

Subtraction by Borrowing



Subtraction by borrowing (Preparation)



10 rupees means 10 coins of 1 rupee each.



100 rupees means 10 notes of 10 rupees each. It also means 100 coins of 1 rupee.



If there are 10 sugarcane in a bundle, then 10 such bundles means 100 sugarcane.

Sonu : I have 2 notes of hundred rupees. I have to give Nandu 70 rupees.

Salma : How will you do that?

Sonu : I will exchange one hundred-rupee note for 10 ten-rupee notes.

Nandu : You could give me 7 ten-rupee notes from those.

Salma : Then Sonu will be left with 1 hundred-rupee note and 3 ten-rupee notes.

Sonu : Right. I will have 130 rupees left.

1 Hundred = 10 Tens

2 Hundreds = 1 Hundred 10 Tens.

4 Hundreds = 3 Hundreds 10 Tens.

3 Hundreds = 2 Hundreds 10 Tens.

7 Hundreds = 6 Hundreds 10 Tens.

5 Hundreds = 4 Hundreds + Tens.

6 Hundreds = Hundreds + 10 Tens.

- ◆ When we subtract, sometimes we have to untie 1 hundred or 1 ten. We need to untie only one ten or one hundred, even when there are many hundreds or tens.

3 hundred

Let us untie 1 hundred and make 10 tens.

3 hundred means 2 hundreds and 10 tens

2 hundred

Let us convert 1 hundred into tens and 1 tens into units.

2 hundred means 1 hundred and 10 tens.
It also means 1 hundred 9 tens and 10 units.

Subtraction : By untying a ten

- ◆ Study the example given below.

T	U
5	1
- 2	4

I have 51 rupees. Five 10-rupee notes and a one-rupee coin. I have to pay a shopkeeper 24 rupees.

I cannot give 4 units from 1 unit. So, I'll exchange one 10-rupee note for 10 single rupees.

T	U
4	11
5	1
- 2	4
2	7

Now I have 4 ten-rupee notes. And, these 10 single rupees along with the 1 single rupee I already had makes 11 single rupees.

I shall give 4 single rupees from the 11 single rupees. So, taking away 4 from 11, I will have 7 single rupees. Write these 7 under the units.

Now I'll subtract the tens. Subtracting 2 tens from 4, 2 tens remain.

The answer is 27. Thus, I have 27 rupees left.

- ◆ Subtract.

T	U
5	12
6	2
- 2	7
3	5

T	U
7	3
- 4	5

T	U
8	1
- 5	8

T	U
9	0
- 6	9

Subtraction : By untying a hundred

- ◆ Nandu has 5 notes of 100 rupees, 2 notes of 10 rupees and 7 coins of 1 rupee. He gave Sonu 318 rupees. How many rupees does he have now ?

H	T	U
	1	17
5	2	7
- 3	1	8
2	0	9

8 coins cannot be given out of 7 coins. So, we have to change one of the two 10-rupee notes for one rupee coins. 10 rupees from the 10-rupee note and the earlier 7 rupees. So now, we will have 17 single rupees. From these 17, we give 8. There is one 10-rupee note left. We shall give that, too. So there will not be any ten-rupee note left. We can give 3 of the 5 hundred-rupee notes.

Thus, Nandu will be left with 209 rupees.

- ◆ Subtract. $545 - 265$

H	T	U
4	14	
5	4	5
- 2	6	5
2	8	0

545 means 5 hundreds, 4 tens and 5 units. We have to subtract 265 from that. We can subtract 5 units from 5 units, zero units remain. Now, we cannot subtract 6 tens from 4 tens, but we do have 5 hundreds. We shall untie one of them. So, 4 left in the hundreds place. One hundred gives us 10 tens. These 10 and the previous 4 make 14 tens. Take away 6 tens, 8 remain. Now we subtract 2 hundreds from 4, two hundreds remain. The answer is 280.

- ◆ Subtract.

H	T	U
- 2	7	1
1	3	8

H	T	U
- 6	5	4
	5	6

H	T	U
- 7	3	1
2	4	8

H	T	U
- 8	3	5
2	5	8

H	T	U
- 5	6	7
2	4	9

H	T	U
- 6	5	0
6	4	5

H	T	U
- 7	7	5
3	9	7

H	T	U
- 6	8	0
1	5	4

◆ Subtract : 507 – 288

H	T	U
4	⁹ 10	17
5 – 2	0 8	7 8
2	1	9

8 units cannot be subtracted from 7 units. So we must untie one ten. But there is nothing in the tens place. So we shall untie one hundred and get 10 tens. When we untie one of these tens, we get 10 units. These and the first 7 units make 17 units. Subtract 8 units from them and we have 9 units left. Write them in the answer. Now, there are 9 tens in the tens place. We subtract 8 tens from them, 1 remains. Finally, 4 hundreds are left. Subtracting 2 from them, 2 hundreds remain. Write these in the answer, which is 219.

◆ Subtract : 900 – 365

H	T	U
8	⁹ 10	10
9 – 3	0 6	0 5
5	3	5

Here, 5 units cannot be subtracted from 0 units. So we need to untie a ten. But there is nothing in the tens place either. So we untie a hundred and obtain 10 tens. Then we untie one of these tens and obtain 10 units. From these, we subtract 5 units. 5 units remain. We write these in the answer. Now, we have 9 in the tens place. Subtracting 6 tens from them, we write the remaining 3 in the answer. Then we have 8 hundreds left. Subtract 3 hundreds from them and write the remaining 5 in the answer. It is 535.

◆ Subtract.

H	T	U
– 2	0	5
		6

H	T	U
– 3	0	0
	9	5

H	T	U
– 8	0	0
2	0	7

H	T	U
– 7	0	0
3	4	8

◆ Arrange vertically and subtract.

❖ 245 – 6

❖ 348 – 59

❖ 556 – 368

❖ 407 – 240

❖ 845 – 657

❖ 932 – 754

◆ Write the biggest possible three-digit number and the smallest possible three-digit number using the given digits. Subtract one from the other.

❖ 3, 5, 4

❖ 6, 5, 1

❖ 7, 2, 5

❖ 3, 4, 8

Word Problems

- There are 175 trees in Maharaj Park and 268 in Sayaji Park. How many more trees are there in Sayaji Park than there are in Maharaj Park ?

There are more trees in Sayaji Park. From their number, we shall subtract the number of trees in Maharaj Park. Sayaji Park has more trees.

H	T	U
2	6	8
- 1	7	5

Trees in Sayaji Park

Trees in Maharaj Park

More trees

- There were some books in a book shop. The shopkeeper brought 125 more. Now there are 234 books in the shop. How many were there in the beginning ?

- There are 350 girls and 215 boys in a school. How many more girls are there than boys ?

- Mary had 500 rupees. She bought books worth 275 rupees. How much money will be left with her ?

- Using the given information, make word problems of your own and solve them.

Information : Beads with Aman : 325;
beads with Sulabha : 150.

Problem : Aman has 325 beads and Sulabha has 150. How many more beads should Sulabha take so that they will both have an equal number of beads ?

Sulabha should take beads.

H	T	U
3	2	5
- 1	5	0

Beads

Beads

- Using the given information, make word problems of your own and solve them.

- 257 beads, 300 beads
- 188 mango trees, 275 guava trees
- 195 black bicycles, 100 red bicycles
- 324 *happos* mangoes, 268 *paayari*
- 932 sacks of wheat, 750 of jowar
- 168 rupees, 622 rupees

Addition and Subtraction

◆ Solve the following problems orally.

- ❖ If Malti has 15 blue and 7 red balloons, how many balloons does she have altogether ?
- ❖ Ajit had some seeds. Sagar gave him 25 more. Now Ajit has 65 seeds. How many seeds did Ajit have before ?
- ❖ There are altogether 80 rose and jasmine flowers in a basket. Thirty of them are roses. How many jasmine flowers are there in the basket ?
- ❖ A hundred children took part in a tree planting drive. If 60 of them were girls, how many boys participated ?
- ❖ Akbar peeled 42 potatoes. Salma peeled 35. How many more potatoes should Salma peel to equal the number peeled by Akbar ?

◆ Using the given information, make word problems of your own and solve them.

Tony has 75 books. Sonu has 40 books. Nandu has 80 books.

- ❖ How many books do Tony and Sonu have together ?
- ❖ How many more books does Tony have than Sonu ?
- ❖ How many more books does Nandu have than Tony ?
- ❖ How many books should Sonu buy so that Tony and Sonu can have an equal number of books ?

◆ Make problems of your own and solve them.

- ❖ 150 red marbles, 220 blue marbles, 75 green marbles
- ❖ Salma's marks - 272, Nandu's marks - 245, Sonu's marks - 331.

The scoreboard : ❖ Ashok - 110 ❖ Salim - 92 ❖ David - 48

