

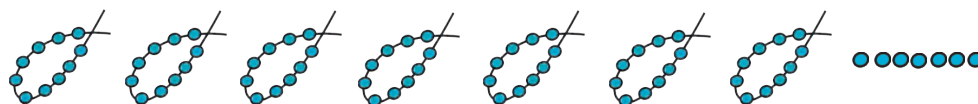
Part Two

Addition by Carrying Over

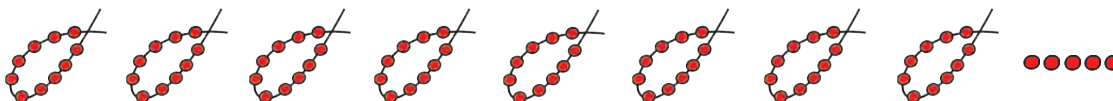


Salma has 7 strings of ten and 7 single beads which make 77 beads. Sonu has 8 strings of ten and 5 single beads. That makes 85 beads.

Salma



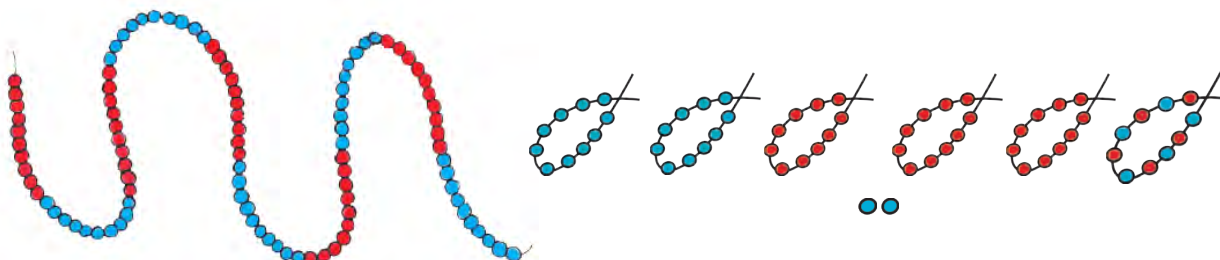
Sonu



When they put together the strings and beads that the two of them have, they got 15 strings of ten and 12 single beads.

Now, 10 units is one ten. So, they made one string of ten using 10 of the 12 single beads. So, they had two single beads left. Now, they had 16 strings of ten altogether.

10 tens make a hundred. So, they strung together 10 strings of ten and got 1 string of hundred. Then they had 6 strings of 10 left over.



Thus, on bringing together all their beads, they got 1 string of hundred, 6 strings of ten and 2 single beads. That is, they have 162 beads.

◆ Write the proper numbers in the empty boxes.

12 T means 1 H 2 T

15 T means H T

17 T means H T

18 T means H T

21 T means H T

1 H 2 T = 12 T

1 H 4 T = T

3 H 2 T = T

4 H 3 T = T

5 H 9 T = T



■ Addition by carrying over

$$\begin{array}{r}
 1 \text{ H} \quad 2 \text{ T} \quad 8 \text{ U} \\
 + \quad 2 \text{ H} \quad 1 \text{ T} \quad 6 \text{ U} \\
 \hline
 3 \text{ H} \quad 3 \text{ T} \quad 14 \text{ U} \\
 \quad \quad \quad \uparrow \\
 \quad \quad 1 \text{ T} \quad 4 \text{ U}
 \end{array}$$

On adding the units, we get 14 units. 14 units make 1 ten and 4 units.

Let's take this ten to the tens place. Look at the addition now.

	H	T	U
Carried over		1	
	1	2	8
+	2	1	6
	3	4	4

4 units left in the units place.

In the tens place, we add this new ten to the 2 tens and 1 ten already there. Thus, we get 4 tens. We write these under the line in the tens place. The digits in the hundreds place add up to 3. We write that in the hundreds place under the line.

Thus, the addition of the two numbers gives 3H 4T 4U that is, 344.

$$\begin{array}{r}
 1 \text{ H} \quad 5 \text{ T} \quad 2 \text{ U} \\
 + \quad 1 \text{ H} \quad 7 \text{ T} \quad 3 \text{ U} \\
 \hline
 3 \text{ H} \quad 12 \text{ T} \quad 5 \text{ U} \\
 \quad \quad \quad \uparrow \\
 \quad \quad 1 \text{ H} \quad 2 \text{ T}
 \end{array}$$

12 tens make 1 hundred and 2 tens. We write this new 1 hundred in the hundreds place. So we have 2 left in the tens place. We add the hundreds. The earlier 2 hundreds and 1 new hundred together make 3 hundreds. So the total is 325.

◆ Study the example of addition given below.

$$\begin{array}{r}
 \text{H} \quad \text{T} \quad \text{U} \\
 2 \quad 6 \quad 7 \\
 + \quad 5 \quad 3 \quad 9 \\
 \hline
 \\
 \hline
 \end{array}$$

H	T	U
1	1	
2	6	7
+	5	3
	0	6

1 H 0 T 1 T 6 U

Carried over

H	T	U
1	1	
2	6	7
+	5	3
8	0	6

Addition

◆ Carry out the additions below.

H	T	U
1	3	5
+	4	7
		6

H	T	U
2	4	7
+	5	1
		7

H	T	U
3	4	9
+	2	1
		9

H	T	U
4	6	5
+	3	3
		5

H	T	U
3	5	6
+		6
		5

H	T	U
5	4	9
+		1
		9

H	T	U
7	4	2
+		2
		8

H	T	U
8	5	0
+		6
		0

■ Look at the following examples.

H	T	U
1	1	
2	1	7
+	1	6
+		9
4	7	6

Now, let us add three numbers. The method is the same.

Start with the units. The units add up to 16.

16 units is 1 ten and 6 units. Write 1 at the top of the tens place and 6 under the line in the units place. Now add the digits in the tens place. We get 17 tens. 10 tens make 1 hundred. Write the hundred at the top of the hundreds place and the 7 under the line in the tens place. Finally, add the digits in the hundreds place. The hundreds add up to 4. Write this under the line in the hundreds place. The total is 476.

◆ Carry out the additions given below.

H	T	U
4	3	2
+		9
+		5

H	T	U
3	9	5
+		6
+		8

H	T	U
4	7	2
+		0
+		4

H	T	U
2	5	0
+		3
+		2

◆ Add.

$$\begin{array}{r} \text{✧} \quad 1 \ 7 \ 2 \\ + \quad 3 \ 9 \ 4 \\ + \quad 2 \ 3 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{✧} \quad 5 \ 0 \ 0 \\ + \quad 2 \ 8 \ 0 \\ + \quad 1 \ 2 \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} \text{✧} \quad 6 \ 4 \ 3 \\ + \quad \quad 5 \ 7 \\ + \quad \quad \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} \text{✧} \quad 4 \ 3 \ 7 \\ + \quad 1 \ 2 \ 3 \\ + \quad 2 \ 4 \ 5 \\ \hline \end{array}$$



◆ **Arrange vertically and add.**

♣ 235 + 146

H	T	U

♣ 346 + 129

♣ 536 + 236 + 19

♣ 749 + 128

♣ 275 + 246

♣ 382 + 199

♣ 455 + 267

♣ 545 + 165

♣ 270 + 196 + 58

♣ 370 + 195

♣ 307 + 245

♣ 162 + 375

◆ **Add in horizontal arrangement.** (If you have to carry over a number, keep it in your mind.)

♣ 396 + 45

♣ 575 + 31

♣ 644 + 308

♣ 647 + 56

♣ 742 + 9

♣ 547 + 8

♣ 609 + 8

♣ 701 + 9

♣ 199 + 1

♣ 299 + 1

♣ 399 + 1

♣ 499 + 1

♣ 599 + 1

♣ 699 + 1

♣ 799 + 1

♣ 899 + 1

♣ 999 + 1

◆ **Write such pairs of numbers which will add up to 100.**

◆ **Write such pairs of numbers which will add up to 120.**

 **For teachers :** Give the children plenty of practice in doing additions.



Word Problems

◆ Solve the following problems.

- ❖ If 365 women and 276 men took part in the Clean Village Campaign, how many people took part altogether?
Altogether, people took part.

H	T	U
3	6	5
+	7	6
2		

Women
Men

- ❖ Malatibai gifted 350 books to the school library. Vasantrao gave 400 and Jayantrao, 165. What was the total number of books gifted to the school library?

- ❖ If 230 gulmohur trees, 375 neem trees and 160 teak trees were planted on the hillside, how many trees were planted altogether?

- ❖ At the pollution testing centre, 193 two-wheeler and 297 four-wheeler vehicles were tested. What was the total number of vehicles tested for pollution?

◆ Use the given information to prepare a word problem of addition. Solve it.

Information : A tree planting drive, 345 boys, 275 girls.

Problem : If 345 boys and 275 girls participated in a tree planting drive, how many children took part in it altogether ?

Altogether, children took part in the tree planting drive.

H	T	U
3	4	5
+	7	5
2		

Boys
Girls
Children

- ❖ Story-books 50, books of poems 75. ❖ In the basket, 35 mangoes, 45 guavas.
❖ Cost of a dress, 275 rupees; cost of a shirt, 399 rupees.