 \\ + 699 \\ \hline 46 \end{array}$$



Step 3 Add the hundreds.
 1 (carried over from tens) + 1 + 4 + 6
 1 + 1 + 4 + 6 = 12 hundreds.
 Regroup 12 hundreds
 into 1 thousand and 2 hundred.

Th	H	T	O
1	1	1	2
4	3	5	
6	9	9	
1	2	4	6



Exercise 2.2

A. Add by regrouping. ANS

- $$\begin{array}{r} 268 \\ + 425 \\ \hline \end{array}$$
- $$\begin{array}{r} 348 \\ + 639 \\ \hline \end{array}$$
- $$\begin{array}{r} 497 \\ + 376 \\ \hline \end{array}$$
- $$\begin{array}{r} 547 \\ + 675 \\ \hline \end{array}$$
- $$\begin{array}{r} 898 \\ + 528 \\ \hline \end{array}$$
- $$\begin{array}{r} 368 \\ + 668 \\ \hline \end{array}$$
- $$\begin{array}{r} 498 \\ + 791 \\ \hline \end{array}$$
- $$\begin{array}{r} 434 \\ + 999 \\ \hline \end{array}$$
- $$\begin{array}{r} 212 \\ 324 \\ + 153 \\ \hline \end{array}$$
- $$\begin{array}{r} 749 \\ 116 \\ + 135 \\ \hline \end{array}$$
- $$\begin{array}{r} 356 \\ 197 \\ + 168 \\ \hline \end{array}$$
- $$\begin{array}{r} 349 \\ 708 \\ + 278 \\ \hline \end{array}$$

B. Write in columns and add in your notebook. ANS

- 172 + 721
- 124 + 286
- 682 + 839
- 547 + 675
- 333 + 784
- 567 + 765
- 386 + 862
- 898 + 528
- 400 + 712 + 112
- 666 + 348 + 314
- 286 + 619 + 412

It is fun to add.



Life Skills

Sukanya wants to gift her grandpa a pen on his birthday, which is on 2 October. She starts saving ₹ 1 per day from today, 1 July. Will she be able to buy the pen if it costs ₹ 90?



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ADDING BIGGER NUMBERS

EXAMPLE 8 Add 1326 and 1422.

Th	H	T	O
1	3	2	6
+ 1	4	2	2
8			

Add the ones. 6 + 2 = 8 ones
 Add the tens. 2 + 2 = 4 tens
 Add the hundreds. 3 + 4 = 7 hundreds
 Add the thousands. 1 + 1 = 2 thousands

ANS. 2748



I Can Do It!

Find the sum. ANS

- $$\begin{array}{r} 2216 \\ + 203 \\ \hline \end{array}$$
- $$\begin{array}{r} 3657 \\ + 4242 \\ \hline \end{array}$$
- $$\begin{array}{r} 5442 \\ + 2577 \\ \hline \end{array}$$

ESTIMATING THE SUM

You can estimate the sum of two numbers. For this, round them off before you add.
 EXAMPLE 9 Round off the numbers 36 and 43 to the nearest ten. Add them to find their estimated sum. Also find the actual sum.

36	rounds up to	40
+ 43	rounds down to	+ 40
79		80

ANS. The actual sum of 36 and 43 is 79 while their estimated sum is 80.



Exercise 2.3

A. Write in columns and find the sum in your notebook. ANS

- 725 + 8095
- 1008 + 7944
- 3652 + 5423
- 1121 + 3009
- 2150 + 3889
- 5167 + 2837
- 5462 + 1538
- 1070 + 683



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- 11 B. Estimate the sum by rounding off the numbers to the nearest ten. Add to find the actual sum. **ANS**

1. $\begin{array}{r} 45 \\ + 22 \\ \hline \end{array}$ rounds up to $\begin{array}{r} 50 \\ + 20 \\ \hline \end{array}$	2. $\begin{array}{r} 26 \\ + 55 \\ \hline \end{array}$ rounds up to $\begin{array}{r} 30 \\ + 60 \\ \hline \end{array}$
3. $\begin{array}{r} 62 \\ + 11 \\ \hline \end{array}$ rounds down to $\begin{array}{r} 60 \\ + 10 \\ \hline \end{array}$	4. $\begin{array}{r} 49 \\ + 25 \\ \hline \end{array}$ rounds up to $\begin{array}{r} 50 \\ + 30 \\ \hline \end{array}$

- 12 I am a 3-digit number. After adding 1 to me, you need to regroup the ones, tens and hundreds. Which number am I? **ANS**



STORY SUMS

EXAMPLE 10 Meenu has 105 songs on her computer. Her friend gives her a DVD with 78 songs. If Meenu copies the songs from the DVD to her computer, how many songs does Meenu have on her computer in all?

Number of songs on the computer = 105
 Number of songs copied from the DVD = 78
 Total number of songs on the computer = $105 + 78 = 183$

$$\begin{array}{r} 105 \\ + 78 \\ \hline 183 \end{array}$$

ANS. Meenu's computer has 183 songs in all.

EXAMPLE 11 A vegetable seller earned ₹485 on Monday and ₹649 on Tuesday. How much did she earn on these two days?

Earning on Monday = ₹485
 Earning on Tuesday = ₹649
 Earning on both the days = ₹485 + ₹649 = ₹1134

$$\begin{array}{r} 485 \\ + 649 \\ \hline 1134 \end{array}$$

ANS. The vegetable seller earned ₹1134.



Exercise 2.4

- 13 Solve these story sums. **ANS**

1. There are 1572 students in the primary wing of a school and 849 students in the middle wing. How many students are there in the school?

Students in the primary wing = _____

Students in the middle wing = _____

Total number of students = _____ + _____ = _____

ANS. There are _____ students in the school.

2. There are 121 people in a compartment of a train. In another compartment there are 112 people. How many people are there in both the compartments?

3. There were 650 packets of milk in a dairy. 297 more packets of milk were brought. How many packets of milk are there in the dairy now?



4. There were 1499 pencils in a carton. 788 pencils were added. How many pencils are there in all?

5. Meera gave 1 toffee each to 125 students of Class 3 and was left with 37 toffees. How many toffees did she have?

6. A library bought 2947 books of poems and 5050 storybooks from the World Book Fair. How many books did the library buy in all?

7. On Saturday, 1475 men, 309 women and 2787 children visited the Science Museum. How many people visited the museum in all?





Maths Lab Activity

Aim: To make an abacus and use it for addition with regrouping
You will need: A 15 cm × 5 cm piece of thermocol, four straws and beads of four different colours

Preparation: Students to work in groups of 3.

Steps

A. To make an abacus

- Use a pencil to make holes in the thermocol piece at equal distances and fit the straws in them (Fig. 1).
- Moving from right to left, write O, T, H, Th under the straws.



Fig. 1

B. To add with regrouping

- Student A calls out two numbers to add, such as 3555 and 4355 (Fig. 2).
- Student B puts beads in the respective straws to represent 3555 (Fig. 2).
- Student C puts beads in the respective straws to represent 4355 (Fig. 3). The total number of beads in the ONES straw becomes 10.
- Student A takes all the 10 beads out of the ONES straw and replaces them with a single bead in the TENS straw (Fig. 4). Now there are 11 beads (5 + 5 + 1) in the TENS straw and no beads are left in the ONES straw.



Fig. 2



Fig. 3



Fig. 4

- Student B takes all the 10 beads out of the TENS straw and replaces them with a single bead in the HUNDREDS straw, leaving 1 bead in the TENS straw and so on for the HUNDREDS and THOUSANDS straws (Fig. 5).
- Student C notes down the number represented on the abacus.



Fig. 5

The number 7910 is the sum of 3555 and 4355.



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Mental Maths

1 A. Fill in the blanks. **ANS**

1. + = _____

2. + = _____

3. + =

4. $273 + 157 =$

Maths Online

For more practice on addition, visit rsgr.in/im3-1



1 B. Tick (✓) the correct option. **ANS**

1. 3 hundreds + 27 tens = _____

- a. 327 b. 273 c. 57 hundred d. 570

2. $8450 + 550 = 550 +$ _____

- a. 550 b. 8450 c. 9000 d. 1100

3. The estimated sum of 45 and 39 is

- a. 70. b. 80. c. 90. d. 100.

4. The estimated sum and actual sum of 62 and 57 are respectively

- a. 120, 119. b. 110, 119. c. 130, 119. d. 119, 100.

1 C. Fill in the with >, < or =. **ANS**

1. $6000 + 20$ 690 2. $4100 + 8$ tens 4 thousand + 1 hundred

3. $8999 + 0$ $0 + 9998$ 4. $999 + 1$ smallest 4-digit number



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Worksheet

1 A. Add the following. Use the answers to solve the given riddle. **ANS**

$$\begin{array}{r} 943 \\ + 287 \\ \hline \end{array}$$

L

$$\begin{array}{r} 470 \\ + 563 \\ \hline \end{array}$$

M

$$\begin{array}{r} 3994 \\ + 5807 \\ \hline \end{array}$$

W

$$\begin{array}{r} 978 \\ + 49 \\ \hline 1526 \end{array}$$

E

$$\begin{array}{r} 736 \\ + 3264 \\ \hline \end{array}$$

C

$$\begin{array}{r} 1032 \\ + 864 \\ \hline \end{array}$$

O

9801	2553	1230	4000	1896	1033	2553

BACK

1 B. Solve these story sums. **ANS**

- One thousand five adults and six hundred ninety-five children visited Nehru Planetarium. How many people visited the planetarium in all?
- There were 875 boys and 562 girls present in a park. Find the total number of children present in the park.
- In the park, Reena saw 24 butterflies on one bush and 32 butterflies on another bush. How many butterflies did Reena see?
- In the park, there were 375 roses, 642 marigolds and 142 lilies. How many flowers were there in all?

