

4

Vacation with My Nani Maa



0333CH04



Chirag and Nandini love their Nani Maa. She is their best friend. They love playing and learning with her.

Listening to her stories is their favourite activity.



Nani Maa shows them a “magic trick”.

You hide some marbles with your handkerchief. I shall tell you the number of marbles you have hidden.

You have 4 under your handkerchief.



Can you tell what the trick is?



Let us Do

Perform the trick on your friends. Write the numbers of hidden seeds in the table below.

Total seeds	Seeds on the table	Hidden seeds
15	12	
17	10	
19	8	

Total seeds	Seeds on the table	Hidden seeds
20	9	
23	7	
27	12	



Teacher's Note: Say a number between 1 and 9. The child has to quickly say the number which makes it 9. Repeat this task with other numbers like 10 and 20.

Both of them have brought a lot of things for their Nani Maa.



We got your favourite sweet.

I know you love to read, Nani Maa! So we got some magazines for you.



Nandini takes out Nani Maa's favourite sweet 'Balushahi'.



I too got balushahi for you.

Nandini had 7 *balushahi*

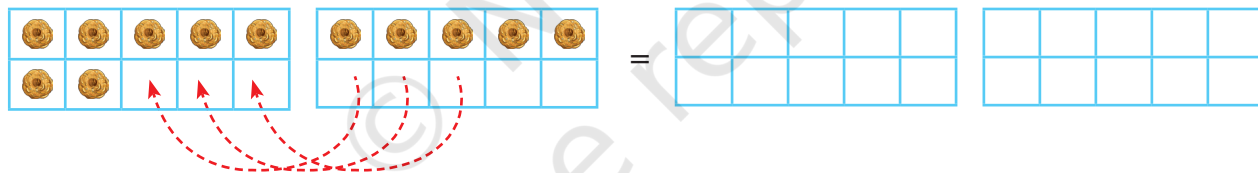
 in her box and
Chirag had 5 *balushahi*

 in his box.



How many do we have in total?

Draw the number of dots.



$$7 \text{ Balushahi} + 5 \text{ Balushahi} = \dots\dots\dots \text{ Balushahi}$$



We bought the same number of balushahi from the shop. Did you eat some of them?

Hahahaha!
I did eat some.



How many did he eat? *balushahi*

$$7 \text{ Balushahi} - 5 \text{ Balushahi} = \dots\dots\dots \text{ Balushahi}$$

Chirag got 9 story books for Nani Maa and Nandini got 7 puzzle books for Nani Maa. How many total books did the children get for Nani Maa?



..... Books + Books = Books



Let us Do

Use the tens frame to solve the following.

(i) $6 + 8 = \dots\dots\dots$

(ii) $5 + 10 = \dots\dots\dots$

(iii) $9 - 6 = \dots\dots\dots$

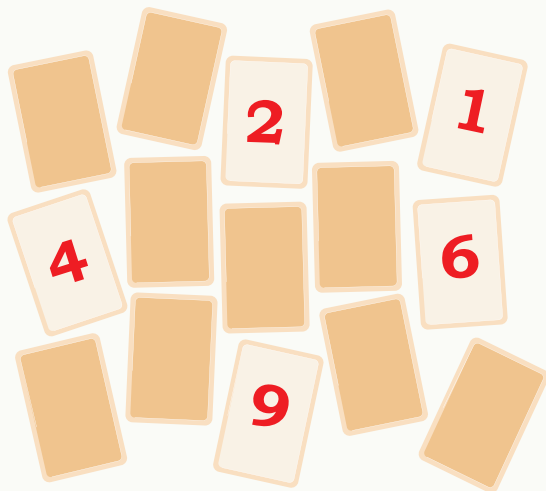
(iv) $18 - 9 = \dots\dots\dots$



Let us Play



Make four sets of number cards with numbers 1 to 10. Shuffle and spread out all cards facing down. Take turns with your friends to open one card at a time. When you open, look at your card, and the cards already opened. If any three cards make an addition or a subtraction statement, you can keep all three cards. Else, put it down opened. For example, Nandini opens 4. The numbers 2 and 6 are already opened. So Nandini can keep all three cards 2, 4 and 6. The game continues till all cards are opened. Whoever collects the greatest number of cards wins the game.





Nandini and Chirag have got their stamps to show to their friends and Nani Maa.

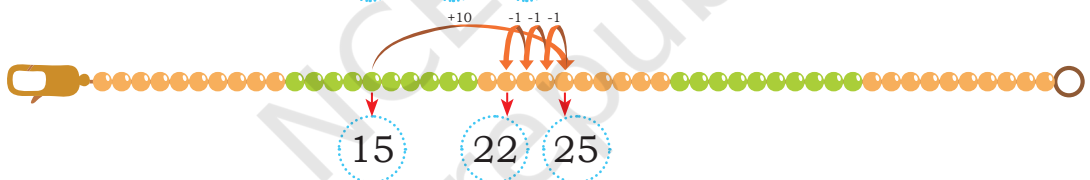
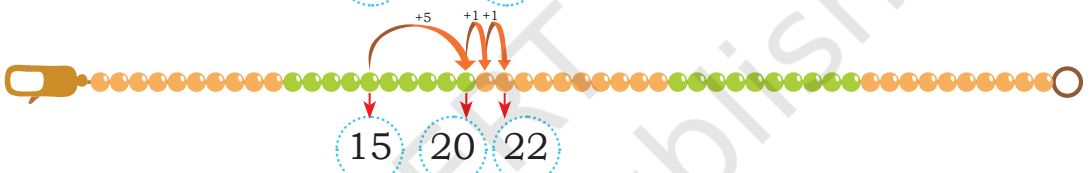
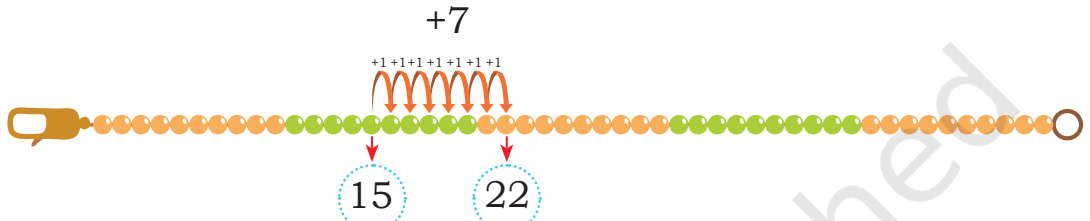
Look Nani Maa,
We have collected
15 stamps.

Let me give you
some more. Here are
7 more.



How many stamps do they have now?

Nandini, Chirag and Nani Maa figured out the answer in three different ways using their *ginladi*:



15 Stamps + 7 Stamps = 22 Stamps
Or 15 + 7 = 22



Let us Do

Nandini and Chirag have 22 stamps. Nani Maa's brother gives them his collection of 30 stamps. How many stamps do they have now?

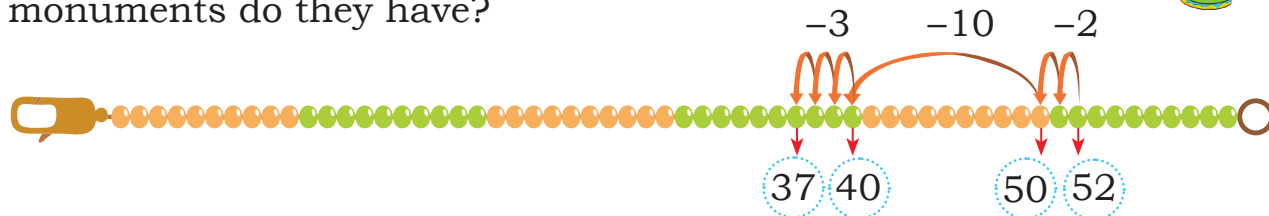


22 Stamps + Stamps = Stamps
Or 22 + =

They now have 52 stamps. Nandini and Chirag count and find that they have 37 stamps with faces of famous persons and the remaining with pictures of monuments.

How many stamps with pictures of monuments do they have?

I can do it this way.



They have 15 stamps with pictures of monuments. Can you find other ways of doing it?



$$52 \text{ Stamps} - 37 \text{ Stamps} = \quad \text{Stamps}$$

$$\bigcirc - \bigcirc = \bigcirc$$

Or

$$37 \text{ Stamps} + \quad \text{Stamps} = 52 \text{ Stamps}$$

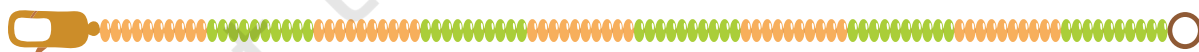
$$\bigcirc + \bigcirc = \bigcirc$$

Nani Maa, we have 52 stamps now.



Next time when we come, we will have 75 stamps!

How many more stamps will they need? Figure it out using the number line.



$$\bigcirc \text{ stamps} + \bigcirc \text{ stamps} = \bigcirc \text{ stamps}$$

$$\text{Or, } \bigcirc + \bigcirc = \bigcirc$$



Teacher's Note: Different strategies of jumping on the number line for solving the problems should be encouraged throughout the chapter. Revise skip counting for small numbers in the class.



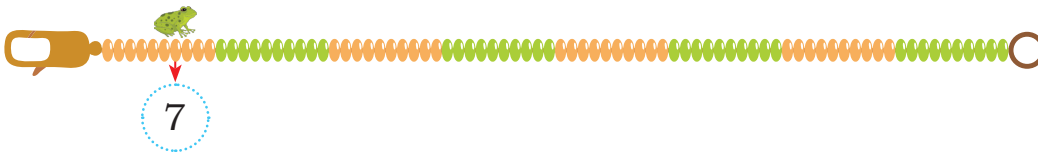
Let us Do

1. Solve using a *gintladi*.

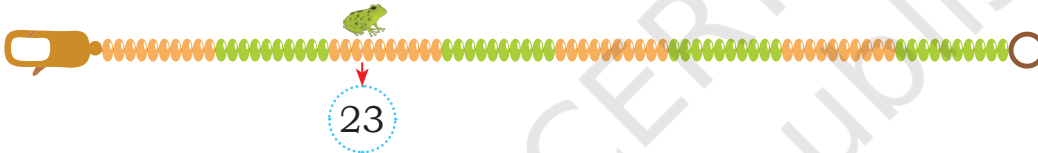
- a. $34 + 6$ b. $23 + 12$ c. $33 - 5$ d. $42 - 15$



2. A frog is jumping on the *gintladi*. He is at 7. He wants to jump 10 beads at a time. Mark the beads that he will jump on and write the numbers.



3. The frog again jumps forward by 10 each time. Mark all the places where the frog will land.

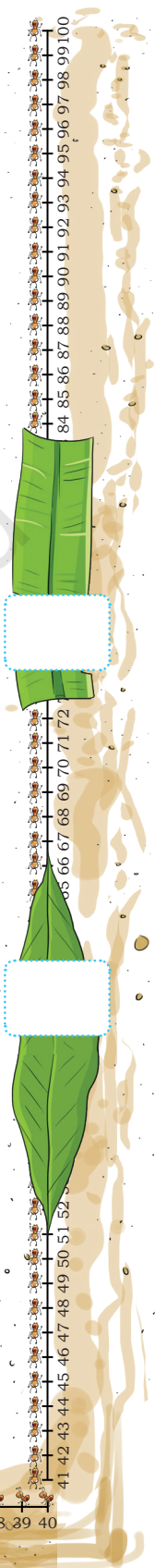


4. The grasshopper jumps backward by 10 each time. Mark all the beads that the grasshopper will jump on and write numbers.



Some ants are carrying big leaves to their homes. They will eat these leaves in the rainy season. Nani Maa can tell how many ants there are without looking under the leaves. Can you also tell how many ants there are under the leaves?

Fill the answers in the boxes provided.



5. Fill in the tables by jumping as instructed.

Jump 5

34	56	87
39		82
	66	

Jump 6

28	59	73
34		67
	71	

Jump 9

29	12	93
38		84
	39	



Let us Play

Adding and Subtracting Smartly with the Number Grid

Let us play a grid game. Each player takes turns rolling two dice to make a two-digit number, and moves the counter by the number they have made. They can choose to move forward or backward. The first to reach a number between 91 and 100 is the winner!

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10



Teacher's Note: Encourage children to add two numbers on the grid by playing the game. If you can't go forward, move backward. If none, roll again.

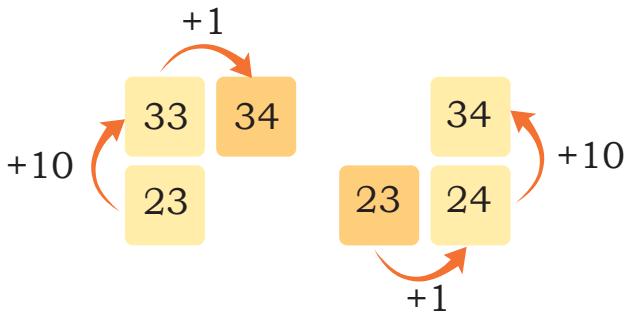


Nandini is at 23. She has got 11 on the dice as the number. She thinks of two ways of moving to 34.

Chirag is at 19. He gets 54 on the dice.



A jump from 23 to 34 is steps.



Help him move his counter to the correct number.

1. Use the number grid to answer the following. Show your thinking by drawing arrows in the grid.

- Nandini is at 45. She gets 34. She will land on
- Chirag is at 75. He gets 56. He will land on
- Nandini is at 30. She gets 66. She will land on
- Chirag is at 89. He gets 63. He will land on

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10



Teacher's Note: Introduce children to different words to express addition (more, added to, total, sum) and subtraction (take away, difference, less, reduce). Provide opportunities to children to make such jumps with other numbers and help them notice the pattern in the numbers.

MAGIC SUMS

Nandini and Chirag find some puzzles that Nani Maa had solved.

Observe the numbers. What do you notice?

Fill the boxes below. In each puzzle, all numbers 1-9 are there. The numbers in each row add up to the number in the box on the right. The numbers in each column add up to the number in the box below.

5	2	8	15
3	1	6	10
9	4	7	20
17	7	21	

	5	8	16
			22
1		4	7
11	16	18	

	3		12
	5		15
	7	4	18
7	15	23	

		6	10
			19
		9	16
10	12	23	



Add the numbers in the **blue** boxes and the numbers in the **red** boxes in each of the puzzles. What do you find?

Nani Maa was doing something in the newspaper. Nandini and Chirag looked into what she was doing.

Nani Maa, What is so magical about this Square?

2	7	6
9	5	1
4	3	8



*Magic magic magic!!!
With numbers 1 to 9
Add the numbers in a line
From left to right
And from top to bottom
Did you find the magic?
Now, try from right to left
And from bottom to top
Isn't it magical?*

*There is something more,
something more
Add the numbers on the diagonal
Isn't it magical?*

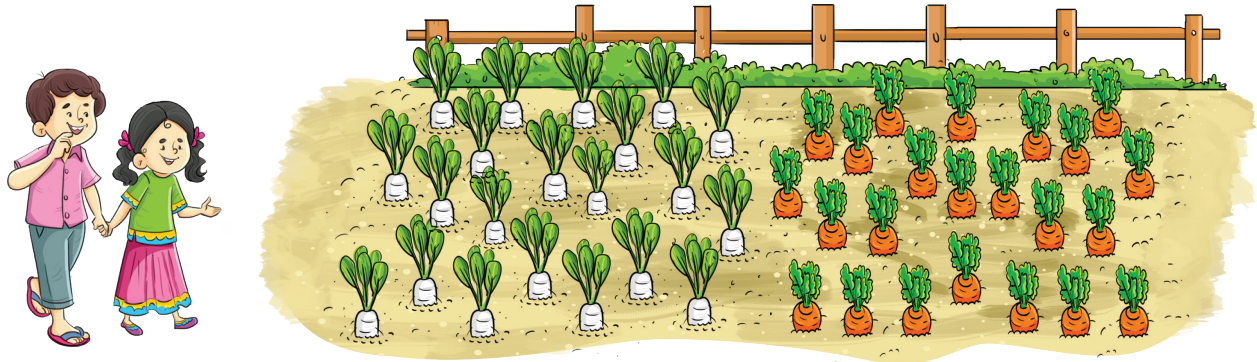
Fill the blanks to complete the Magic square

	3	
		9
6		



Teacher's Note: The teacher can create similar problems and challenge children with puzzles.

Nandini and Chirag went to their Nani Maa's field.
Nani Maa has two fields.



Nani Maa has plucked 25 red radishes and 36 white radishes.
How many total radishes has she plucked?

Nandini starts by drawing the problem on the ground.

red radish
25

white
radish 36

Estimate the total
number of radishes.
.....

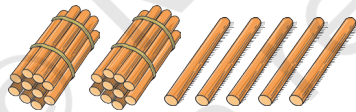


We need to add 25 and 36 to find the total number of radishes.

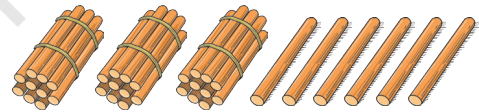


I will add
using bundles
and sticks

25 red radishes



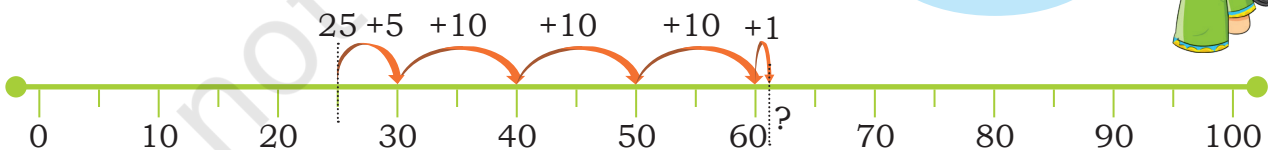
36 white radishes



25 red radishes + 36 white radishes = radishes

$$25 + 36 = \text{?}$$

See how
I do it on the
number line.



Find other ways of solving the same problem on the number line.



Nani Maa puts tomatoes and carrots in a box and writes 100 on it.



I remember she had put 65 tomatoes.

We need not count the carrots.



Nandini draws the given problem.

100

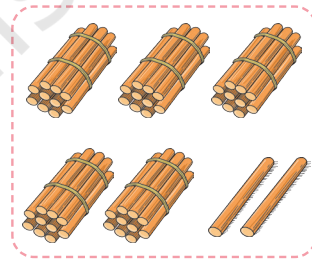
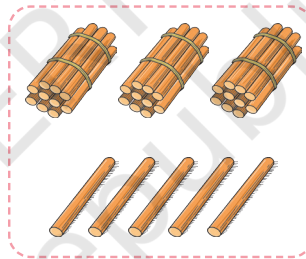
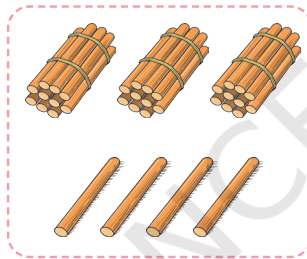
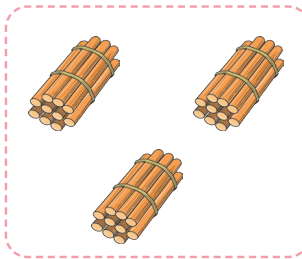
65 tomatoes

? carrots

Your estimation of carrots

.....

Circle the bundle of sticks that shows the correct number of carrots.



Solve the above problem on the number line.



..... tomatoes and carrots total vegetables

$$\dots + \dots = 100$$

.....tomatoes taken out from a box of 100 vegetables, leaves carrots

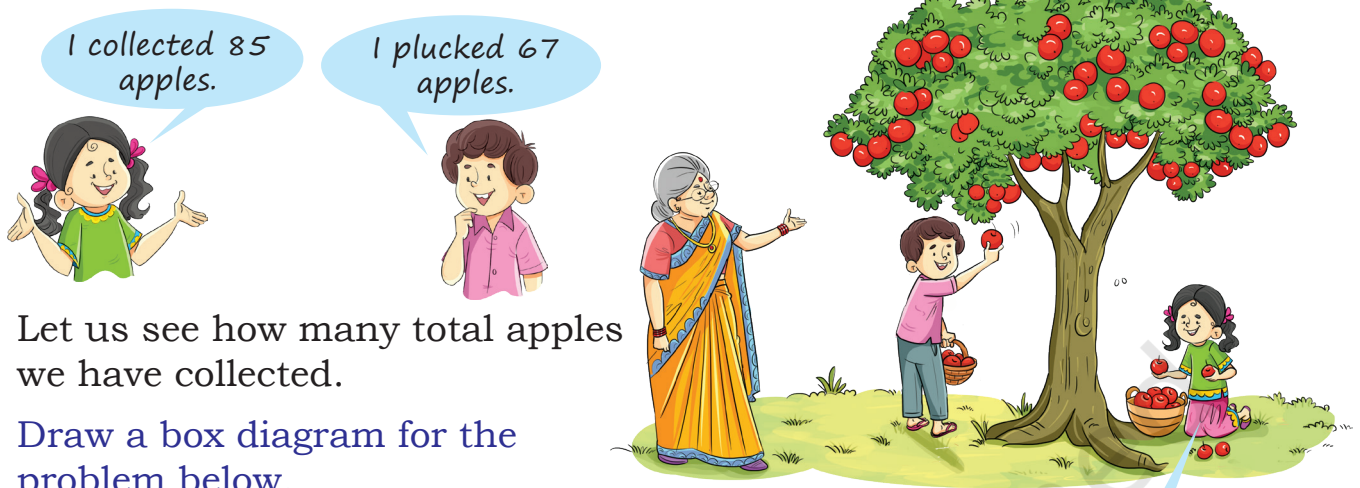
$$100 - \dots = \dots$$



Teacher's Note: Encourage children to share their thinking behind their estimates and answers.

Nani Maa asks Nandini and Chirag to pluck the ripe apples.

Who! So many of them.



Let us see how many total apples we have collected.

Draw a box diagram for the problem below.

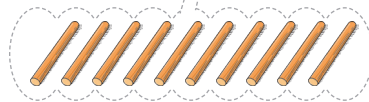
80 and 20 is 100.
So they would be more than 100 in all.

85 apples

67 apples

80 and 20 is 100.
So they would be more than 100 in all.

How many apples in all?



Try finding out the answer on the number line below.

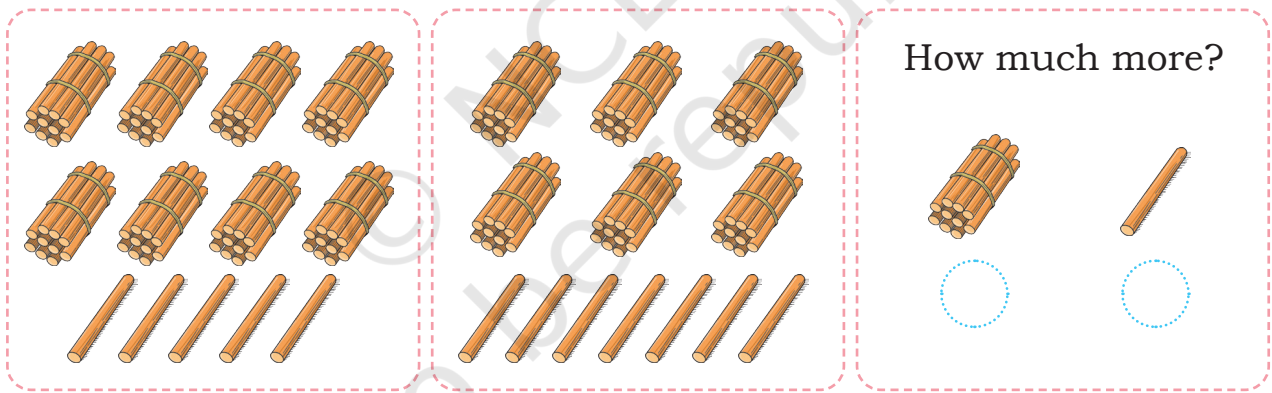
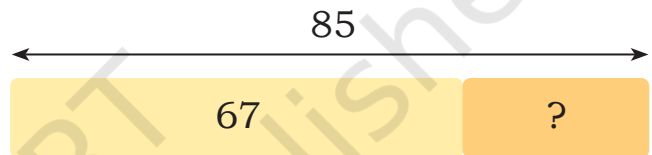


$$85 \text{ apples} + 67 \text{ apples} = \bigcirc \text{ apples}$$

$$85 + 67 = \bigcirc$$

Who collected more, Nandini or Chirag? How much more?

Chirag draws a box diagram for the problem.



Nandini's apples

Chirag's apples

..... collected apples more than



Teacher's Note: Create more such word problems. Allow children to draw and solve them using locally available materials.

Solve the following problems by first drawing the box diagrams. Use matchstick bundles or a number line to find the answer.

1. Babli didi sold 34 books on Monday and 45 books on Tuesday. How many books did she sell in the two days? How many more did she sell on Tuesday than on Monday?
2. In a cricket match at Rosary school, Team Red made 56 runs before lunch and 65 runs after lunch. How many total runs did they make?
3. Rama sells *vadas* in the school canteen. She has sold 39 *vadas* the first day. She sold 12 more the next day. How many *vadas* did she sell in these two days?
4. Gehu brings 56 plants for her terrace garden. Some plants dried up. She is left with 29 plants. How many plants dried up?
5. Choose two numbers. Make a word problem using the two numbers. Share it with your classmates.

.....



Let us Play

This game is to be played between two children. The first player should say a number between 1 and 10. The second player adds a number between 1 and 10 to the first player's number. The first player again adds a number between 1 and 10 to the previous sum. The player to reach 100 first is the winner. An example is given here:

Player 1 wins this round!

Play this game with your friends.

Player 1	Player 2	Total
9		9
	10	19
8		27
	9	36
10		46
	8	54
10		64
	10	74
9		83
	7	90
10		100



Let us Do

1. Estimate the answer and say if it will be more or less than 100. Match with the correct one.

*150 - 50 is 100.
So, 150 - 49 is more than 100.*



134 - 56
20 + 41
150 - 49
199 - 90
70 + 30 + 1
156 - 65

More than
100

Less than
100

68 - 26
95 + 10 + 5
109 - 80
63 + 26
124 + 23 + 20

2. Solve the above problems using a number line. Write the answer next to the problem.



Teacher's Note: Please note that the number line can start from any number. The distance between two numbers can be changed as required. Children can also work with open number lines without maintaining equal distances between two numbers. They should be asked to write the jumps they are taking on the number line.

