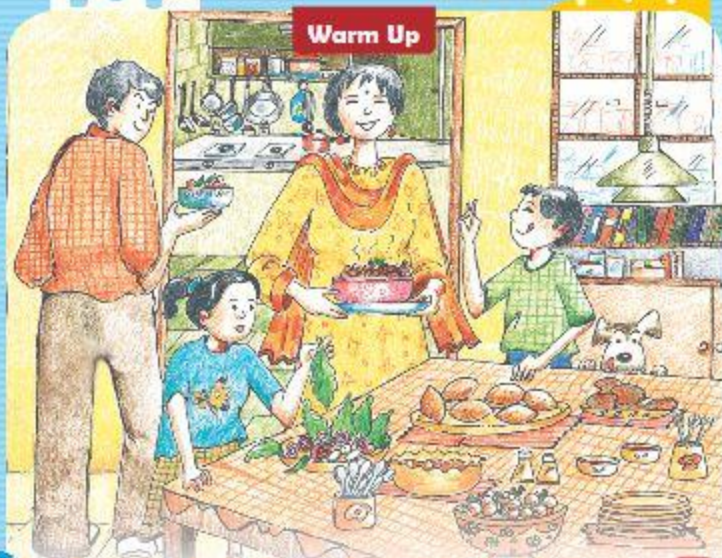


3

SUBTRACTION



It is dinner time for the Sharma family. Solve the following sums. **ANS**

1. There are 20 spoons and 7 forks on the table. Which are more? By how many? _____

$$\begin{array}{r} 20 \\ - 7 \\ \hline \end{array}$$

2. The table has 15 plates. The kitchen has 9 plates less than the table. How many plates are there in the kitchen?

$$\begin{array}{r} 15 \\ - 9 \\ \hline \end{array}$$

3. Mrs Sharma made 12 puris. Rahul ate 3 in the kitchen. How many are left?

$$\begin{array}{r} 12 \\ - 3 \\ \hline \end{array}$$



SUBTRACTION FACTS



The difference is always lesser than the bigger number of the two numbers.

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



- When 0 is subtracted from a number, the difference is the number itself.
 $22 - 0 = 22$
- When 1 is subtracted from a number, the difference is the number before (predecessor). $14 - 1 = 13$
(13 is the predecessor of 14)
- When a number is subtracted from itself, the difference is always 0.
 $13 - 13 = 0$

FINDING THE MISSING NUMBER

In a subtraction fact, if the bigger number is missing you can find it by adding the smaller number and the difference.

EXAMPLE 1 $\square - 7 = 13$

$$\begin{array}{r} \square \\ - 7 \\ \hline 13 \end{array} \quad \begin{array}{r} + 7 \\ \hline 20 \end{array}$$

ANS. The missing number is 20.



In a subtraction fact, if the smaller number is missing you can find it by subtracting the difference from the bigger number.

EXAMPLE 2 $50 - \square = 45$

$$\begin{array}{r} 50 \\ - \square \\ \hline 45 \end{array} \quad \begin{array}{r} 50 \\ - 45 \\ \hline 5 \end{array}$$

ANS. The missing number is 5.



I Can Do It!

Find the missing number. **ANS**

- $32 - 1 = \square$
- $\square - 42 = 0$
- $\square - 14 = 35$

SUBTRACTING 3-DIGIT NUMBERS

Subtraction without regrouping

EXAMPLE 3 Subtract 114 from 125.

$$\begin{array}{r} \text{H T O} \\ 125 \\ - 114 \\ \hline 11 \end{array} \quad \begin{array}{r} \text{H T O} \\ 125 \\ - 114 \\ \hline 11 \end{array} \quad \begin{array}{r} \text{H T O} \\ 125 \\ - 114 \\ \hline 11 \end{array}$$

Subtract the ones.
 $5 - 4 = 1$ one

Subtract the tens.
 $2 - 1 = 1$ ten

Subtract the hundreds.
 $1 - 1 = 0$ hundred

ANS. 11

Subtraction with regrouping

Regrouping tens

EXAMPLE 4 Subtract 117 from 336.

Step 1 Subtract the ones.
7 ones cannot be subtracted from 6 ones. So, regroup 3 tens 6 ones into 2 tens 16 ones.
 $16 - 7 = 9$ ones.

$$\begin{array}{r} \text{H T O} \\ 336 \\ - 117 \\ \hline 9 \end{array}$$

Step 2 Subtract the tens.
 $2 - 1 = 1$ ten.

$$\begin{array}{r} \text{H T O} \\ 336 \\ - 117 \\ \hline 19 \end{array}$$

Step 3 Subtract the hundreds
 $3 - 1 = 2$ hundreds.

$$\begin{array}{r} \text{H T O} \\ 336 \\ - 117 \\ \hline 219 \end{array}$$

ANS. 219

When there are not enough ones to subtract from, regroup 1 ten into 10 ones.



Regrouping hundreds

EXAMPLE 5 Subtract 181 from 455.

Step 1 Subtract the ones.
 $5 - 1 = 4$ ones.

H	T	O
4	5	5
-	1	8
		4

Step 2 Subtract the tens. 8 tens cannot be subtracted from 5 tens. So, regroup 4 hundreds 5 tens into 3 hundreds 15 tens.
 $15 - 8 = 7$ tens.

H	T	O
3	15	5
-	1	8
	7	4

Step 3 Subtract the hundreds.
 $3 - 1 = 2$ hundreds.

H	T	O
3	15	5
-	1	8
2	7	4

ANS. 274

I Can Do It!

Subtract. **ANS.**

1. $\begin{array}{r} 342 \\ - 310 \\ \hline \end{array}$ 2. $\begin{array}{r} 541 \\ - 237 \\ \hline \end{array}$

3. $\begin{array}{r} 995 \\ - 678 \\ \hline \end{array}$ 4. $\begin{array}{r} 857 \\ - 366 \\ \hline \end{array}$

5. $\begin{array}{r} 653 \\ - 461 \\ \hline \end{array}$ 6. $\begin{array}{r} 726 \\ - 333 \\ \hline \end{array}$

Get It Right!

You cannot subtract 0 from 4.

$$\begin{array}{r} 434 \\ - 226 \\ \hline 212 \end{array}$$

$$\begin{array}{r} 214 \\ 434 \\ - 226 \\ \hline 208 \end{array}$$

Regrouping hundreds and tens

EXAMPLE 6 Subtract 163 from 341.

H	T	O
3	4	1
-	1	6
		3
	8	

Subtract the ones.
 3 ones cannot be subtracted from 1 one.
 So, regroup 4 tens
 1 one into 3 tens
 11 ones.
 $11 - 3 = 8$ ones.

H	T	O
2	13	1
-	1	6
		3
	7	8

Subtract the tens.
 6 tens cannot be subtracted from 3 tens.
 So, regroup 3 hundreds
 3 tens into 2 hundreds
 13 tens.
 $13 - 6 = 7$ tens.

H	T	O
2	13	1
-	1	6
		3
	1	7
		8

Subtract the hundreds.
 $2 - 1 = 1$ hundred.

ANS. 178

I am a 3-digit number. If you subtract 1 from me, you will get a 2-digit number and you need to regroup hundreds and tens.
 Which number am I? **ANS.**

HOTS Questions

Subtraction of numbers with zeroes

EXAMPLE 7 Subtract 205 from 700.

Step 1 Subtract the ones.

5 ones cannot be subtracted from 0 ones. 0 tens cannot be regrouped. So, regroup 7 hundreds 0 tens into 6 hundreds 10 tens. Now, regroup 10 tens 0 one into 9 tens 10 ones. Subtract the ones.
 $10 - 5 = 5$ ones.

H	T	O
6	10	10
-	2	0
		5
4	9	5

Step 2 Subtract the tens. $9 - 0 = 9$ tens.

Step 3 Subtract the hundreds.
 $6 - 2 = 4$ hundreds.

ANS. 495



Exercise 3.1

A. Subtract. ANS

- $$\begin{array}{r} 278 \\ -149 \\ \hline \end{array}$$
- $$\begin{array}{r} 464 \\ -326 \\ \hline \end{array}$$
- $$\begin{array}{r} 603 \\ -295 \\ \hline \end{array}$$
- $$\begin{array}{r} 900 \\ -550 \\ \hline \end{array}$$
- $$\begin{array}{r} 726 \\ -333 \\ \hline \end{array}$$
- $$\begin{array}{r} 800 \\ -521 \\ \hline \end{array}$$
- $$\begin{array}{r} 848 \\ -172 \\ \hline \end{array}$$
- $$\begin{array}{r} 906 \\ -435 \\ \hline \end{array}$$

B. Write in columns and subtract. ANS

- 124 from 325
- 407 from 525
- 185 from 554
- 294 from 687
- 528 from 752
- 398 from 864
- 456 from 872
- 217 from 928
- 596 from 978

Remember to write the bigger number above the smaller number.



SUBTRACTING BIGGER NUMBERS

Without regrouping

EXAMPLE 8 Subtract 1320 from 2462.

Th H T O	Th H T O	Th H T O	Th H T O
2 4 6 2	2 4 6 2	2 4 6 2	2 4 6 2
- 1 3 2 0	- 1 3 2 0	- 1 3 2 0	- 1 3 2 0
-----	-----	-----	-----
2	4 2	1 4 2	1 1 4 2

Subtract the ones.
 $2 - 0 = 2$ ones

Subtract the tens.
 $6 - 2 = 4$ tens

Subtract the hundreds.
 $4 - 3 = 1$ hundred

Subtract the thousands.
 $2 - 1 = 1$ thousand



ANS. 1142



Exercise 3.2

A. Subtract. ANS

- $$\begin{array}{r} 2216 \\ -203 \\ \hline \end{array}$$
- $$\begin{array}{r} 3098 \\ -2085 \\ \hline \end{array}$$
- $$\begin{array}{r} 4894 \\ -2432 \\ \hline \end{array}$$
- $$\begin{array}{r} 5567 \\ -1310 \\ \hline \end{array}$$
- $$\begin{array}{r} 5985 \\ -2573 \\ \hline \end{array}$$
- $$\begin{array}{r} 6978 \\ -1759 \\ \hline \end{array}$$
- $$\begin{array}{r} 7854 \\ -4660 \\ \hline \end{array}$$
- $$\begin{array}{r} 8035 \\ -4020 \\ \hline \end{array}$$

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

- 495 from 8695
- 1585 from 1586
- 2316 from 6456
- 1999 from 9999
- 1004 from 7944
- 2837 from 5967
- 1531 from 5662
- 4061 from 4782
- 6252 from 6253

ESTIMATING THE DIFFERENCE

You can estimate the difference of two numbers. For this, round them off before you subtract.

EXAMPLE 9 Round off the numbers 88 and 56 to the nearest ten. Subtract to find their estimated difference. Also find the actual difference.

88	rounds up to	90
- 56	rounds up to	- 60
-----	-----	-----
32	actual difference	30
	-----	-----
	estimated difference	

30 is the estimated difference. It is quite close to 32, the actual difference.

Ans. The actual difference between 88 and 56 is 32 while their estimated difference is 30.





Exercise 3.3

Estimate the answer by rounding off the numbers. Solve to check your answer. **ANS**

1. 45 rounds up to 50
 $- 23$ rounds down to 20

2. 83 rounds down to 80
 $- 17$ rounds up to 20

3. 86 rounds up to 90
 $- 55$ rounds up to 60

4. 56 rounds up to 60
 $- 39$ rounds up to 40

STORY SUMS

EXAMPLE 10 Divya is reading a book that has 128 pages. She has read 98 pages. How many pages are left for her to read?

Total number of pages in the book = 128

Number of pages read by Divya = 98

Pages left for Divya to read = $128 - 98 = 30$

ANS. 30 pages are left for Divya to read.

$$\begin{array}{r} 128 \\ - 98 \\ \hline 30 \end{array}$$



Exercise 3.4

Solve these story sums. **ANS**

1. Sajid, a fruit seller, had 560 kg of apples. He sold 385 kg during the day. How many apples are left with him?
 Apples with Sajid = _____ kg
 Apples sold during the day = _____ kg
 Apples left with him = _____ - _____ = _____
- ANS.** Sajid has _____ kg apples left.

$$\begin{array}{r} 560 \\ - 385 \\ \hline \end{array}$$



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2. A shopkeeper has 2645 trousers and shirts. If he has 1742 trousers, how many shirts does he have?

Total number of clothes = _____

Total number of trousers = _____

Total number of shirts = _____ - _____ = _____

ANS. The shopkeeper has _____ shirts.



3. The cost of one ticket for the Republic Day parade is ₹ 175. Amita gives a ₹ 2000 note to the ticket vendor for a ticket. How much money will she get back?
4. A school took 1064 students to watch the Republic Day parade. If 509 students were boys, how many students were girls?
5. Mr Joshi ordered 7649 chairs from a shop for the Republic Day parade. The shopkeeper could supply only 6438 chairs. How many more chairs does Mr Joshi need?
6. Ramesh sold 4932 tickets for the Republic Day parade. By 8 o'clock in the morning, 3562 people had been seated as per his list. How many more people are expected?
7. 8450 children are to perform at the Republic Day parade. 4165 children are below the age of fifteen. How many children are above the age of fifteen?



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ADDING AND SUBTRACTING TOGETHER

EXAMPLE 11 Find the sum of 125 and 214. Subtract 21 from this sum.

$$\begin{array}{r} 125 \\ + 214 \\ \hline 339 \end{array} \quad \begin{array}{r} 339 \\ - 21 \\ \hline 318 \end{array}$$

ANS. 318

EXAMPLE 12 Solve $3129 + 94 - 128$.

$$\begin{array}{r} 3129 \\ + 94 \\ \hline 3223 \end{array} \quad \begin{array}{r} 3223 \\ - 128 \\ \hline 3095 \end{array}$$

ANS. 3095

To solve these type of questions, first add and then subtract.



Exercise 3.5

A. Akbar had many elephants, cows, rabbits and goats. He gave them all away to Birbal, Tansen and Jahangir. Add and subtract to fill in the blanks in the table. **ANS**

					TOTAL
Birbal	200	348	3.	126	746
Tansen	1.	412	161	279	1012
Jahangir	117	235	310	4.	999
TOTAL	477	2.	543	742	5.

B. First add. Then subtract. **ANS**

- $214 + 313 - 138$
- $289 + 725 - 164$
- $678 + 142 - 414$
- $725 + 164 - 689$
- $946 + 257 - 134$
- $2835 + 111 - 773$
- $3786 + 184 - 697$
- $4555 + 184 - 333$
- $5842 + 250 - 895$
- $6966 + 199 - 1297$
- $7245 + 184 - 1006$
- $8969 + 129 - 3895$

STORY SUMS INVOLVING ADDITION AND SUBTRACTION

EXAMPLE 13 Hema had ₹68. Her mother gave her ₹25 more. She spent ₹17 on stationery. How much money is she left with?



$$\begin{aligned} \text{Total amount Hema had} &= ₹68 + ₹25 = ₹93 \\ \text{Money spent on stationery} &= ₹17 \\ \text{Money left with Hema} &= ₹93 - ₹17 = ₹76 \end{aligned}$$

$$\begin{array}{r} 68 \\ + 25 \\ \hline 93 \end{array} \quad \begin{array}{r} 93 \\ - 17 \\ \hline 76 \end{array}$$

ANS. Hema is left with ₹76.



Exercise 3.6

Solve these story sums. ANS



- There were 67 people in a bus. At the first stop 12 people boarded. At the next stop, 9 people got off the bus. How many people were still there in the bus?
- There are 90 books on a bookshelf. Anu puts 9 more books there and then takes away 14 books. How many books are left on the shelf now?
- There are 35 cars parked in a parking lot. 16 more cars came in the morning. If there is space for a total of 70 cars in the parking lot, how many more cars can be parked?
- For painting a fence, Tom bought 2 buckets of paint with 100 litres and 50 litres. He used 125 litres of paint to paint the fence. How much paint is left?





Ma Maths Lab Activity

Aim: To subtract one number from another by regrouping

You will need: 20 boxes of 10 pencils, loose pencils, rubber bands and paper slips

Preparation: Students to work in groups of 4.

Steps

- 1 Student A calls out two numbers to subtract, for example, 68 and 135.
- 2 Student B forms the bigger number by (Fig. 1)
 - a. grouping 10 pencil boxes with a rubber band to make 1 HUNDRED.
 - b. taking 3 pencil boxes to show 3 TENS.
 - c. taking 5 loose pencils to show 5 ONES.



Fig. 1

- 3 Student C regroup TENS to subtract 8 ONES as follows.
 - a. Opens a box of 10 pencils and adds them to the 5 loose pencils forming 15 ONES (Fig. 2). There are now 1 HUNDRED, 2 TENS and 15 ONES (Fig. 3).



Fig. 2



Fig. 3

- b. Removes 8 ONES from 15 ONES. There are now 1 HUNDRED, 2 TENS and 7 ONES.
- 4 Student D regroup HUNDREDS to subtract 6 TENS from 2 TENS as follows.
 - a. Opens the group of 10 boxes and adds them to 2 TENS forming 12 TENS (Fig. 4).

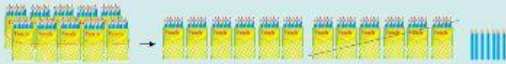


Fig. 4

- b. Removes 6 TENS from 12 TENS. There are now 6 TENS and 7 ONES (Fig. 5).



Fig. 5

- 5 Student A notes down the answer.
- Other groups of students form different questions on subtraction and follow same steps.



Mental Maths

A. Type T for true or F for false. **ANS**

1. $6452 - 4652 = 4652 - 6452$ _____
2. $3000 + 20$ is 1 less than 3021. _____
3. $9547 < 9$ thousand - 100 _____
4. When a number is subtracted from itself the difference is 0. _____
5. 8905 is nine hundred more than 8000. _____

Maths Online

For more practice on subtraction, visit rsgr.in/m3-2



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

1. $4000 - 1 =$ _____
 - a. 4001
 - b. 4009
 - c. 3009
 - d. 3999
2. _____ - 100 = 8000
 - a. 7900
 - b. 8100
 - c. 0
 - d. 9000
3. The difference of 4528 and its predecessor is
 - a. 0
 - b. 1
 - c. 4527
 - d. 4529
4. 6349 is the _____ of 6350.
 - a. predecessor
 - b. successor
 - c. zero
 - d. number itself
5. $1529 - 0 =$ _____
 - a. 1529
 - b. 1520
 - c. 15290
 - d. 0

C. Fill in the blanks. **ANS**

1. 1 less than 256 _____
2. 1 less than 307 _____
3. 10 less than 2138 _____
4. 10 less than 679 _____
5. 100 less than 452 _____
6. 100 less than 340 _____
7. 1000 less than 1726 _____
8. 1000 less than 3450 _____



Worksheet

A. Arrange in columns and find the difference. **ANS**

1. $119 - 80$
2. $705 - 204$
3. $892 - 644$
4. $5000 - 4905$
5. $5122 - 2014$
6. $7012 - 862$

B. Solve the sums. **ANS**

1. $989 + 125 - 237$
2. $241 + 133 - 123$
3. $876 + 241 - 404$
4. $9669 + 112 - 732$
5. $4275 + 481 - 2137$
6. $9689 + 412 - 7237$



Subject Link

SCIENCE

Many birds migrate to India during the winter. Solve the following story sums. **ANS**

1. 237 Siberian cranes flew together from Siberia. If 152 of them arrived in the Keoladeo Ghana National Park, how many more birds are on their way?
2. Six hundred gadwalls (brown ducks) have settled in Bhopal for the winter. 378 of them were able to find insects to eat, while the others are still looking. How many gadwalls are still looking for insects to eat?
3. 1052 spotted redshank females have laid eggs in marshy areas of Haryana. 752 of them have already left for their home in Scandinavia. How many are left?
4. 4295 rosy starlings have migrated to Kerala and Tamil Nadu. If 2598 rosy starlings are in Kerala, how many are in Tamil Nadu?

