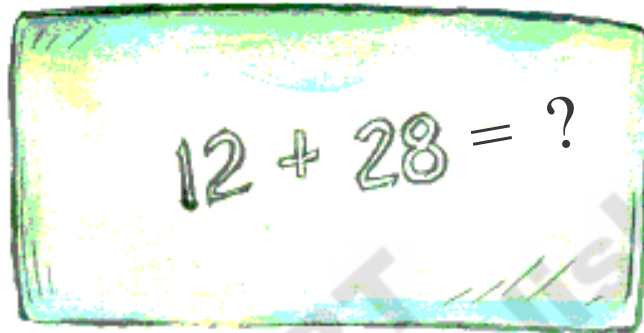


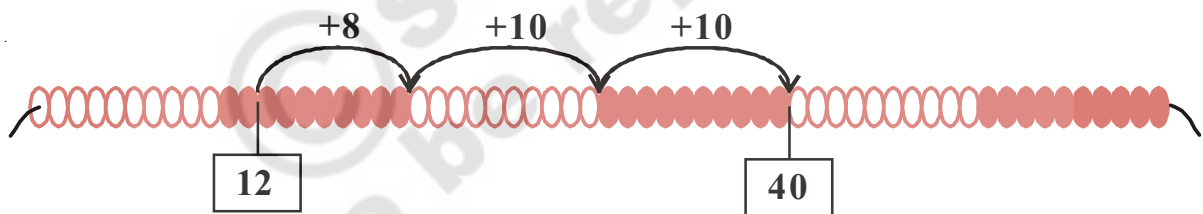
5 How many more-How many less?

The teacher hung the beads mala in class again today and wrote a problem on the blackboard. Teacher asked the children to use the beads mala to find the answer to the problem.



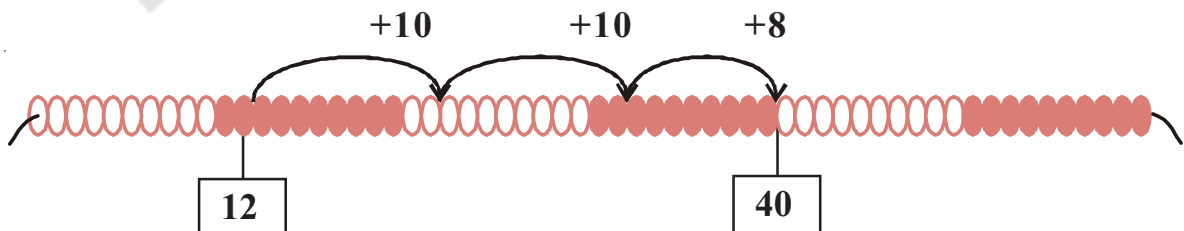
Children started solving the problem in different ways on the beads mala.

Sudha did it like this.



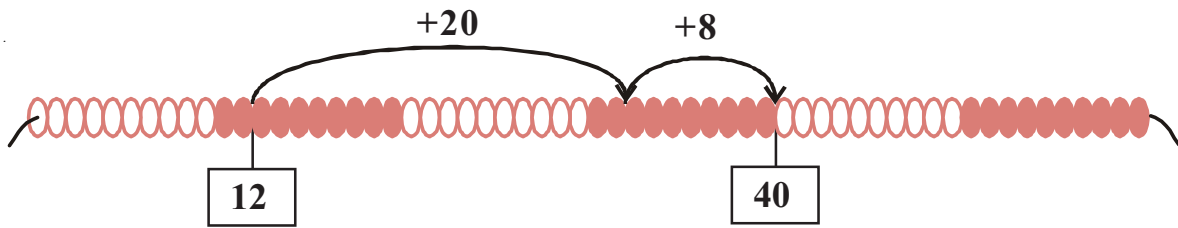
She wrote- $12 + 28 = 12 + 8 + 10 + 10 = 40$

Karuna did it like this.



She wrote- $12 + 28 = 12 + 10 + 10 + 8 = 40$

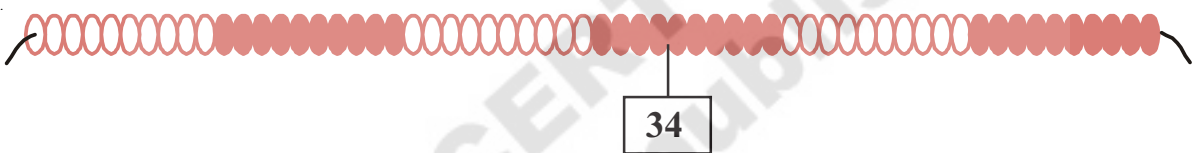
Rajendra did it like this.



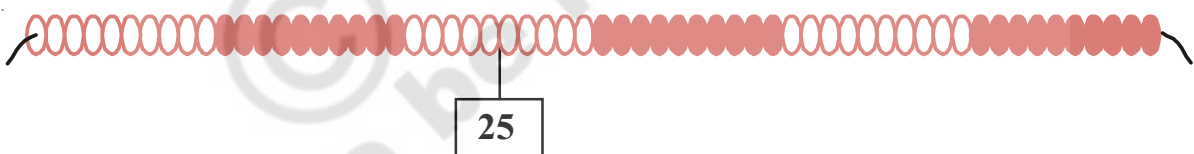
He wrote- $12 + 28 = 12 + 20 + 8 = 40$

Now, solve the following on the beads mala in whichever way you want and state the sum and also write.

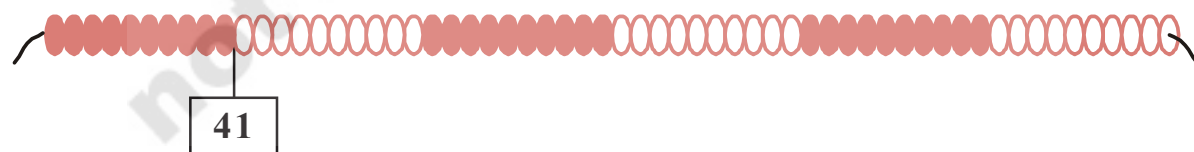
(a) $34 + 16 =$



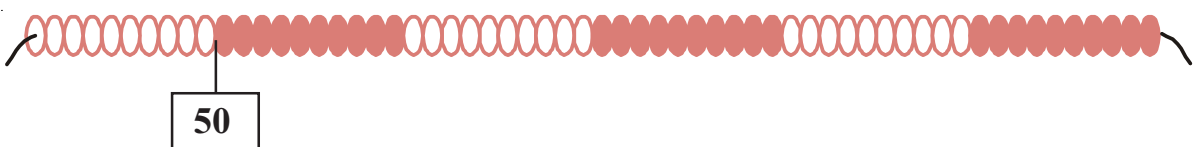
(b) $25 + 23 =$



(c) $41 + 30 =$



(d) $53 + 37 =$

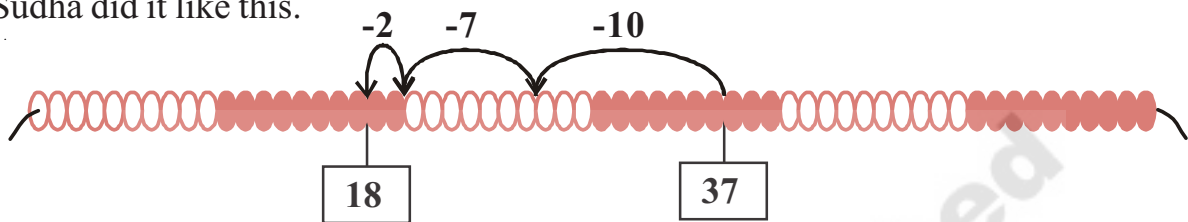


The teacher then wrote this problem on the board.

$$37 - 19 = ?$$

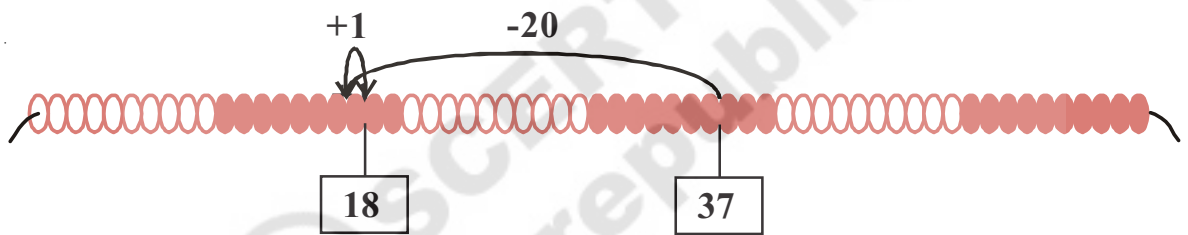
Again, children solved the problem differently on the beads mala.

Sudha did it like this.



She wrote- $37 - 19 = 37 - 10 - 7 - 2 = 18$

Karuna did it like this.



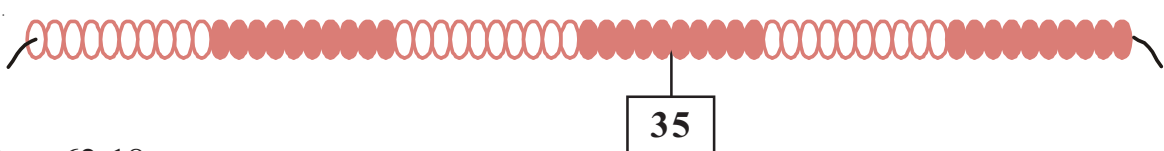
She wrote- $37 - 19 = 37 - 20 + 1 = 18$

Now, solve the following on the beads mala in whichever way you want and state the difference and also write.

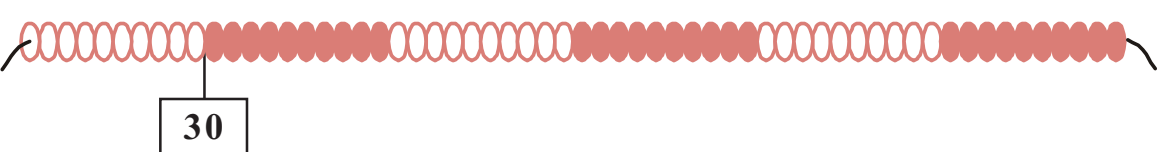
(a) $42 - 12$



(b) $35 - 27$



(c) $62 - 18$



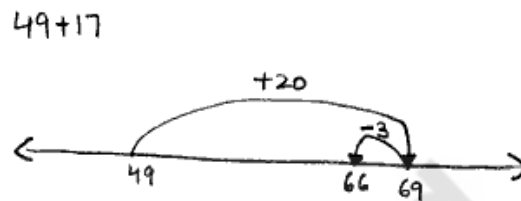
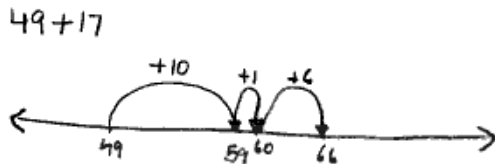
The teacher then asked the children to solve these problems in their Note books.

(a) $49 + 17$

(b) $83 - 24$

Sudha did it like this-

Kamla did it like this-

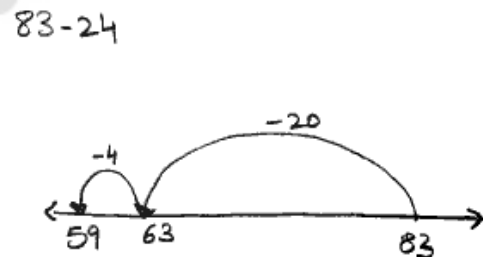
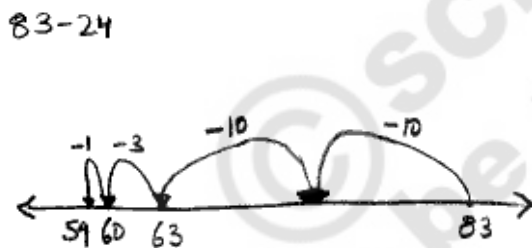


$49 + 17 = 49 + 10 + 1 + 6 = 66$

$49 + 17 = 49 + 20 - 3 = 66$

Sudha did the subtraction like this-

Kamla did it like this-



$83 - 24 = 83 - 20 - 3 - 1 = 59$

$83 - 24 = 83 - 20 - 4 = 59$

Do This

1. Solve the following using number line.

(a) $46 + 37 = ?$

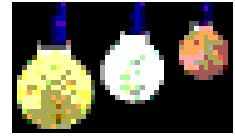
(b) $63 - 35 = ?$

(c) $77 - 29 = ?$

(d) $42 + 38 = ?$

London Olympics Medal Winners - 2012

The London Olympics medal score-sheet given below is incomplete. Can you complete it?



Country	Gold	Silver	Bronze	Total
America	46	29	29	
China	38	27	23	
Britain	29	17		65
Russia	24		32	82
Korea	13	8		28
France		11	12	34
Australia	7	16	12	
Italy	8		11	28
Hungary		4	5	17
Japan	7	14		38

- How many more medals did America get than Italy?
- How many lesser medals did Korea get than Russia?
- How many more medals does China need to get an equal number of medals as that of America?
- Make more problems on addition and subtraction based on the table given above.

Try This

Fill the blanks and make more problems like ones given below.

(a) $27 + 52 = 79$

(b) $73 - 41 = 32$

$79 - 52 = \underline{\quad}$

$32 + \underline{\quad} = 73$

(c) $36 + 56 = 92$

(d) $91 - 37 = 54$

$92 - \underline{\quad} = 56$

$\underline{\quad} + 37 = 91$

Do not find the exact answer. Just estimate!

Sridhar and Gayatri have gone to a jathara. Lets see what they are up to.

Sridhar spent ₹ 68 on food and ₹ 99 on toys at the jathara. About how much money did Sridhar spend at the jathara?

Its always easy to add numbers when they are in tens. I spent ₹ 68 on food. 68 is closer to 70 than 60, so I can say that I spent about ₹ 70 on food. Similarly, I spent about ₹ 100 on toys. So I spent about $70 + 100 = ₹ 170$ in the jathara.



I had about ₹ 100 when I went to the Jathara and spent about ₹ 40. So I have about ₹ 60 left with me.



Gayatri had ₹ 98 when she went to the jathara. She spent ₹ 42. About how much money does she have left with her?

Do This

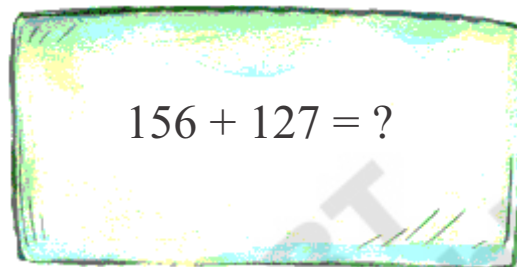
Now, can you estimate the answers of the following problems?

- Sandhya spent ₹ 91 on fruits and ₹ 82 on vegetables. About how much money did he spend in all?
- Gopal went to the market with ₹ 78. He spent ₹ 29. About how much money does Gopal have now?
- Somaiah earned ₹ 89 on Monday and ₹ 57 on Tuesday. About how much money did Somaiah earn in all?
- There are 87 trees in a grove. During a storm 28 fell down. About how many trees are still standing in the grove?

- (e) About how much is the sum of 58 and 33?
- (f) About how much is the difference between 91 and 33?
- (g) Kamal bought 84 candles for Diwali. He used 28 candles a day before Diwali. About how many candles are left for Diwali day?

Doing addition and subtraction of bigger numbers

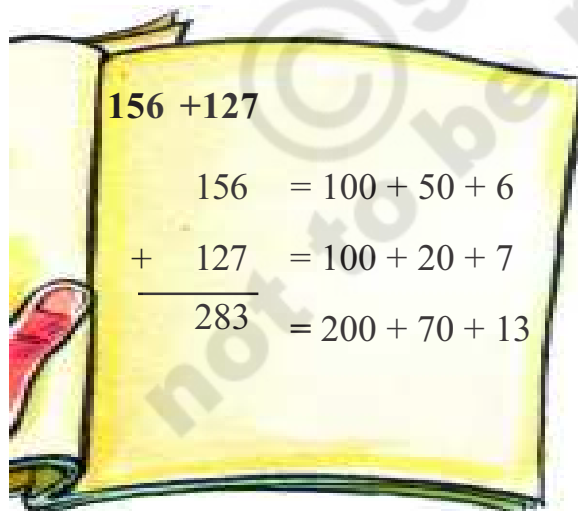
The teacher is doing addition of bigger numbers in class today. He wrote a problem on the board.



$$156 + 127 = ?$$

Whether the sum be bigger than 300 or smaller than 300?

The children did the problem in their notebook.



$$\begin{array}{r}
 156 + 127 \\
 156 = 100 + 50 + 6 \\
 + 127 = 100 + 20 + 7 \\
 \hline
 283 = 200 + 70 + 13
 \end{array}$$



Sudha

I split both numbers into hundreds, tens and ones. Then I added the hundreds to the hundreds, the tens to the tens and the ones to the ones.

$$\begin{array}{r}
 1 \\
 156 \\
 + 127 \\
 \hline
 283 \\
 \hline
 \end{array}$$



George

First, I placed the numbers one below the other such that the digits in the ones, tens and hundreds place are placed one below the other. Then, I added the digits in the ones place. After this I added the digits in the tens place. To this I added the ten I had carried forward from the ones place. Last I added the digits in the hundred's place.

Teacher: Both of you have used different methods and both of your answers are correct.

Discuss with your friends the differences in the two processes.

The next day the teacher decided to do subtraction. He wrote a problem on the board

$$279 - 146 = ?$$

Whether the difference be less than 100 or more than 100.

$$\begin{array}{r}
 279 - 146 \\
 \hline
 133
 \end{array}
 \quad
 \begin{array}{r}
 200 + 70 + 9 \\
 - 100 + 40 + 6 \\
 \hline
 100 + 30 + 3
 \end{array}$$



Sudha

Since 146 is being subtracted from 279, I wrote 146 below 279. Then I split both numbers into hundreds, tens and ones. I started from the units place. I took away 6 from 9, Then I subtracted 40 from 70 and then 100 from 200.

Then teacher changes the numbers and asks children to solve it.

$$\begin{array}{r} 6 \ 16 \\ 2 \cancel{7} \ 6 \\ - 1 \ 4 \ 9 \\ \hline 1 \ 2 \ 7 \end{array}$$



Since 149 is being subtracted from 276, I wrote 149 below 276 in such a way that the digits in the ones, tens and hundreds place are placed one below the other. I started subtracting from the units place.

Since 9 ones cannot be subtracted from 6 ones, I borrowed 1 ten from 7 tens. So I now had 16 ones from which I subtracted the 9 ones. I got 7 ones.

Then I subtracted 4 tens from 6 tens to get 2 tens and 1 hundred from 2 hundreds to get 1 hundred.

Do This

1. Kavita had ₹ 73 in her purse. She got back ₹ 28 from a friend, who owed her money. How much money does Kavita have now?
2. Somaiah earns ₹ 92 and spends ₹ 67 on food and other necessary items for his home, in the day. How much money does Somaiah take home?
3. 234 tamil movies were made in a year. If the number of telgu movies made in the same year is 67 more than the number of tamil movies, how many telgu movies were made in the year?
4. Tendulkar scored 184 runs in a match and Yuvraj Singh scored 48 runs less than him. How many runs did Yuvraj Singh score in the match?
5. There were 545 kg of rice lying in the godown. 228 kg were sent out to various shops. Now how much rice is lying in the godown?
6. Vasudha went out shopping for clothes with her mother. They bought one sari for ₹ 512 and one salwar-suit material for ₹ 309. What is the total amount they spent on clothes?
7. Shreya has ₹ 149 in her purse. She needs to give the shopkeeper ₹ 268. How much more money does Shareya need to pay the to shopkeeper?

Lets estimate again!

Laxmi had ₹ 384 in her purse when she went to the market. She spent ₹ 106. About how much money is left with her?

Just like it was easy to subtract 10s, it is also easy to subtract 100s. Laxmi took about ₹ 400 to the market and spent about ₹ 100. So she has about ₹ 300 left.

Now, you estimate and round the option closest to the answer.

- (a) Rajendra has ₹ 618 and his brother Ravi has ₹ 321. About how much money do they have in all? 800 900 1000
- (b) Ranga earned ₹ 268 in a day and spent ₹ 99 on food. About how much money did Ranga save in a day? 100 200 300
- (c) About how much more is 904 than 418? 400 500 600
- (d) There are 467 kg of wheat and 376 kg of rice in godown. About how many kg of rice is there in the godown? 800 900 1000
- (e) About how much is the sum of 589 and 218? 800 900 1000
- (f) About how much more is 386 than 298? 50 100 150

Try This



Is $9 + 8 = 8 + 9$? Is $14 + 7 = 7 + 14$? Is $29 + 42 = 42 + 29$?

Take any two numbers, add and see if the above rule is true for all?

1. Now, fill the blanks.

- (a) $12 + 9 = \underline{\quad} + 12$
- (b) $17 + 14 = 14 + \underline{\quad}$
- (c) $40 + 50 = \underline{\quad} + 40$
- (d) $39 + 67 = \underline{\quad} + 39$
- (e) $97 + 101 = 101 + \underline{\quad}$
- (f) $125 + \underline{\quad} = 143 + 125$
- (g) $\underline{\quad} + 315 = 315 + 270$

Exercise

- 36 people were travelling in a bus. 8 got down at a bus stop and 9 got on the bus. How many people are there in the bus now? When the bus reached the next stop, 14 people got down and 6 got on the bus. How many people are there in the bus now?
- Sudha has ₹ 75. Radha has ₹ 19 less than Sudha. How much money does Radha have? How much money do the both have in all?
- Kumar has ₹ 37 in his pocket and his sister Lata has ₹ 56 in her pocket. How many do they have in all? Together they spent ₹ 90 in the market. How much money is left with them?
- In an election, the winner got 273 votes. The looser got 45 votes less than the winner. How many votes did the looser get?
-  Father purchased a pant and a shirt for ₹ 349 for his son and a frock for ₹ 399 for his daughter. He gave ₹ 1000 to the shop keeper. How much money will the shopkeeper return? 
- A fruit seller purchased 840 bananas on Tuesday. He sold 612 bananas in the week and 18 got spoiled. How many bananas does he have at the end of the week?
- Somaiah earned ₹ 175 and his wife earned ₹ 125 on Monday. They spent ₹ 25 for rice, ₹ 18 for vegetables and ₹ 57 for other things on that day. How much money did they save in the day?
- In a test match, the Indian cricket team scored 517 runs. Laxman scored 137 and Dravid scored 165 runs. How many runs were scored by the rest of the team?
- Rajaiah has 348 sheep. Mallaiah has 49 less than that of Rajaiah. The number of sheep that Somaiah has; is equal to the total number of sheep that Rajaiah and Mallaiah have together. i) How many sheep does Somaiah have? ii) How many sheep do the three have all together?