My Mathematics

Grade - 2

Student's Name	:	----------
Roll Number	:	----------
School's Name	:	----------

Government of Nepal
Ministry of Education, Science and Technology
Curriculum Development Centre
Sanothimi, Bhaktapur, Nepal

Publisher: **Government of Nepal**
Ministry of Education, Science and Technology
Curriculum Development Centre
Sanothimi, Bhaktapur, Nepal

First Edition : 2078 BS

Price Rs.

Printed by :

If you have any suggestions regarding textbook, please send them to the Curriculum Development Centre. The centre heartily welcomes suggestions from readers.

Preface

Curriculum is the central guide of education and is essential for teaching and learning. A textbook is a main tool to deliver the curriculum. Therefore, the curriculum and textbooks are revised on a regular basis so as to make it relevant, practical, qualitative and useful for the overall development of a person in the changed context. 'My Mathematics, Grade 3' is developed to address the main aim of the Basic Education; developing the fundamental skills of basic literacy and life skills in addition to arousing the interest in arts and aesthetic value. It is aligned with the intent and guiding principles carried out by the National Curriculum Framework for School Education 2076; and is developed in an integrated manner in accordance with the new Basic Level Mathematics Curriculum, 2076.

This textbook initially written by Prof. Uma Nath Pandeya, Mr. Ramesh Prasad Awasthi, Mr. Bishnu Prasad Paneru and Mr. Jagannath Adhikari. This book has been translated by Mr. Jagannath Adhikari. The contribution made by Director General Ana Prasad Neupane, Prof. Dr. Ramjee Prasad Pandit, Ms. Pramila Bakhati, Mr. Kesab Raj Phulara, Mr. Ram Hada, Ms. Nirmala Gautam and Ramchandra Dhakal is remarkable in bringing the book in this form. The language of the book was edited by Nabin Kumar Khadka. The illustrations in the book are done by Mr. Dev Koimee and the layout was designed by Mr. Nawaraj Puri. The Curriculum Development Centre extends sincere gratitude to all of them.

The textbook is a primary resource for classroom teaching. Considerable efforts have been made to make the book helpful in achieving the expected competencies of the curriculum. Curriculum Development Centre always welcomes constructive feedback for further betterment of its publications.

2078 BS

Curriculum Development Centre
Sanothimi, Bhaktapur

CONTENTS

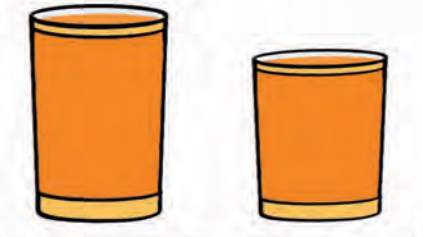
Lesson 1

Capacity

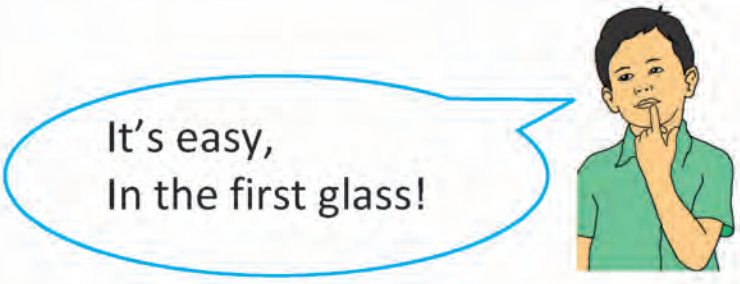
Read the story and discuss.

There are four people in our family including mother, father, brother and me. After returning home from school, we have lunch and help our mother to get water. I fill an empty small pitcher with water. Then my brother takes the small pitcher filled with water to home and pours it into a big pitcher. After pouring water five times from small pitcher, the big pitcher is filled.

Orange juice is shown in two glasses. Which glass has more juice?



First Second



Which one of the following two glasses contain more water?

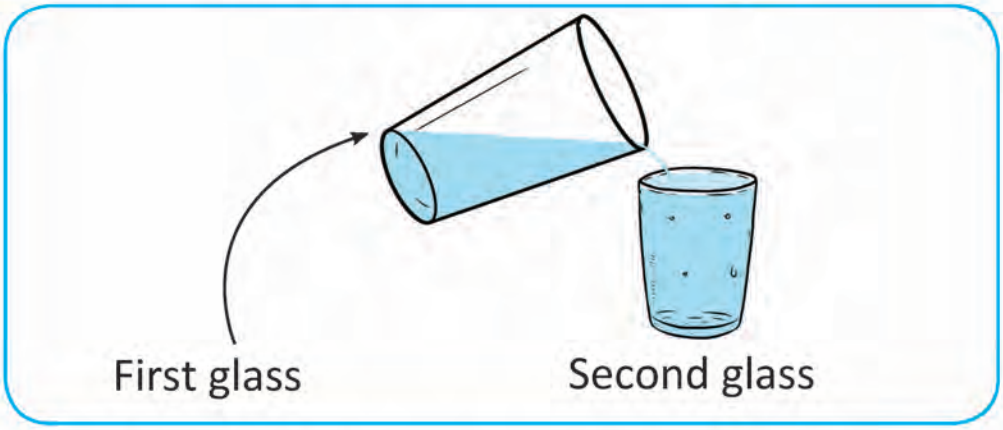
I think, the first glass contains more water.

How?

First glass

Second glass

Look! Let's pour the water in the second glass by filling the first glass



A little water remained in the first glass after filling the second one.

Yes, so the first glass contains more water.

Thank you! you are correct.

In the pictures given below, two glasses are filled with orange juice. Which glass has more juice?

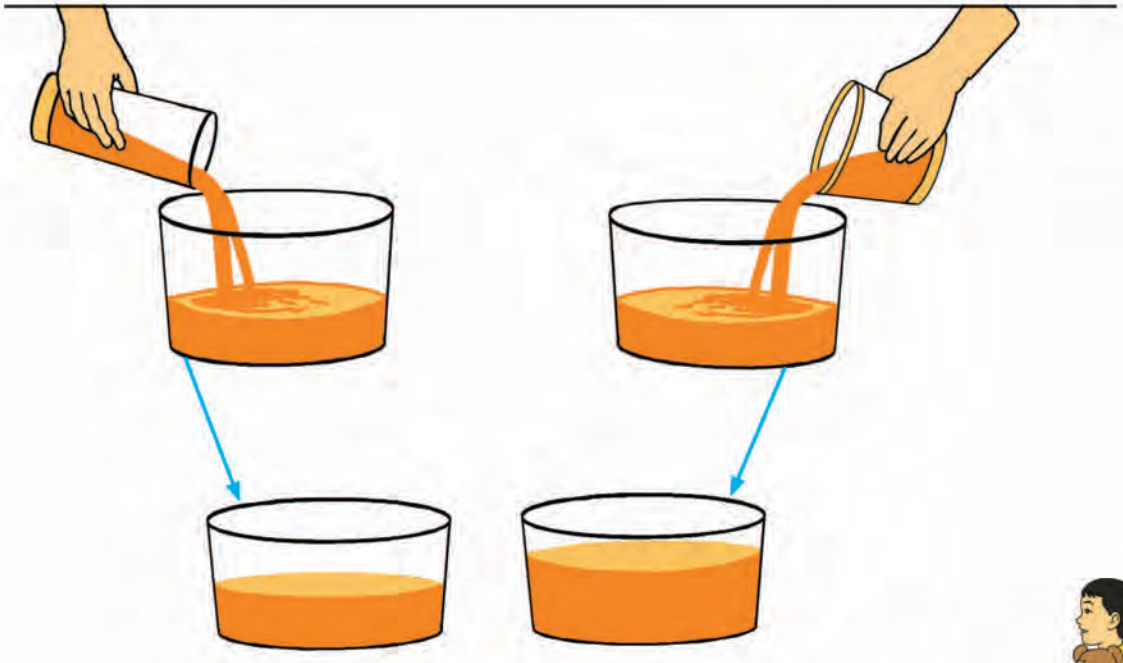
First glass

Second glass

Look! I think, there may be more juice in the second glass.

Is it! In my opinion there may be more juice in the first glass.

If so, let's compare it by putting it in the vessels of equal size!



The second glass has more juice.

There are blue and pink bottles shown in the picture below. Which bottle may have more water?

At first, let's fill the glasses with water from both bottles.

Let's compare the number of glasses now.

☐ glasses

☐ glasses

There are ☐ glasses of water in the blue bottle.

There are ☐ glasses of water in the pink bottle.

Therefore, the ☐ bottle contains more water.

Which vessel has more capacity? Find:

1.

A

B

2.

A

B

3.

A

B

Compare the capacity of two vessels in your house and write the vessel with more capacity in row 1 and the vessel with less capacity in row 2.

1.	Bowl					
2.	Glass					

Write 'M' for vessels with more capacity and 'L' for vessels with less capacity.

1. 

2. 

3. 

4. 

5. 

6. 

7. 

8. 

Which contains the most?

1.

A B C

C

3.

A B C

4.

A B C

5.

A B C

6.

A B C

7.

A B C

8.

A B C

Which contains the least?

2.

A B C

A

Collect any five vessels in your home. Guess and verify how many times a small vessel fills a large vessel, as shown in the picture below.

1.

Guessed	Actual	Right/ Wrong
..... times	..... times	.....

2.

Guessed	Actual	Right/ Wrong
..... times	..... times	.....

3.

Guessed	Actual	Right/ Wrong
..... times	..... times	.....

4.

Guessed	Actual	Right/ Wrong
..... times	..... times	.....

Me and My Family

Let's see, how much have I learnt?

1. Write 'More' for vessels with more capacity and less for vessels with 'Less' capacity.

1.

2.

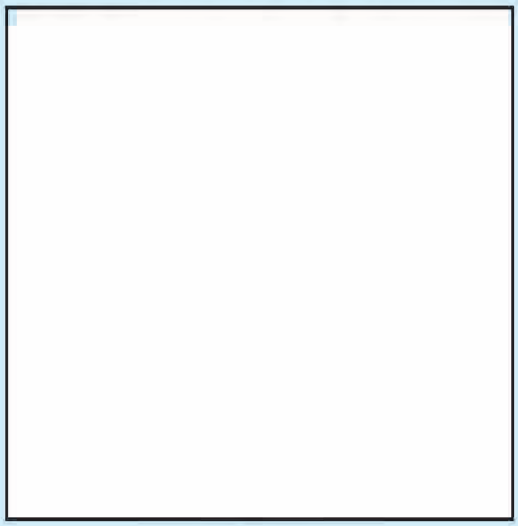
3.

4.

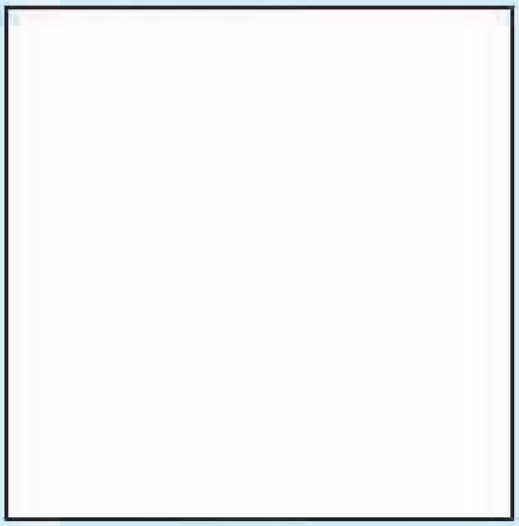
5.

6.

2. Draw pictures of a glass and a bowl of your home.



glass



bowl

Guess: The _____ contains more water.

Actual: The _____ contained more water.

How do you check?

1. .....
2. .....
3. .....
4. .....

_____ _____

Teacher's signature Parent's signature

Lesson 2

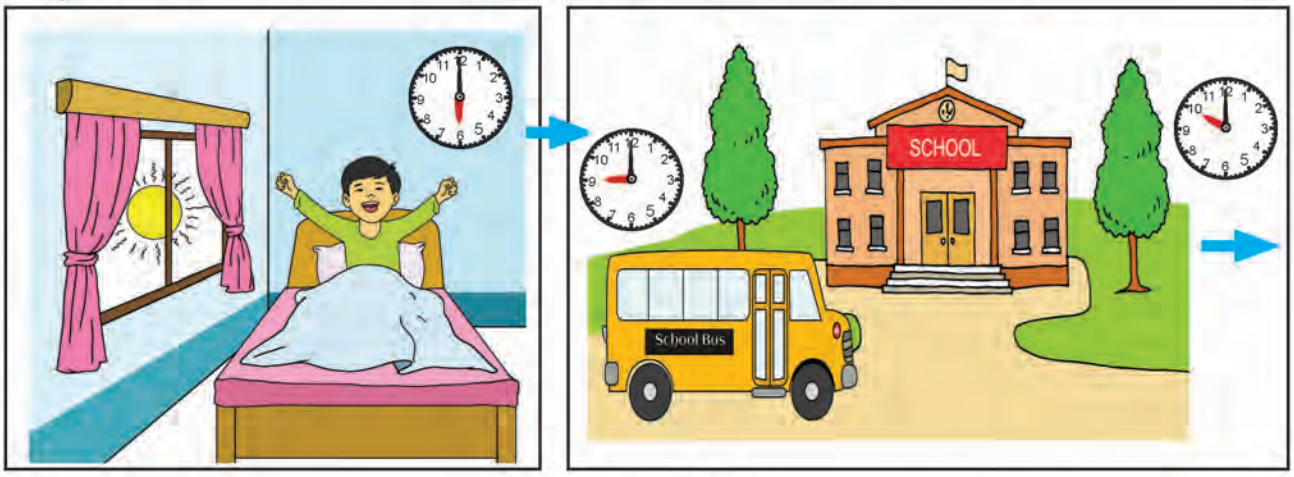
Time

Read the story and discuss.

I woke up late this morning. When I opened my eyes, the sun was shining brightly outside. The time on the wall clock was 8 o'clock in the morning. I said to my mother loudly, "Mother, I am getting late for school. Why didn't you wake me up?" The mother said, "Today is holiday on the occasion of New Year's day. Today is Saturday too. As usual, I have to go to clean the tole. Will you join me in the Saturday cleaning?"

"Ok, mom, I will also go. I can meet my friends too."

Watch the daily activities and tell the time.



The long hand has shown 12 and the short hand has shown 7. It's 7 o'clock on the clock. It is written as 7:00.

Digits on the digital clock indicates the time.

The short hand has shown 9 and the long hand has shown 12. It's 9 0'clock on the clock.

It's is written as 9:00.

The short hand on the clock indicates the hour hand and the long hand indicates the minute hand.

Look at the clocks below and tell the time.

1. 

2. 

3. 

Tell the time.

One complete turn of long hand equals 60 minutes. 60 minutes means 1 hour.

The long hand is at 6. The short hand is exactly in between 10 and 11. It's 30 past 10 on this clock. It is also called half past 10.

The long hand is at 3. The short hand is in between 1 and 2. It's 15 past 1 on this clock. It is also called quarter past 1.

The long hand is at 9. The short hand is in between 1 and 2. It's 45 past 1 on this clock, or 15 minutes to 2. It is also called quarter to 2.

Look at the clocks below and tell the time.

1. 

2. 

3. 

Look at the clocks below and tell the time.

It is denoted as 7:05 in short form.

It is 5 minutes past 7 on this clock.

Look at the clocks below and write the time in the box below the clocks.

1. 

2. 

3. 

4. 

Look at the clocks below and write the time in the box below the clocks.

1. 

2. 

3. 

Which clock shows the time 3:55? Discuss.

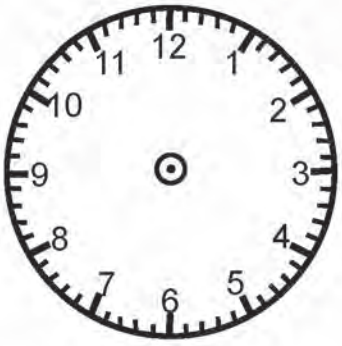
Match the clock and the time indicated by it.

06:12

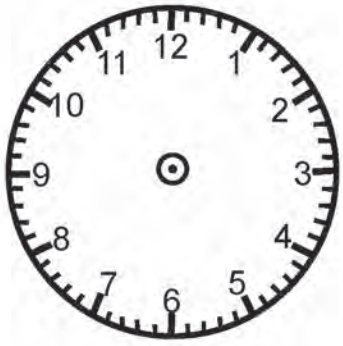
11:35

Make long and short hands on the clock according to the time given below.

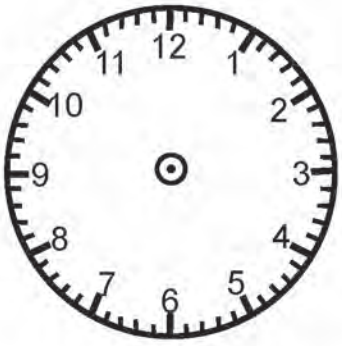
1. 9:55



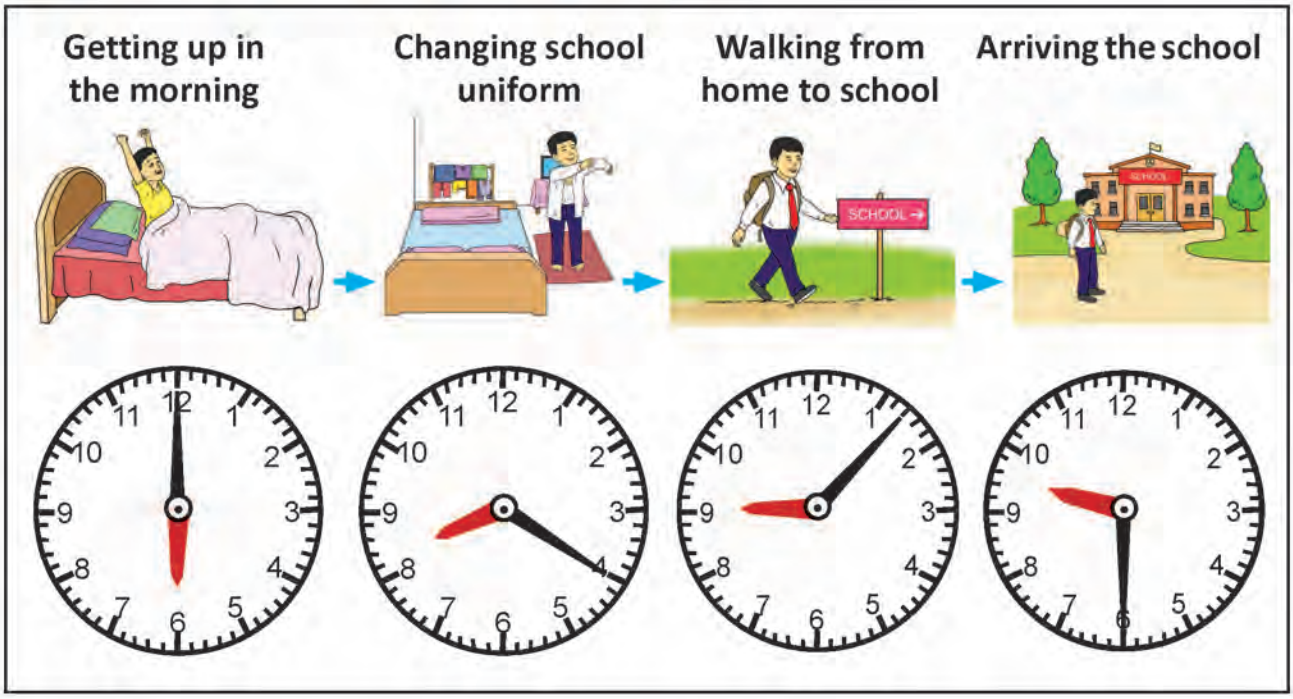
2. 2:39



3. 7:13



Answer the following questions by observing what Deepak does at what time.



(a) At what time does Deepak wake up? _____

(b) At what time does he change his clothes? _____

(c) At what time does he leave home to go to school? _____

(d) At what time does he arrive at school? _____

Show the time on the clocks as shown in the table below and write that time in the box below the clocks.

Breakfast time	Lunch time	Bed time

Look at the calendar and discuss.

Days, weeks, months and years are units of time.

1 week = 7 days

1 year = 12 months

1 year = 365 days

Generally, there are 365 days in 1 year.

How many days are there in a year? ☐

How many days are there in a week? ☐

Baishak 2078

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

(a) Which year's calendar is this? ☐

(b) Which month's calendar is this? ☐

(c) How many days are there in this month? ☐

(d) What are the dates of Saturdays in this month? ----, ----, ----, ----

(e) What are the dates of Sundays in this month? ----, ----, ----, ----

Look at the calendar and fill in the blanks.

Paush 2078

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

(a) This is the calendar of the month of Paush.

(b) The first day of this month is Thursday.

(c) The last day of this month is ____

(d) There are 4 Sundays in this month.

(e) There are ____ Tuesdays in this month.

(f) There are ____ Saturdays in this month.

(g) There are ____ Fridays in this month.

(h) The 7th day of this months is Wednesday.

(i) The 27th day of this month is Tuesday.

(j) The 12th day of this month is ____.

(k) The 5th day of this month is Wednesday.

(l) The 18th day of this month is ____.

Look at the calendar and fill in the blanks.

Chaitra 2078

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

(a) This calendar is for the month of ☐ of the year ☐.

(b) The first day of this calendar is ☐

(c) There are ☐ days in this month in total.

(d) The last day of this month, ☐ is the Wednesday.

(e) The last day of the second week which is also the 12the day of the month is on ☐.

(f) Wednesdays in this month are 2, 9, ☐, ☐ and ☐.

(g) Fridays in this month are ☐, ☐, ☐ and ☐.

(h) Tuesdays in this month are ☐, ☐, ☐, ☐ and ☐.

Look at the calendar and write the date of today.

How can we write today's date?

Today is the 2nd of Jestha, 2078 BS.
Today's date can be written as:
2078/02/02

Observe the calendar of the month of Falgun, 2078 and write the date of festivals and days in the format of year/month/day of that month.

S.N.	Festivals and days	Date

My Daily Life

Let's see, how much have I learn?

1. **Look at the clocks given below and write the time shown by the clocks.**

2. **Write the time of various activities you do and show the time on the clocks.**

Activities	Time	Time on the clocks
(a) Getting up in the morning	----------	
(b) Eating breakfast	----------	
(c) Going to school	----------	
(d) Returning from school	----------	

3. Look at your birth month in this year's calendar and fill in the blanks.

This calendar is for the month ☐ of the year ☐.

There are ☐ days in this month in total.

There are ☐ Saturdays in this month.

The 10th day of this months is ☐.

The last day of this month is ☐.

4. Observe the calendar of the month Bhadra of this year and write the date of festivals and days in the format of year/ month/day.

S.N.	Festivals/days	Date
1.		
2.		
3.		
4.		
5.		
6.		

Teacher's signature

Parent's signature

Lesson 3

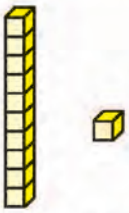
Numbers up to 1000

Numbers from 1 to 50

Count the blocks and read.

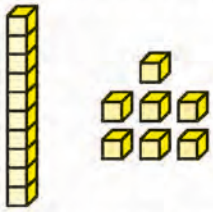
	1	One		6	Six
	2	Two		7	Seven
	3	Three		8	Eight
	4	Four		9	Nine
	5	Five		10	Ten

Count the blocks and read.



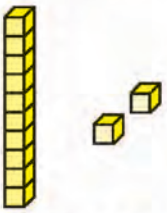
Tens	Ones
1	1

11 Eleven



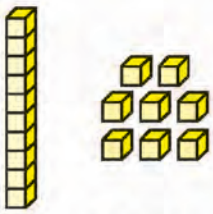
Tens	Ones
1	7

17 Seventeen



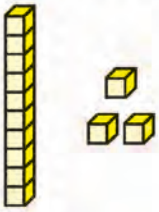
Tens	Ones
1	2

12 Twelve



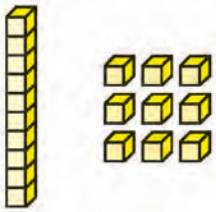
Tens	Ones
1	8

18 Eighteen



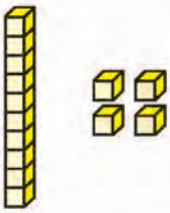
Tens	Ones
1	3

13 Thirteen



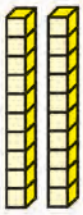
Tens	Ones
1	9

19 Nineteen



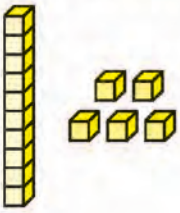
Tens	Ps
1	4

14 Fourteen



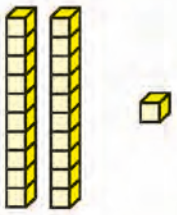
Tens	Ones
2	0

20 Twenty



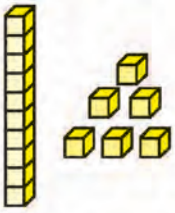
Tens	Ps
1	5

15 Fifteen



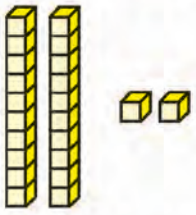
Tens	Ones
2	1

21 Twenty one



Tens	Ones
1	6

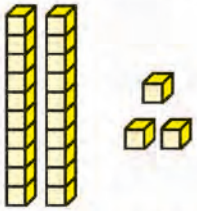
16 Sixteen



Tens	Ones
2	2

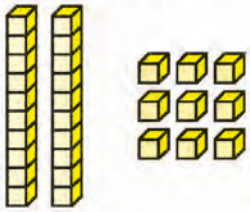
22 Twenty two

Count the blocks and read.



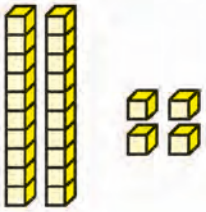
Tens	Ones
2	3

23 Twenty three



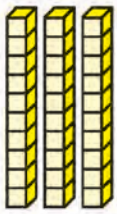
Tens	Ones
2	9

29 Twenty nine



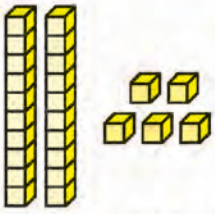
Tens	Ones
2	4

24 Twenty four



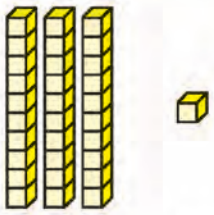
Tens	Ones
3	0

30 Thirty



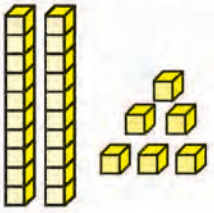
Tens	Ones
2	5

25 Twenty five



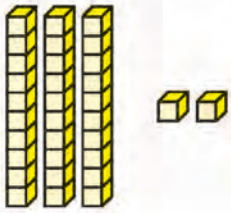
Tens	Ones
3	1

31 Thirty one



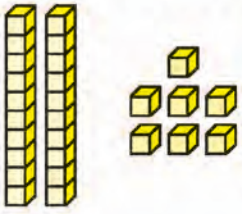
Tens	Ones
2	6

26 Twenty six



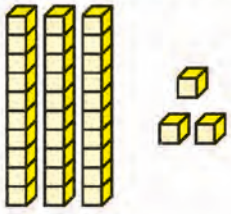
Tens	Ones
3	2

32 Thirty two



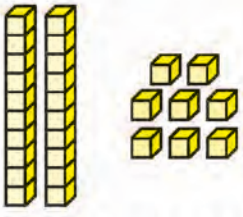
Tens	Ones
2	7

27 Twenty seven



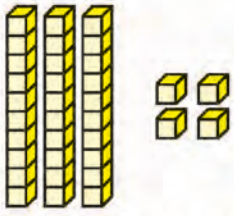
Tens	Ones
3	3

33 Thirty three



Tens	Ones
2	8

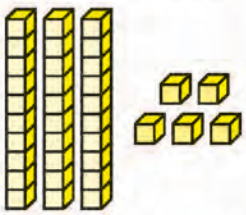
28 Twenty eight



Tens	Ones
3	4

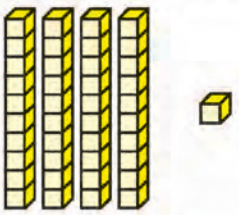
34 Thirty four

Count the blocks and read.



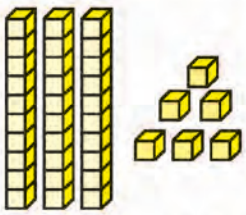
Tens	Ones
3	5

35 Thirty five



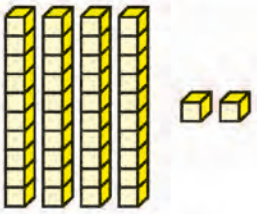
Tens	Ones
4	1

41 Forty one



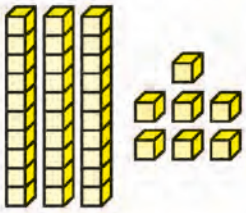
Tens	Ones
3	6

36 Thirty six



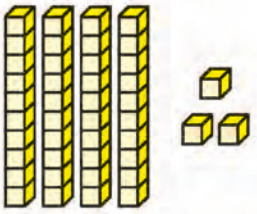
Tens	Ones
4	2

42 Forty two



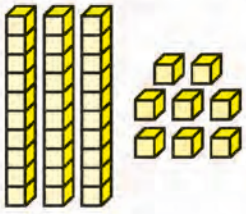
Tens	Ones
3	7

37 Thirty seven



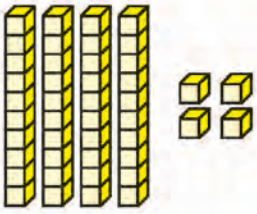
Tens	Ones
4	3

43 Forty three



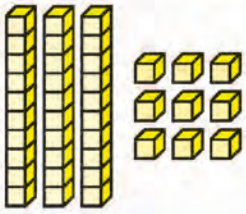
Tens	Ones
3	8

38 Thirty eight



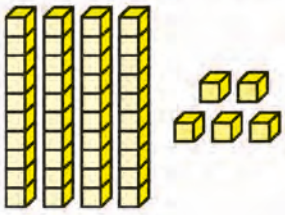
Tens	Ones
4	4

44 Forty four



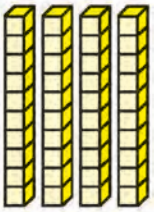
Tens	Ones
3	9

39 Thirty nine



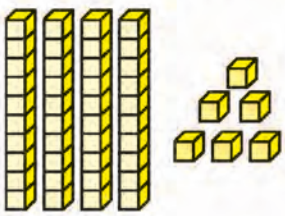
Tens	Ones
4	5

45 Forty five



Tens	Ones
4	0

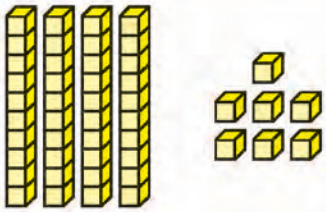
40 Forty



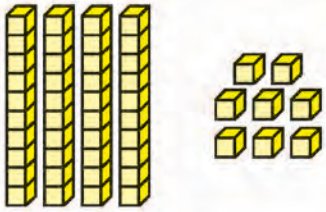
Tens	Ones
4	6

46 Forty six

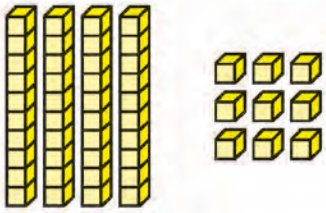
Count the blocks and read.



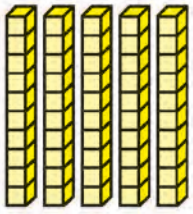
Tens	Ones
4	7
47	Forty seven



Tens	Ones
4	8
48	Fouty eight



Tens	Ps
4	9
49	Forty nine



Tens	Ones
5	0
50	Fifty

Take two dices written from 1 to 6. Roll different dice in groups of two turn by turn. Write the number using the digits shown above the dice by putting the number in ones and tens place. For example, 35 or 53. Announce the winning team of the game to the pair with the highest number.

Numbers from 21 to 50 (In words)

Read and write in words.

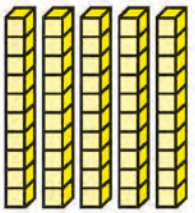
21	Twenty one	Twenty one	Twenty one	Twenty one
22	Twenty two			
23	Twenty three			
24	Twenty four			
25	Twenty five			
26	Twenty six			
27	Twenty seven			
28	Twenty eight			
29	Twenty nine			
30	Thirty			
31	Thirty one			
32	Thirty two			
33	Thirty three			
34	Thirty four			
35	Thirty five			

Read and write in words.

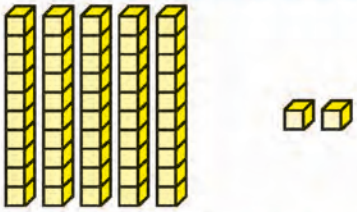
36	Thirty six			
37	Thirty seven			
38	Thirty eight			
39	Thirty nine			
40	Forty			
41	Forty one			
42	Forty two			
43	Forty three			
44	Forty four			
45	Forty five			
46	Forty six			
47	Forty seven			
48	Forty eight			
49	Forty nine			
50	Fifty			

Numbers from 51 to 100

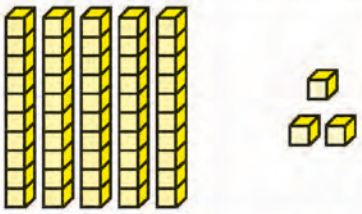
Count the blocks and read.



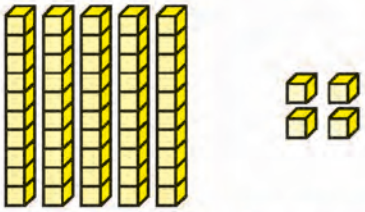
Tens	Ones
5	1
51	Fifty one



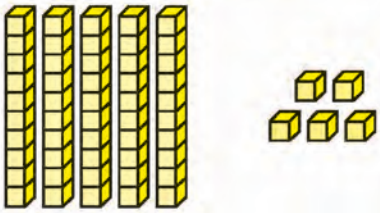
Tens	Ones
5	2
52	Fifty two



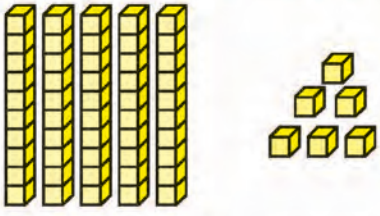
Tens	Ones
5	3
53	Fifty three



Tens	Ones
5	4
54	Fifty four

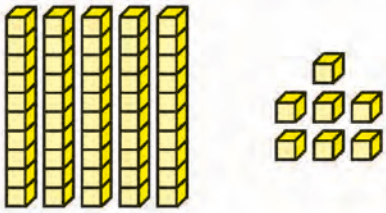


Tens	Ones
5	5
55	Fifty five



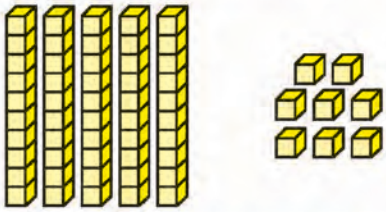
Tens	Ones
5	6
56	Fifty six

Count the blocks and read.



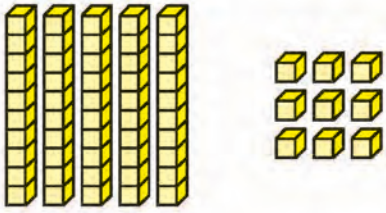
Tens	Ones
5	7

57 Fifty seven



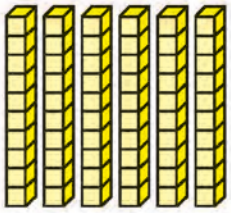
Tens	Ones
5	8

58 Fifty eight



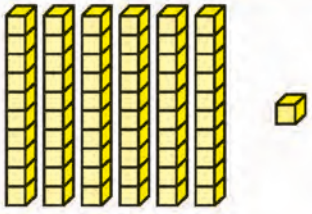
Tens	Ones
5	9

59 Fifty nine



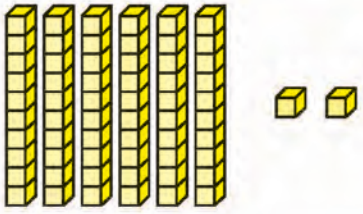
Tens	Ones
6	0

60 Sixty



Tens	Ones
6	1

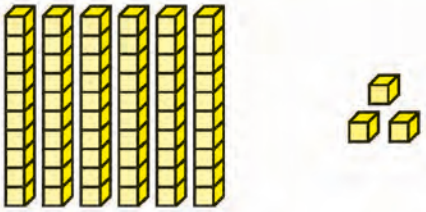
61 Sixty one



Tens	Ones
6	2

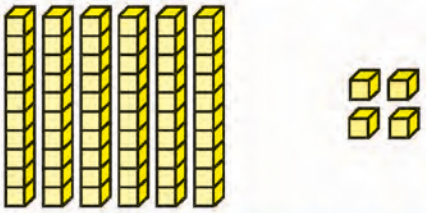
62 Sixty two

Count the blocks and read.



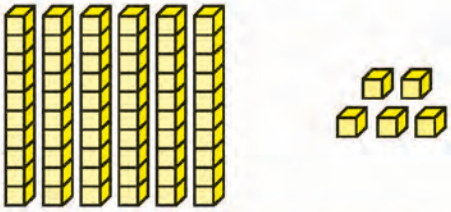
Tens	Ones
6	3

63 Sixty three



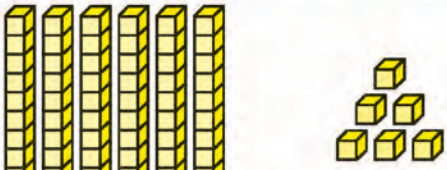
Tens	Ones
6	4

64 Sixty four



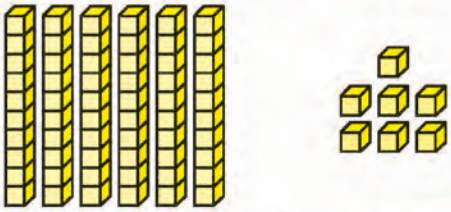
Tens	Ones
6	5

65 Sixty five



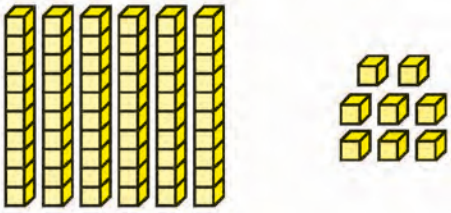
Tens	Ones
6	6

66 Sixty six



Tens	Ones
6	7

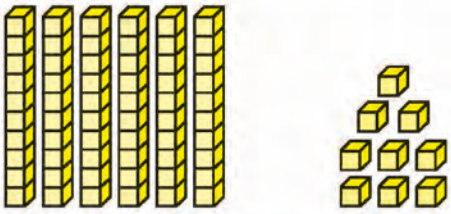
67 Sixty seven



Tens	Ones
6	8

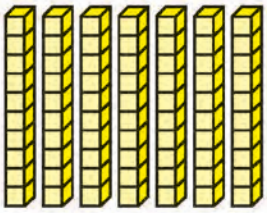
68 Sixty eight

Count the blocks and read.



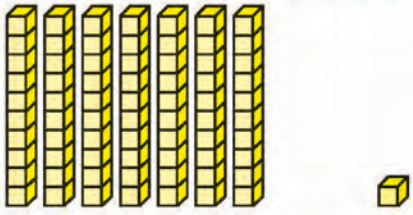
Tens	Ones
6	9

69 Sixty nine



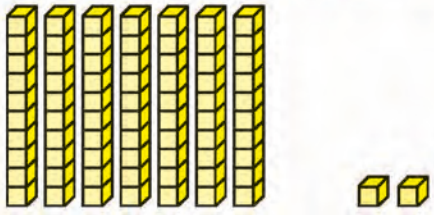
Tens	Ones
7	0

70 Seventy



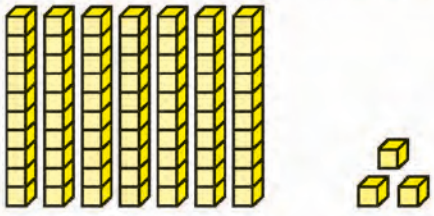
Tens	Ones
7	1

71 Seventy one



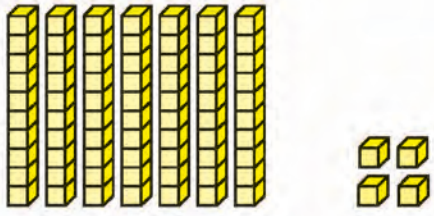
Tens	Ones
7	2

72 Seventy two



Tens	Ones
7	3

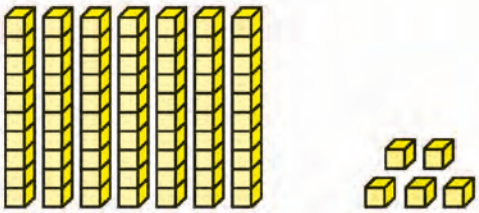
73 Seventy three



Tens	Ones
7	4

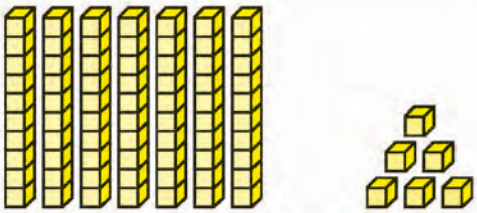
74 Seventy four

Count the blocks and read.



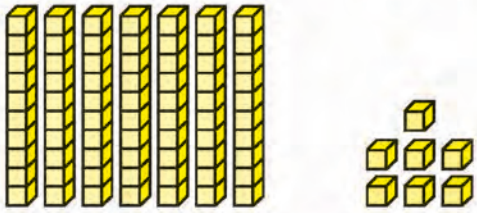
Tens	Ones
7	5

75 Seventy five



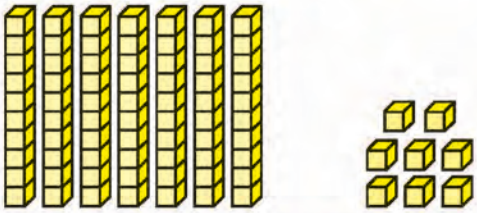
Tens	Ones
7	6

76 Seventy six



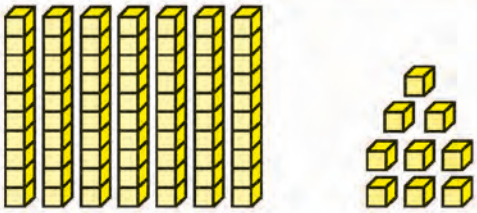
Tens	Ones
7	7

77 Seventy seven



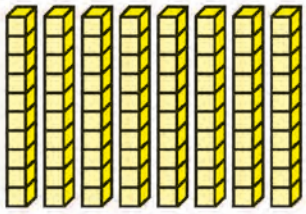
Tens	Ones
7	8

78 Seventy eight



Tens	Ones
7	9

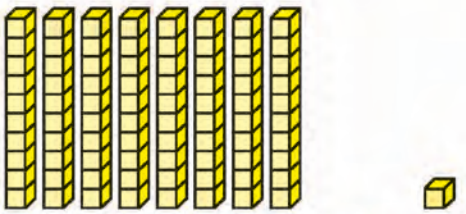
79 Seventy nine



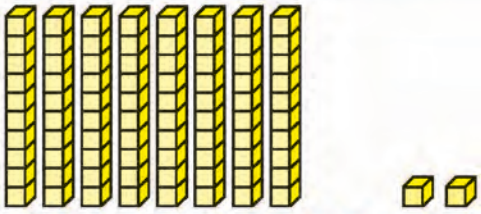
Tens	Ones
8	0

80 Eighty

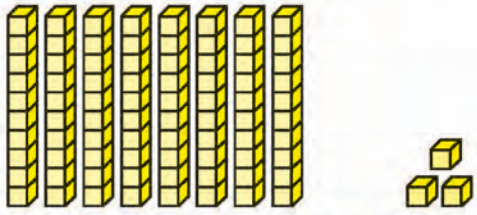
Count the blocks and read.



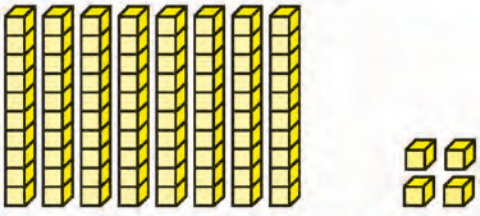
Tens	Ones
8	1
81	Eighty one



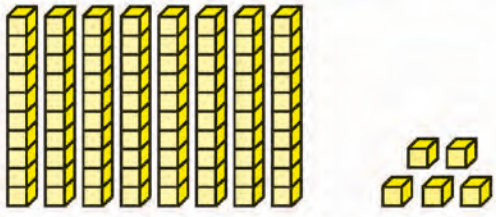
Tens	Ones
8	2
82	Eighty two



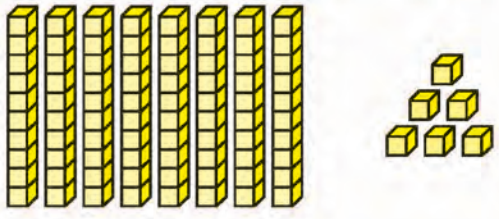
Tens	Ones
8	3
83	Eighty three



Tens	Ones
8	4
84	Eighty four

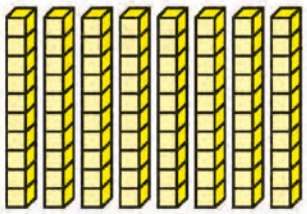


Tens	Ones
8	5
85	Eighty five

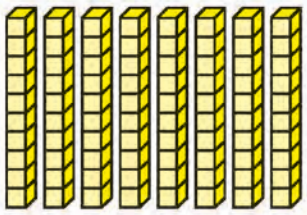


Tens	Ones
8	6
86	Eighty six

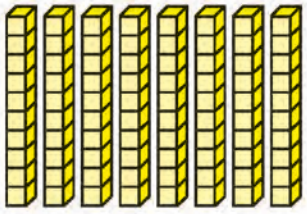
Count the blocks and read.



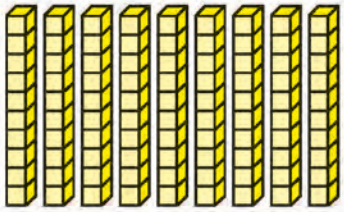
Tens	Ones
8	7
87	Eighty seven



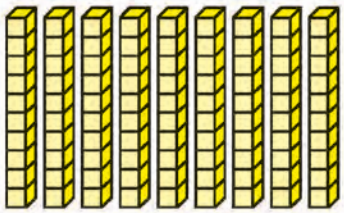
Tens	Ones
8	8
88	Eighty eight



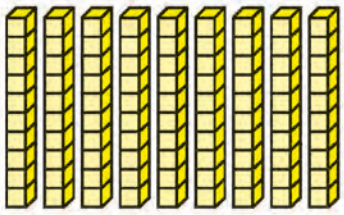
Tens	Ones
8	9
89	Eighty nine



Tens	Ones
9	0
90	Ninety

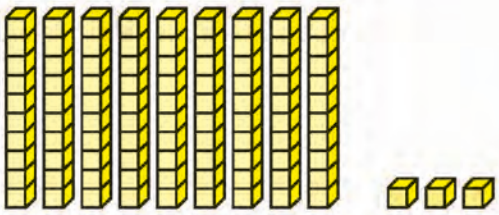


Tens	Ones
9	1
91	Ninety one



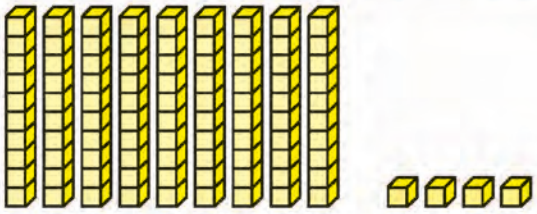
Tens	Ones
9	2
92	Ninety two

Count the blocks and read.



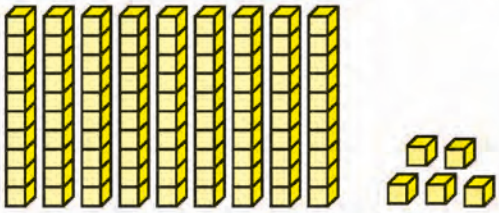
Tens	Ones
9	3

93 Ninety three



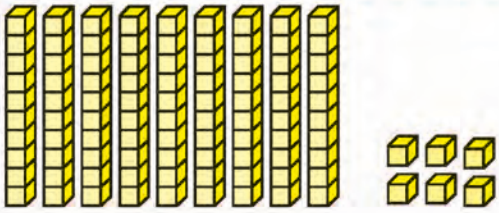
Tens	Ones
9	4

94 Ninety four



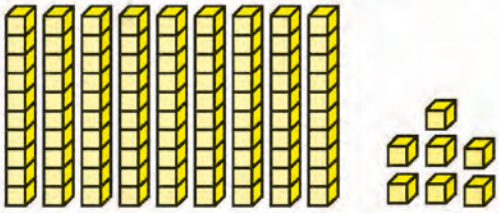
Tens	Ones
9	5

95 Ninety five



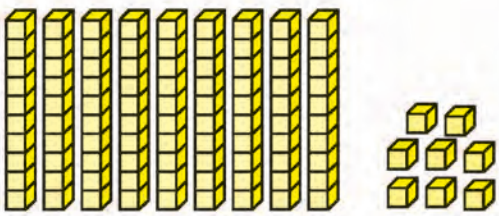
Tens	Ones
9	6

96 Ninety six



Tens	Ones
9	7

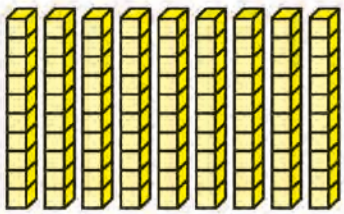
97 Ninety seven



Tens	Ones
9	8

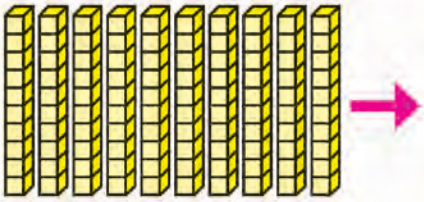
98 Ninety eight

Count the blocks and read.



Tens	Ones
9	9

99 Ninety nine

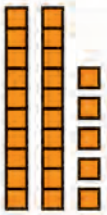


Hundreds	Tens	Ones
1	0	0

100 One hundred

Make the cards as shown below.

(a)



Tens	Ones
2	4

(b)

Tens	Ones
3	5

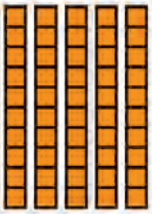
(c)

Tens	Ones
4	9

(d)

Tens	Ones
4	2

Make the cards as shown below.

(e) 	Tens: 5, Ones: 0
(f)	Tens: 6, Ones: 1
(g)	Tens: 7, Ones: 5
(h)	Tens: 8, Ones: 0
(i)	Tens: 9, Ones: 1
(j)	Tens: 9, Ones: 9

Read and write in words.

51	Fifty one	Fifty one	Fifty one	Fifty one
52	Fifty two			
53	Fifty three			
54	Fifty four			
55	Fifty five			
56	Fifty six			
57	Fifty seven			
58	Fifty eight			
59	Fifty nine			
60	Sixty			
61	Sixty one			
62	Sixty two			
63	Sixty three			
64	Sixty four			
65	Sixty five			
66	Sixty six			
67	Sixty seven			

Read and write in words.

68	Sixty eight	Sixty eight	Sixty eight	Sixty eight
69	Sixty nine			
70	Seventy			
71	Seventy one			
72	Seventy two			
73	Seventy three			
74	Seventy four			
75	Seventy five			
76	Seventy six			
77	Seventy seven			
78	Seventy eight			
79	Seventy nine			
80	Eighty			
81	Eighty one			
82	Eighty two			
83	Eighty three			
84	Eighty four			

Read and write in words.

85	Eighty five	Eighty five	Eighty five	Eighty five
86	Eighty six			
87	Eighty seven			
88	Eighty eight			
89	Eighty nine			
90	Ninety			
91	Ninety one			
92	Ninety two			
93	Ninety three			
94	Ninety four			
95	Ninety five			
96	Ninety six			
97	Ninety seven			
98	Ninety eight			
99	Ninety nine			
100	Hundred			

Write the given numerals in words.

Numerals	In words
7	Seven
30	
12	
54	
17	
18	
19	
21	
50	
41	
92	
88	
97	
68	
69	
35	
40	

Numerals	In words
49	Forty nine
80	
65	
23	
62	
84	
73	
57	
90	
89	
61	
74	
85	
20	
29	

Write in numerals for the numbers in words.

In words	Numerals
Eighteen	
Thirty five	
Seventy	
Forty one	
Twenty three	
Sixty	
Seventy two	
Forty three	
Ninety	
Fifty three	
Eighty four	
Thirty two	
Twenty seven	
Forty six	
Fifty five	
Seventy eight	
Ninety seven	

In words	Numerals
Fifty nine	
Thirty seven	
Nineteen	
Forty four	
Seventy nine	
Eleven	
Sixty four	
Eighty six	
Ninety five	
Eighty five	
Fifty one	
Twenty one	
Thirty eight	
Forty eight	
Sixty four	
Eighty	
Twenty	

Devanagari Numeration System

Read.

Hindu Arabic numerals	Deva-nagari numerals
1	१
2	२
3	३
4	४
5	५
6	६
7	७
8	८
9	९
10	१०
11	११
12	१२
13	१३
14	१४
15	१५
16	१६
17	१७
18	१८
19	१९
20	२०

Hindu Arabic numerals	Deva-nagari numerals
21	२१
22	२२
23	२३
24	२४
25	२५
26	२६
27	२७
28	२८
29	२९
30	३०
31	३१
32	३२
33	३३
34	३४
35	३५
36	३६
37	३७
38	३८
39	३९
40	४०

Hindu Arabic numerals	Deva-nagari numerals
41	४१
42	४२
43	४३
44	४४
45	४५
46	४६
47	४७
48	४८
49	४९
50	५०
51	५१
52	५२
53	५३
54	५४
55	५५
56	५६
57	५७
58	५८
59	५९
60	६०

Read.

Hindu Arabic numerals	Devanagari numerals
61	६१
62	६२
63	६३
64	६४
65	६५
66	६६
67	६७
68	६८
69	६९
70	७०
71	७१
72	७२
73	७३
74	७४
75	७५
76	७६
77	७७
78	७८
79	७९
80	८०

Hindu Arabic numerals	Devanagari numerals
81	८१
82	८२
83	८३
84	८४
85	८५
86	८६
87	८७
88	८८
89	८९
90	९०
91	९१
92	९२
93	९३
94	९४
95	९५
96	९६
97	९७
98	९८
99	९९
100	१००

Read.

१	एक
२	दुई
३	तीन
४	चार
५	पाँच
६	छ
७	सात
८	आठ
९	नौ
१०	दश
११	एघार
१२	बाह्र
१३	तेर
१४	चौध
१५	पन्ध्र
१६	सोर
१७	सत्र
१८	अठार
१९	उन्नाइस
२०	बिस

२१	एक्काइस
२२	बाइस
२३	तेइस
२४	चौबिस
२५	पच्चिस
२६	छब्बिस
२७	सत्ताइस
२८	अट्ठाइस
२९	उनन्तिस
३०	तिस
३१	एकतिस
३२	बत्तिस
३३	तेत्तिस
३४	चौतिस
३५	पैँतिस
३६	छत्तिस
३७	सैँतिस
३८	अठतिस
३९	उनन्चालिस
४०	चालिस

४१	एकचालिस
४२	बयालिस
४३	त्रिचालिस
४४	चवालिस
४५	पैँतालिस
४६	छ्यालिस
४७	सतचालिस
४८	अठचालिस
४९	उनन्चास
५०	पचास
५१	एकाउन्न
५२	बाउन्न
५३	त्रिपन्न
५४	चवन्न
५५	पचपन्न
५६	छपन्न
५७	सन्ताउन्न
५८	अन्ठाउन्न
५९	उनन्साठी
६०	साठी

Read.

६१	एकसट्ठी
६२	बयसट्ठी
६३	त्रिसट्ठी
६४	चौसट्ठी
६५	पैँसट्ठी
६६	छ्यसट्ठी
६७	सतसट्ठी
६८	अठसट्ठी
६९	उनन्सत्तरी
७०	सत्तरी
७१	एकहत्तर
७२	बहत्तर
७३	त्रिहत्तर
७४	चौहत्तर
७५	पचहत्तर
७६	छ्यहत्तर
७७	सतहत्तर
७८	अठहत्तर
७९	उनासी
८०	असी

८१	एकासी
८२	बयासी
८३	त्रियासी
८४	चौरासी
८५	पचासी
८६	छ्यासी
८७	सतासी
८८	अठासी
८९	उनान्नब्बे
९०	नब्बे
९१	एकान्नब्बे
९२	बयानब्बे
९३	त्रियानब्बे
९४	चौरानब्बे
९५	पन्चानब्बे
९६	छ्यानब्बे
९७	सन्तानब्बे
९८	अन्ठानब्बे
९९	उनान्सय
१००	सय

Write the given numerals in words according to Devanagari numeration system.

१	एक
२	
३	
४	
५	
६	
७	
८	
९	
१०	
११	
१२	
१३	
१४	
१५	
१६	
१७	
१८	
१९	
२०	

२१	
२२	
२३	
२४	
२५	
२६	
२७	
२८	
२९	
३०	
३१	
३२	
३३	
३४	
३५	
३६	
३७	
३८	
३९	
४०	

Write the given numerals in words according to Devanagari numeration system.

४१	
४२	
४३	
४४	
४५	
४६	
४७	
४८	
४९	
५०	
५१	
५२	
५३	
५४	
५५	
५६	
५७	
५८	
५९	
६०	

६१	
६२	
६३	
६४	
६५	
६६	
६७	
६८	
६९	
७०	
७१	
७२	
७३	
७४	
७५	
७६	
७७	
७८	
७९	
८०	

Write the given numerals in words according to Devanagari numeration system.

८१	
८२	
८३	
८४	
८५	
८६	
८७	
८८	
८९	
९०	

९१	
९२	
९३	
९४	
९५	
९६	
९७	
९८	
९९	
१००	

Write the Hindu Arabic numerals in Devanagari numerals.

2	
7	
13	
18	
25	
33	
39	
40	

41	
47	
49	
63	
55	
58	
74	
79	

82	
85	
88	
92	
95	
98	
67	
100	

Match.

(a)

Fifty	81
Sixty five	100
Eighty one	99
Forty five	65
Ninety nine	50
Hundred	45

(b)

चौबिस	७५
अठचालिस	३२
त्रिसट्ठी	२४
पचहत्तर	६३
बयासी	४८
बत्तिस	८२

Write the numbers in words.

1. 

There are 20 frogs in the pond.

_____

2. 

I have 69 friends.

_____

3. 

I put 43 rupees in my piggy bank today

4. 

I am 75 years old.

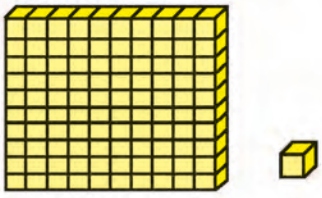
_____

5. 

There are 87 soldiers in the army barrack I live.

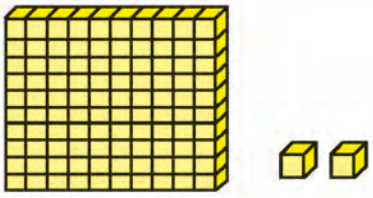
_____

Count and write.

1. 

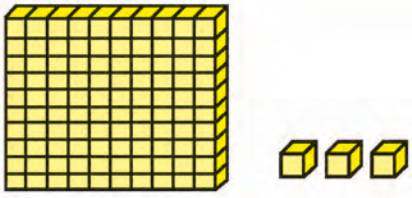
[1] hundred [0] tens [1] ones

= [101]

2. 

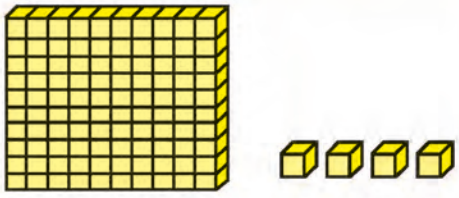
[ ] hundred [ ] tens [ ] ones

= [ ]

3. 

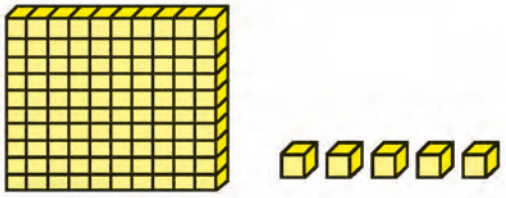
[ ] hundred [ ] tens [ ] ones

= [ ]

4. 

[ ] hundred [ ] tens [ ] ones

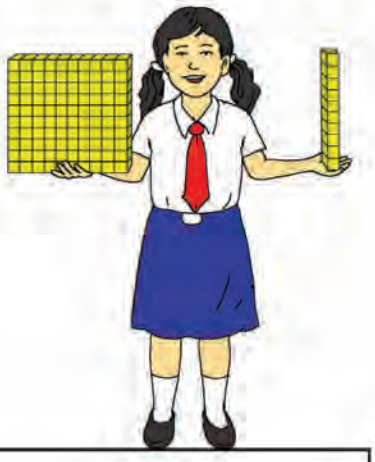
= [ ]

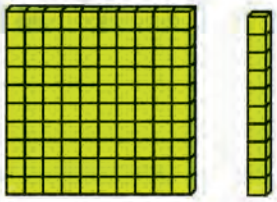
5. 

[ ] hundred [ ] tens [ ] ones

= [ ]

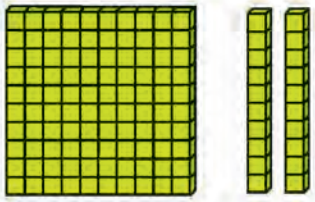
Count and write.



1. 

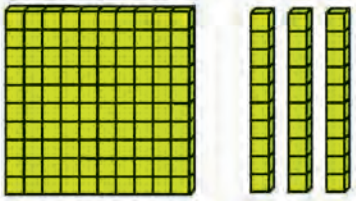
1 hundred 1 ten

= 110

2. 

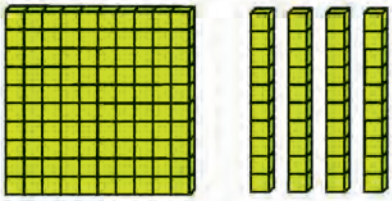
hundred tens

=

3. 

hundred tens

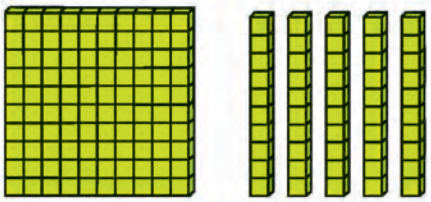
=

4. 

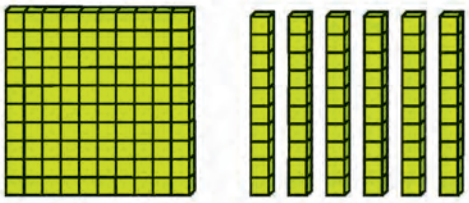
hundred tens

=

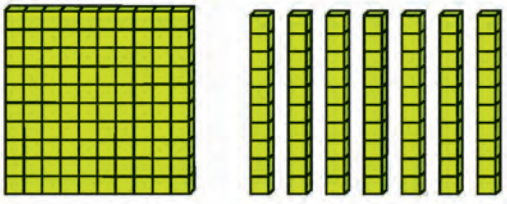
Count and write.

5. 

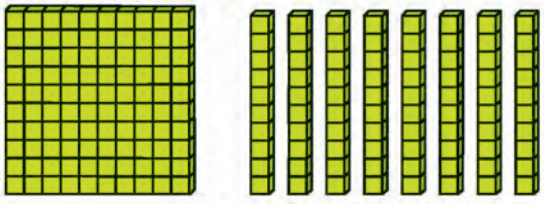
☐ hundred ☐ tens
= ☐

6. 

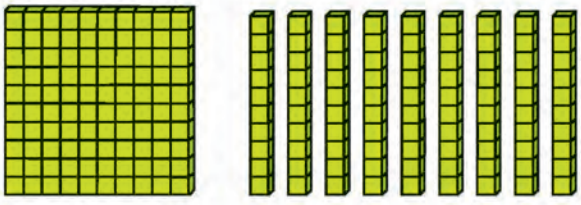
☐ hundred ☐ tens
= ☐

7. 

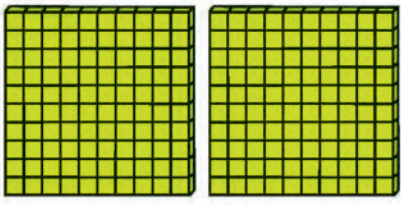
☐ hundred ☐ tens
= ☐

8. 

☐ hundred ☐ tens
= ☐

9. 

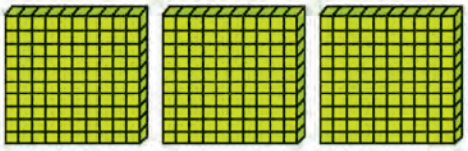
☐ hundred ☐ tens
= ☐

10. 

☐ hundreds ☐ tens
= ☐

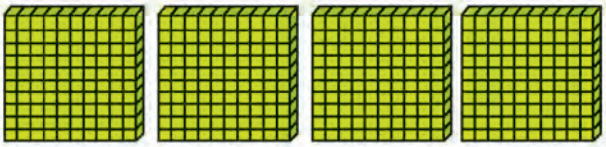
Count and write.

1.



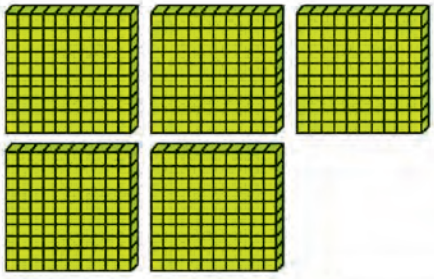
3 hundreds = 300

2.



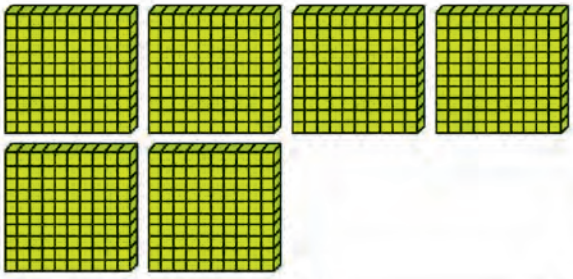
☐ hundreds = ☐

3.



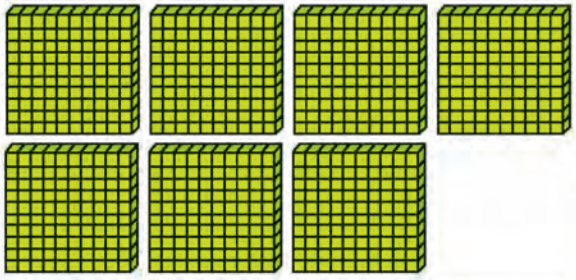
☐ hundreds = ☐

4.



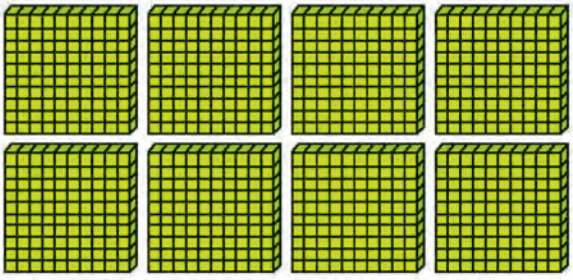
☐ hundreds = ☐

5.



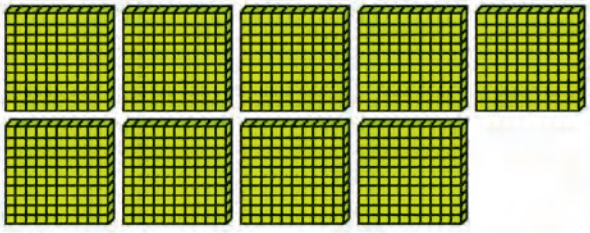
☐ hundreds = ☐

6.



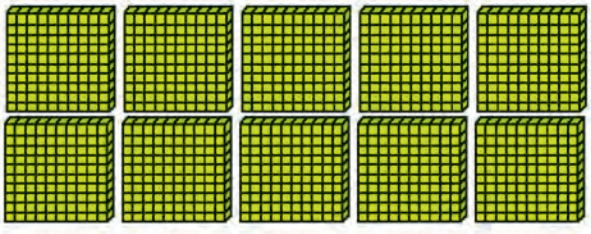
☐ hundreds = ☐

7.



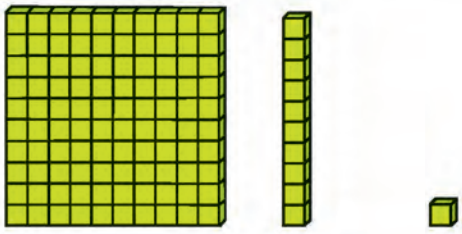
☐ hundreds = ☐

8.



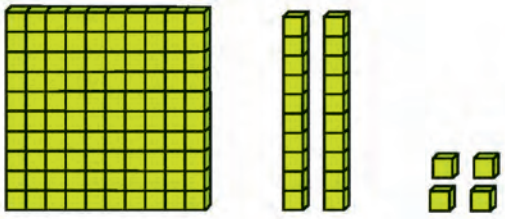
☐ hundreds = ☐

Count and write.

1. 

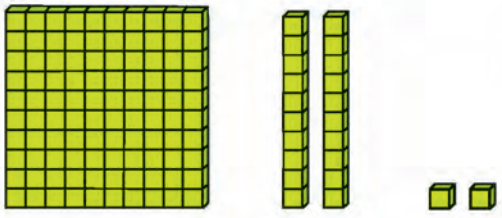
□ hundred □ ten □ one

= □

2. 

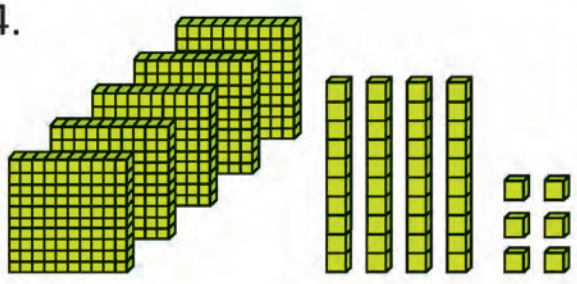
□ hundred □ tens □ ones

= □

3. 

□ hundred □ tens □ ones

= □

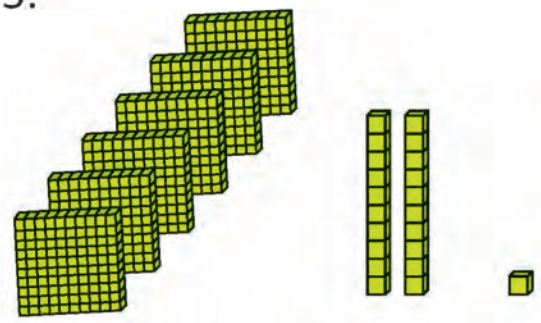
4. 

□ hundreds □ tens □ ones

= □

Count and write.

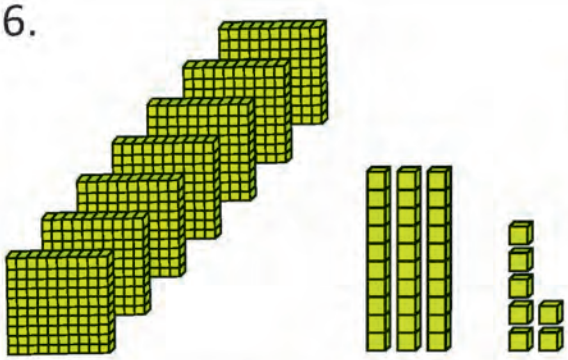
5.



☐ hundreds ☐ tens ☐ ones

= ☐

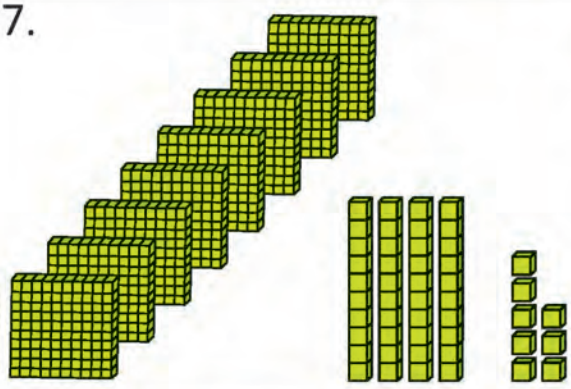
6.



☐ hundreds ☐ tens ☐ ones

= ☐

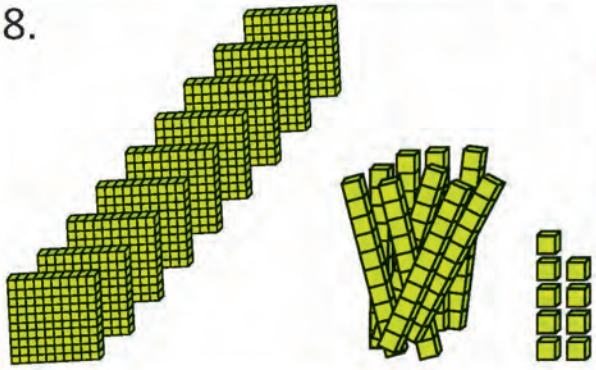
7.



☐ hundreds ☐ tens ☐ ones

= ☐

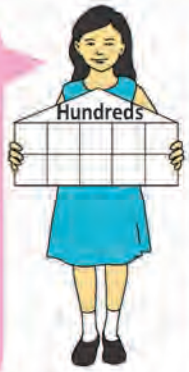
8.



☐ hundreds ☐ tens ☐ ones

= ☐

My number house, which represents numbers of hundreds have ten boxes.



My number house, which represents numbers of tens have ten boxes as well.

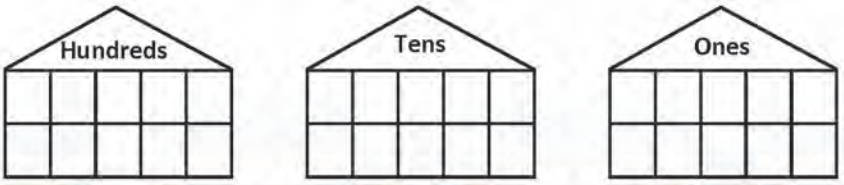
My number house, which represents numbers of ones have ten boxes as well.

Colour the boxes of hundreds, tens and ones, and write numerals.

1.

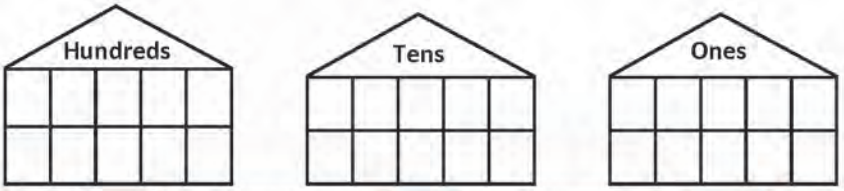
1 hundred 2 Tens 5 Ones = 125

2.



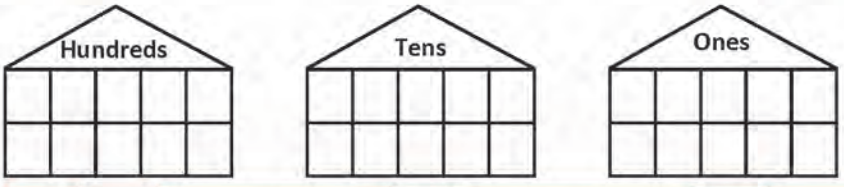
3 hundreds 5 Tens 4 Ones = ____

3.



3 hundreds 6 Tens 6 Ones = ____

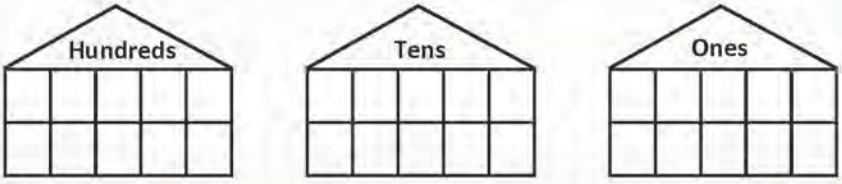
4.



3 hundreds 7 Tens 5 Ones = ____

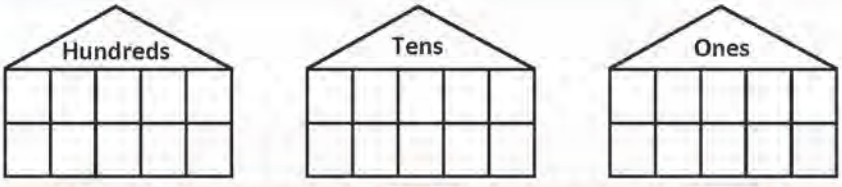
Colour the boxes of hundreds, tens and ones.

1.



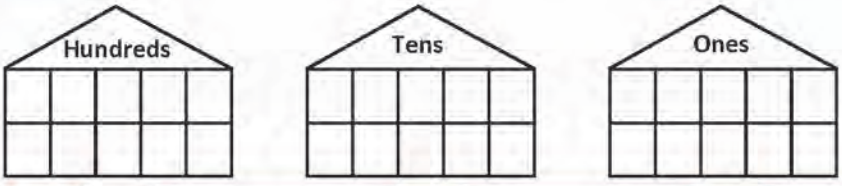
4 hundreds 2 Tens 1 One = ____

2.



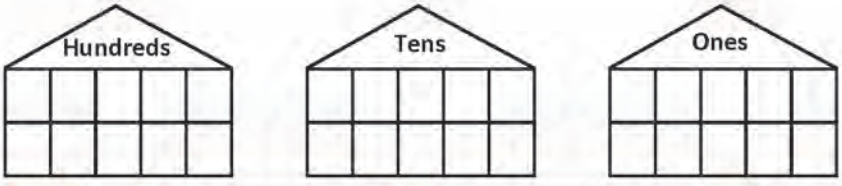
5 hundred 4 Tens 3 Ones = ____

3.



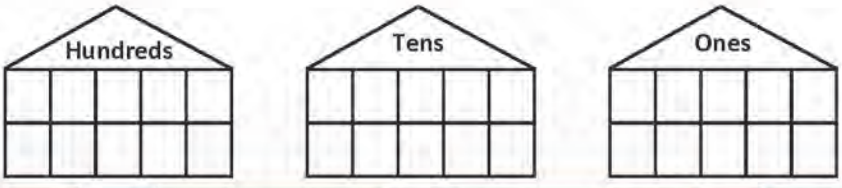
6 hundreds 2 Tens 8 Ones = ____

4.



7 hundreds 1 Ten 8 Ones = ____

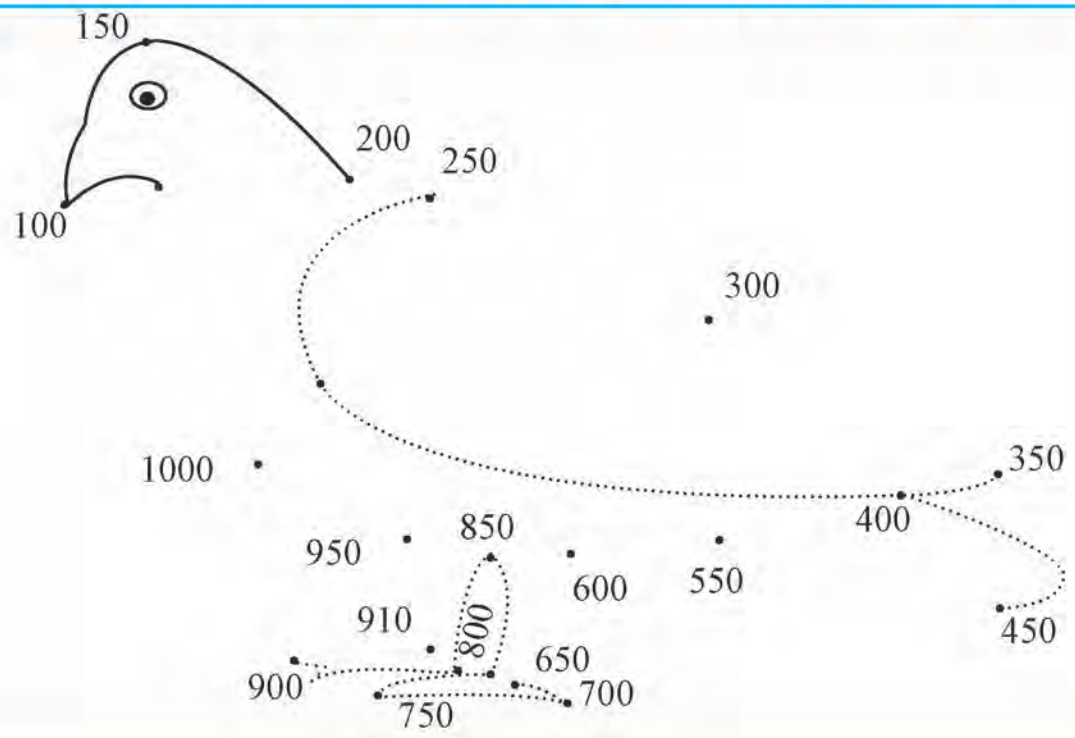
5.



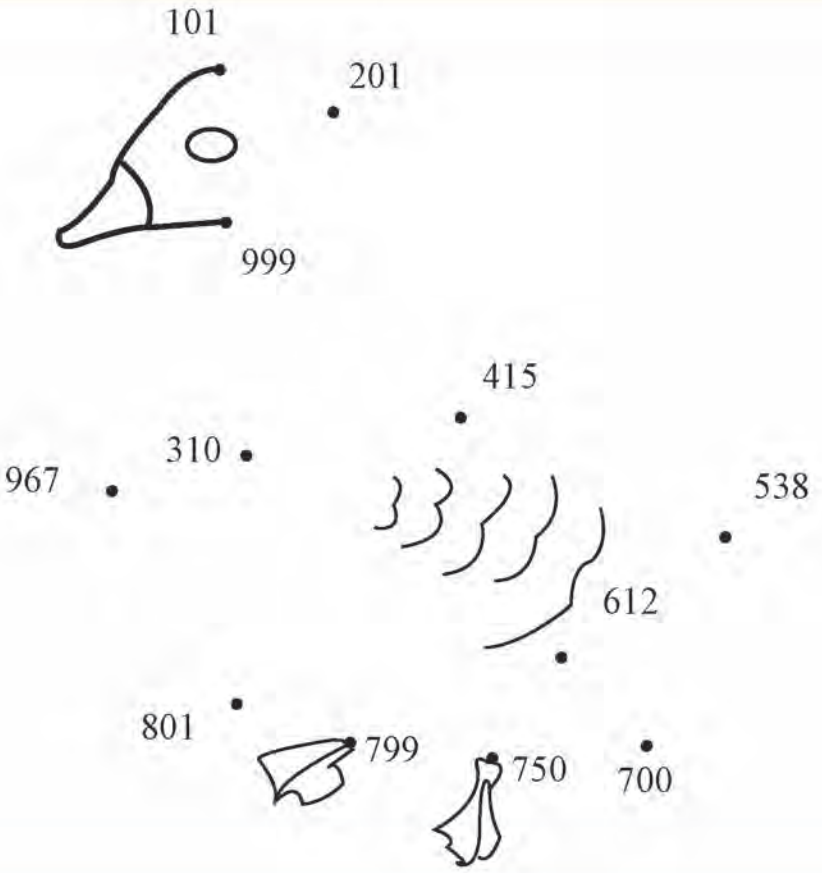
5 hundreds 6 Tens 4 Ones = ____

Draw a picture by connecting dots in order and colour.

(a)

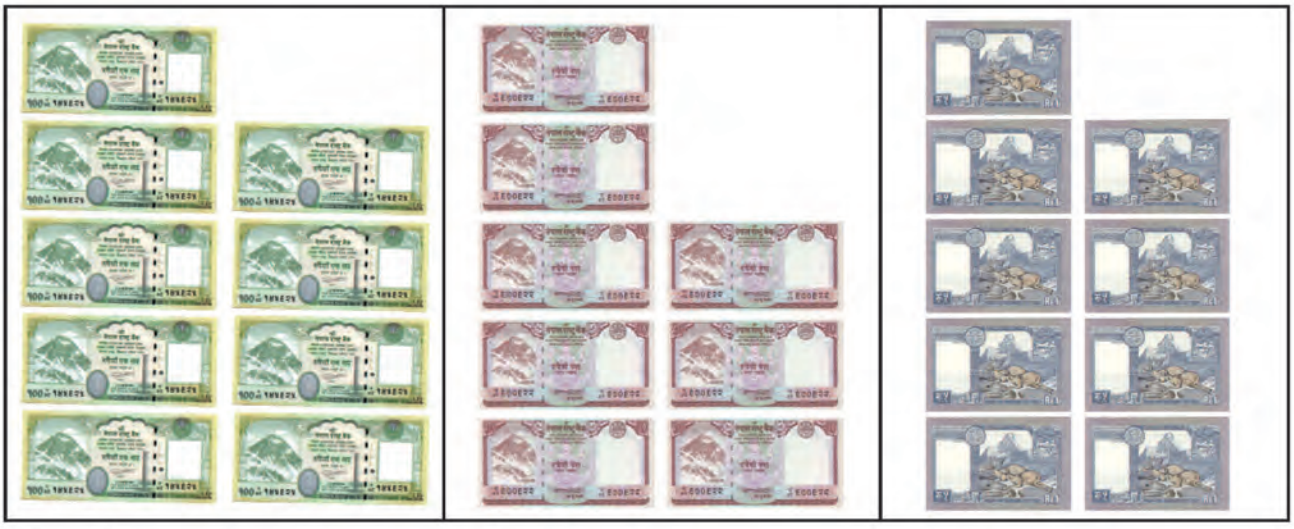


(b)



Read and discuss.

How can count all these rupees?



9 hundreds 8 tens 9 ones

How easy it is! What is it called to do so?

Putting it in this way is keeping it according to place value.

I finally understood. It is the calculation by keeping hundreds in one place, tens in one place and ones in one place.

So, how much is the total amount?

9 hundreds 8 tens 9 ones = 989

Observe the notes and write.

1.

Hundreds	Tens	Ones
2	2	5
225		

2.

Hundreds	Tens	Ones

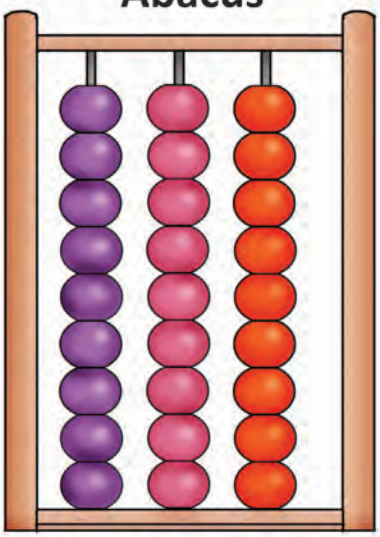
3.

Hundreds	Tens	Ones

4.

Hundreds	Tens	Ones

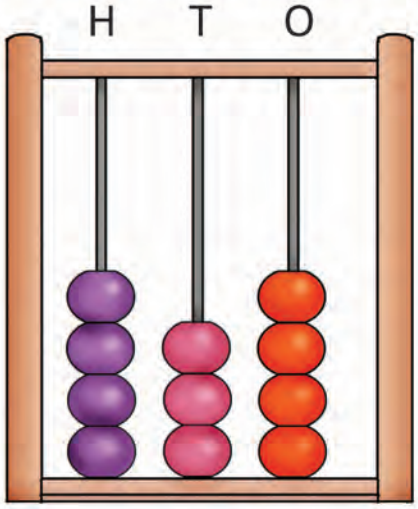
Count the beads and write the numbers.



Abacus

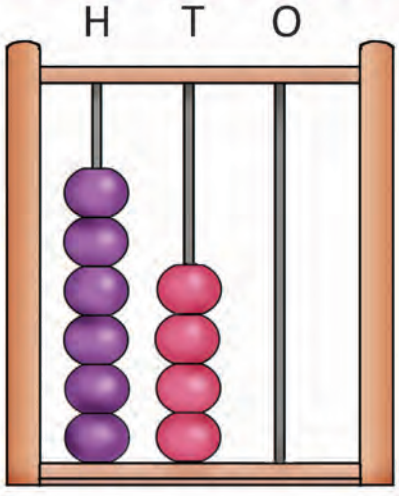
Calculating device

1.



Hundreds	Tens	Ones
4	3	4
434		

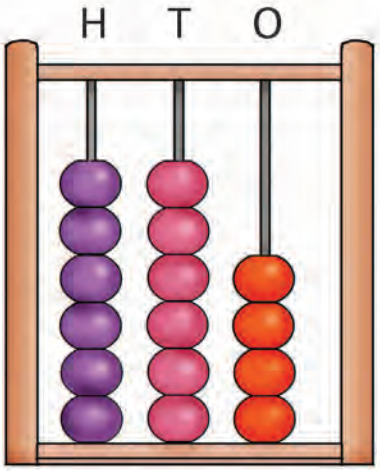
2.



Hundreds	Tens	Ones

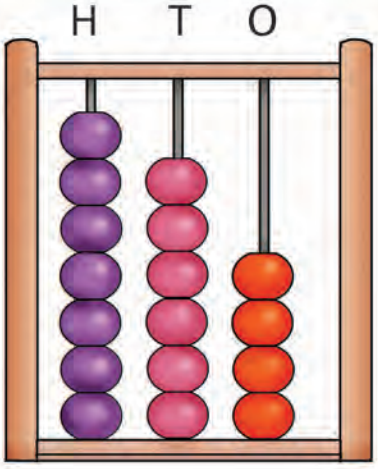
Count the beads and write the numbers.

3.



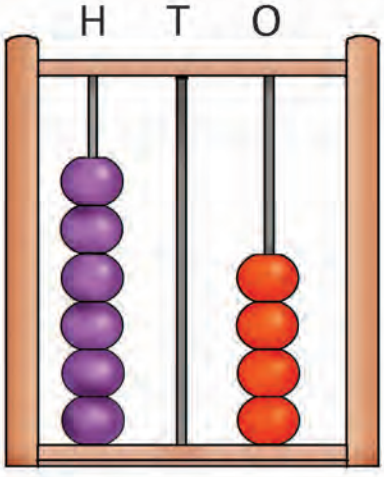
Hundreds	Tens	Ones

4.



Hundreds	Tens	Ones

5.

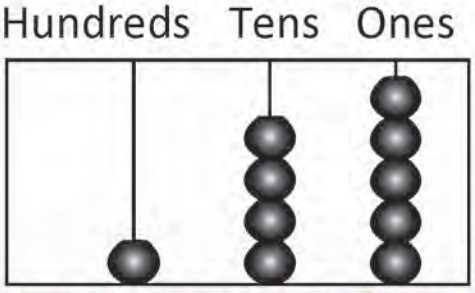


Hundreds	Tens	Ones

Show the numbers below in the abacus as shown in the picture.

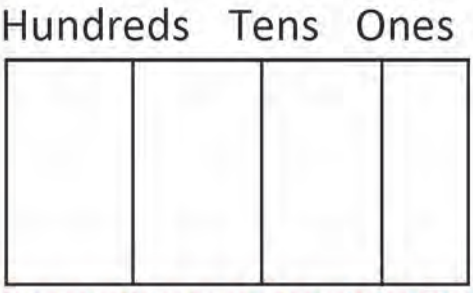
1.

Hundreds	Tens	Ones
1	4	5
145		



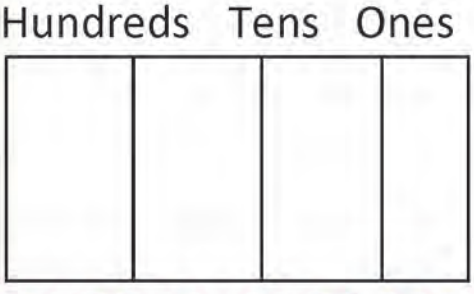
2.

Hundreds	Tens	Ones
2	3	4
234		



3.

Hundreds	Tens	Ones
5	6	7
567		

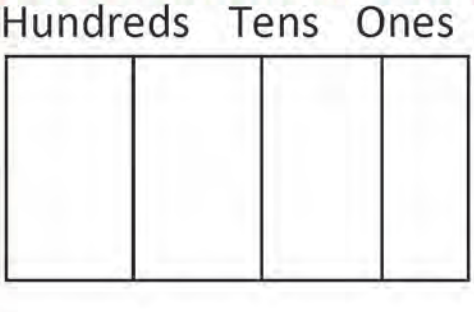


4.

Hundreds	Tens	Ones
6	4	3
643		

5.

Hundreds	Tens	Ones
7	4	4
744		



Write the following numbers in the place value table.

1. 150

Hundreds	Tens	Ones
1	5	0

2. 260

Hundreds	Tens	Ones

3. 320

Hundreds	Tens	Ones

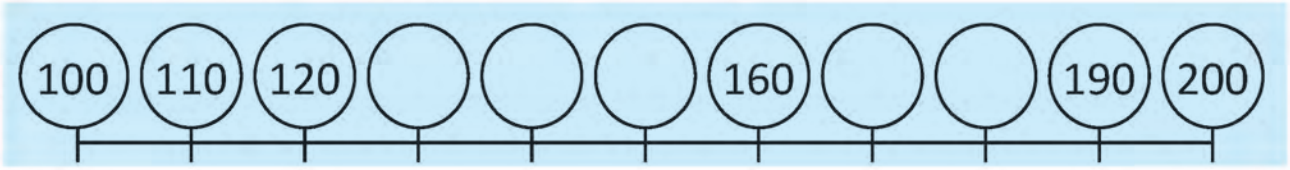
4. 405

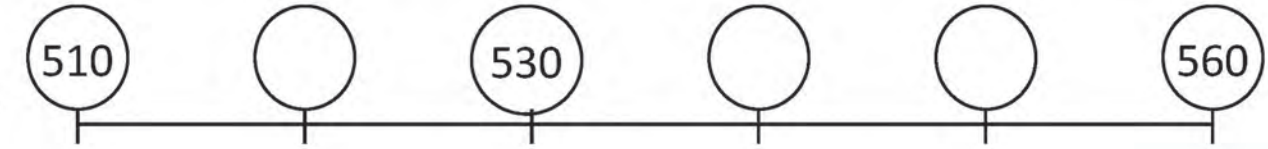
Hundreds	Tens	Ones

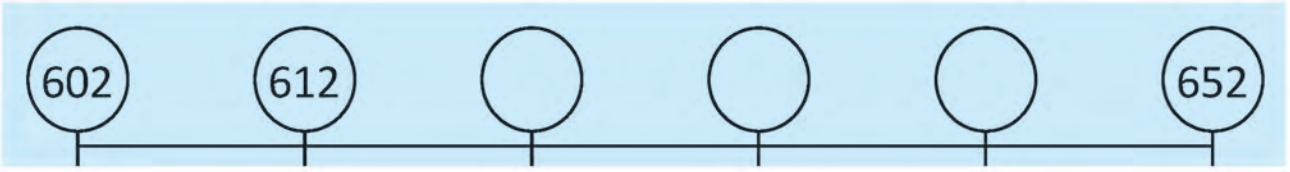
Write the place value of circled (O) digits.

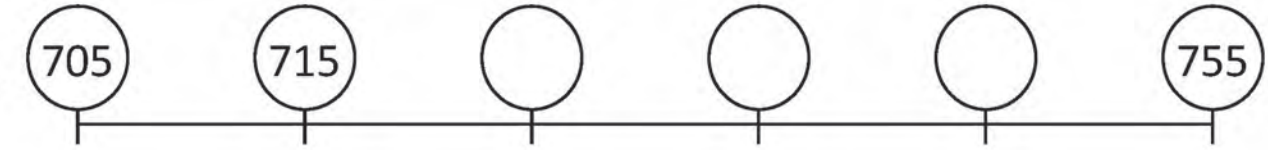
1.	2(6)8	6 tens	2.	(9)35	
3.	13(6)		4.	68(9)	
5.	(7)25		6.	3(5)5	
7.	7(8)6		8.	32(0)	
9.	79(8)		10.	(4)44	

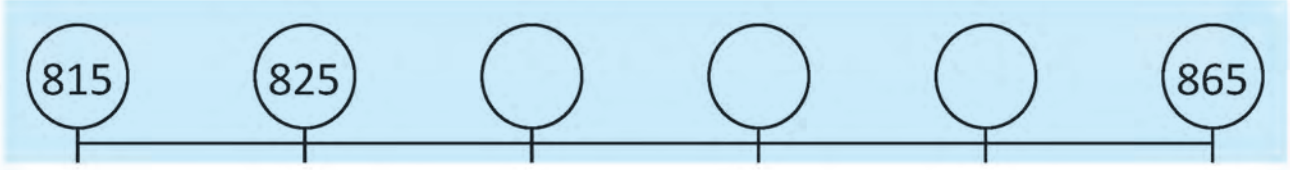
Complete the number patterns.

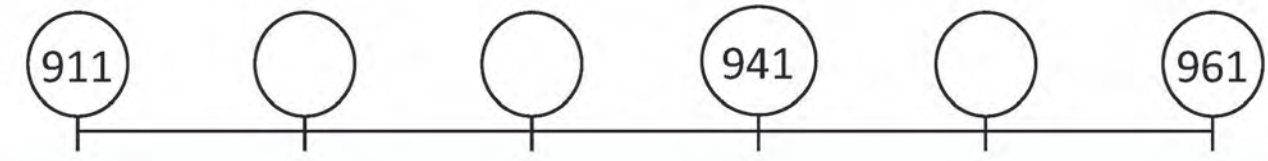
1. 

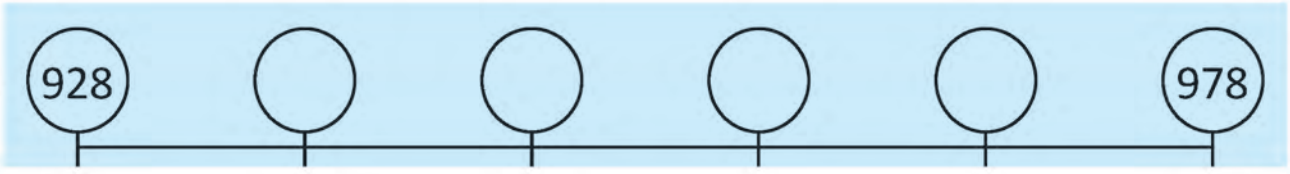
2. 

3. 

4. 

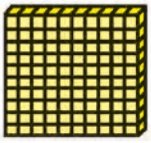
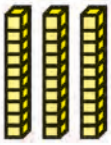
5. 

6. 

7. 

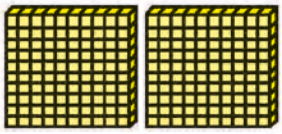
Devanagari Numerals

Discuss about Devanagari numerals, place and place value of digits by counting blocks.

सय	दश	एक
		
१	३	४

Devanagari Numeral: १३४

१ ३ ४	स्थान	स्थानमान
	एक	४ एक = ४
	दश	३ दश = ३०
	सय	१ सय = १००

सय	दश	एक
		
२	४	६

Devanagari Numeral: २४६

२ ४ ६	स्थान	स्थानमान
	एक	६ एक = ६
	दश	४ दश = ४०
	सय	२ सय = २००

Study the place value tables given below and write Devanagari numerals.

1.

सय	दश	एक
२	०	५

Devanagari numeral

2.

सय	दश	एक
४	४	५

Devanagari numeral

Show the numbers below in the place value table.

१. ३५७

सय	दश	एक

२. ६१०

सय	दश	एक

३. ९१५

सय	दश	एक

४. ८४७

सय	दश	एक

Write the place and place value of circled digits in the numbers given below.

१. ४(२)५ स्थान : ____ स्थानमान : ____

२. ७२(१) स्थान : ____ स्थानमान : ____

३. (९)३४ स्थान : ____ स्थानमान : ____

Study the place value tables given below and write the place value of digits.

१.

सय	दश	एक
४	३	७

४ को स्थानमान :

३ को स्थानमान :

७ को स्थानमान :

२.

सय	दश	एक
५	९	३

५ को स्थानमान :

९ को स्थानमान :

३ को स्थानमान :

३.

सय	दश	एक
७	०	८

७ को स्थानमान :

० को स्थानमान :

८ को स्थानमान :

४.

सय	दश	एक
९	८	६

९ को स्थानमान :

८ को स्थानमान :

६ को स्थानमान :

300 + 40 + 5 = 345

Write in short form.

1.	90 + 5	=	95
2.	90 + 9	=	
3.	100 + 10 + 1	=	
4.	100 + 20 + 2	=	
5.	400 + 60 + 7	=	
6.	500 + 10 + 5	=	
7.	600 + 20 + 3	=	
8.	700 + 30 + 4	=	
9.	800 + 10 + 1	=	
10.	900 + 90 + 9	=	

345 = 300 + 40 + 5

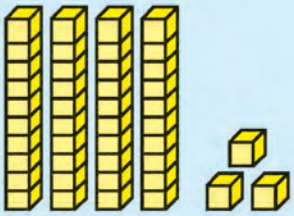
Write in expanded form.

1.	425	=	400 + 20 + 5
2.	512	=	+ +
3.	541	=	+ +
4.	540	=	+ +
5.	641	=	+ +
6.	645	=	+ +
7.	672	=	+ +
8.	712	=	+ +
9.	892	=	+ +
10.	990	=	+ +

Number sense

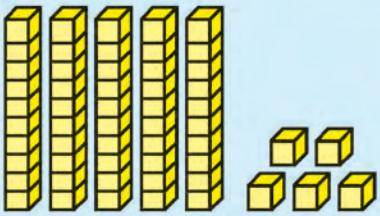
Let's see, how much have I learnt?

1. Count and write.

(a) 

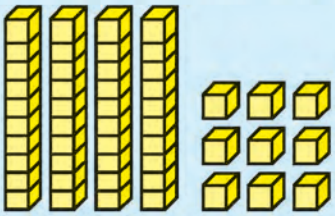
Tens	Ones

In words

(b) 

Tens	Ones

In words

(c) 

Tens	Ones

In words

2. Fill in the table below.

Devanagari numerals	In words
५	
	साठी
२०	
	एकासी
९५	
	सय

Hindu Arabic numerals	In words
50	
	Twenty five
65	
	Seventy
75	
	Ninety one

3. Write the following numbers in place value table.

(a) 254

Hundreds	Tens	Ones

(b) 907

Hundreds	Tens	Ones

(c) ४३५

सय	दश	एक

(d) ८९०

सय	दश	एक

4. Study the following place value tables and write the place value of digit.

(a)

सय	दश	एक
२	४	५

२ को स्थानमान : ☐

४ को स्थानमान : ☐

५ को स्थानमान : ☐

(b)

Hundreds	Tens	Ones
6	7	8

Place value of 6: ☐

Place value of 7: ☐

Place value of 8: ☐

Teacher's signature

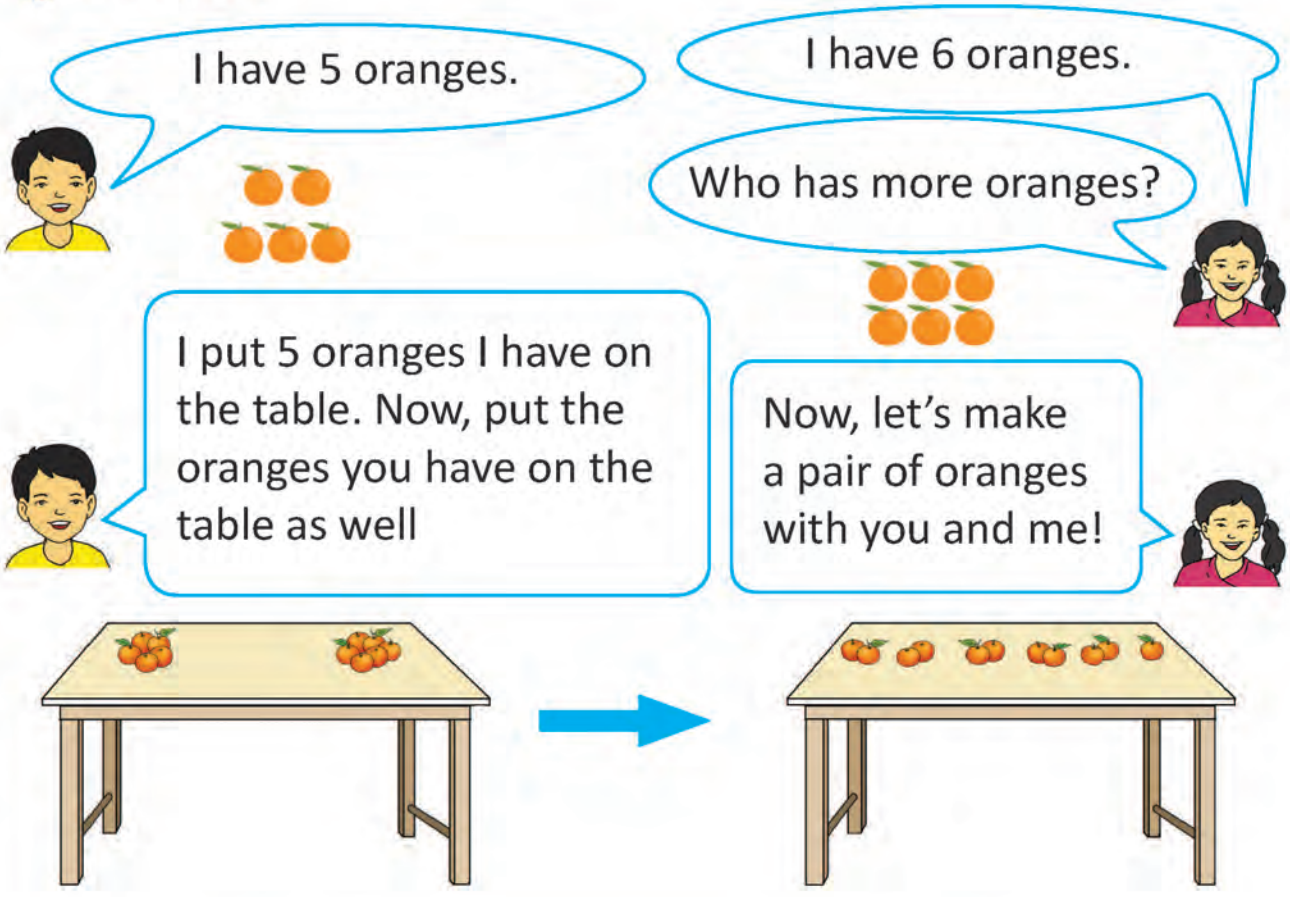
Parent's signature

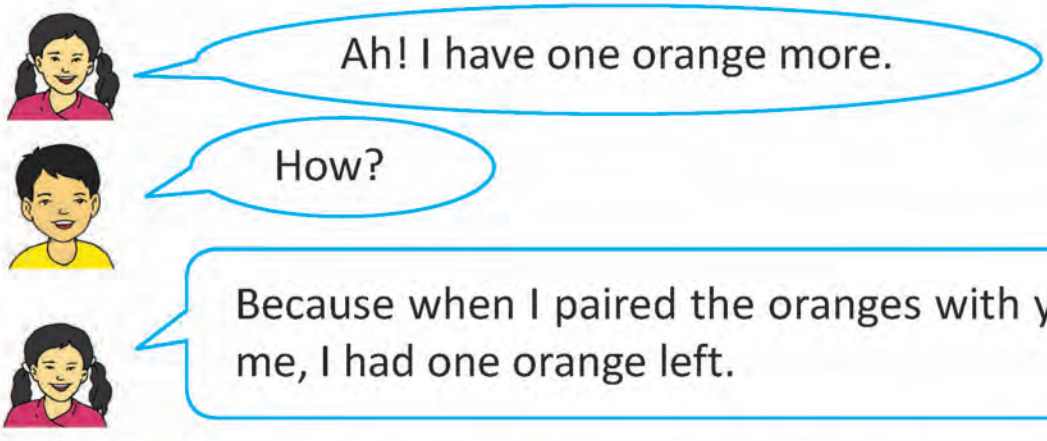
Lesson 4

Comparison of Numbers

Comparison of numbers

Discuss.



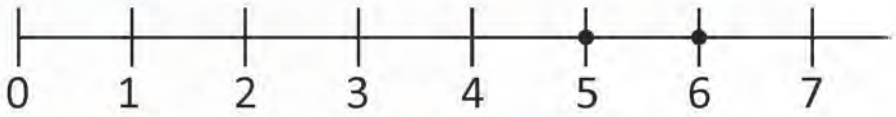


The number with greater number of objects is greater.

Ah! When we count the numbers, 6 comes after 5. Is the number that comes later greater than the number that comes first when counting?

You are right. When counting numbers there is an object in one. Adding one to another makes two objects. In this way, the number is greater in further counting.

Now, let's look at it in number line.



While putting 5 and 6 on the number tell the position of 5 and 6.

5 is on the left side of 6. Is the number on the left side be smaller?

6 is on the right side of 5. If so, is the number on the right side be greater?

Yes! You both are right.

Looking at the number line, if there is a number on the left of the given number then that number is smaller and the number on the right is greater.

Circle the smaller number.

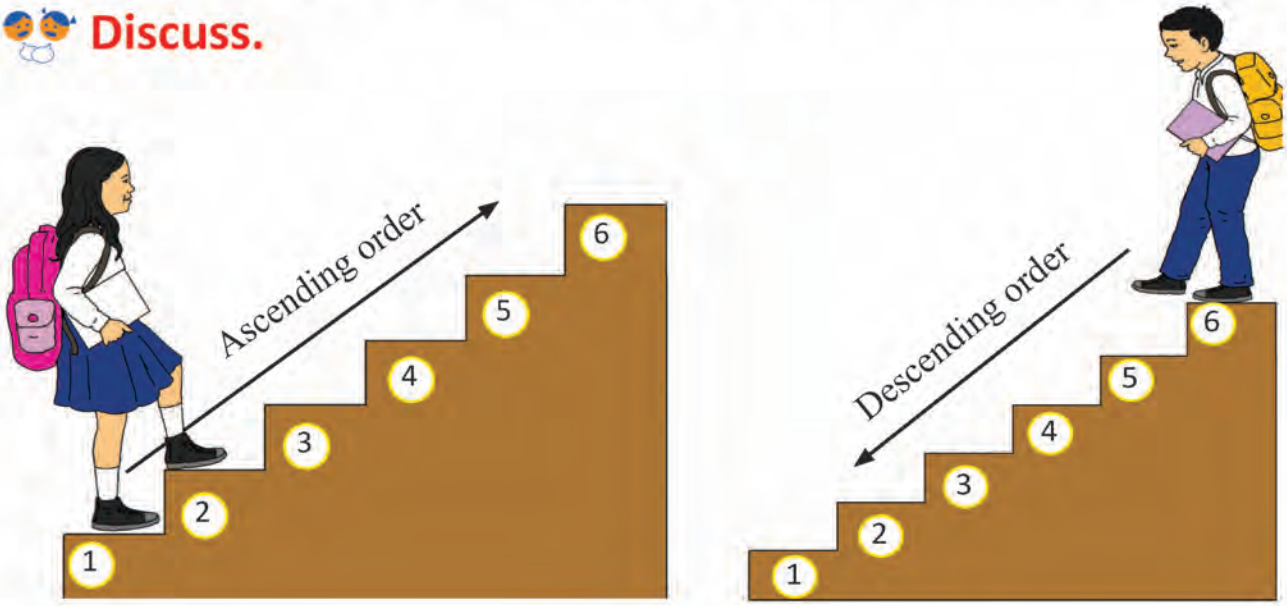
(a)	5 and 6	(b)	8 and 6
(c)	3 and 4	(d)	15 and 25
(e)	75 and 67	(f)	235 and 325

Circle the greater number

(a)	5 and 8	(b)	34 and 43
(c)	76 and 79	(d)	236 and 263
(e)	532 and 235	(f)	671 and 705

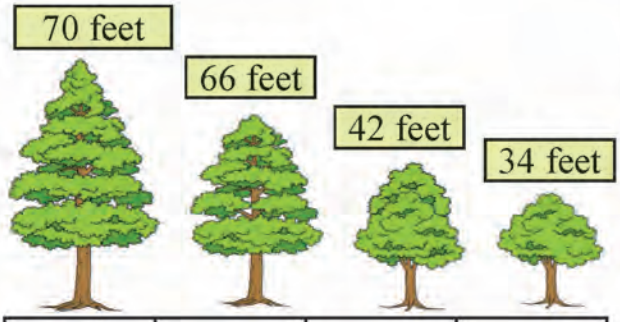
Ascending and Descending order of Number

Discuss.



Write in ascending order.

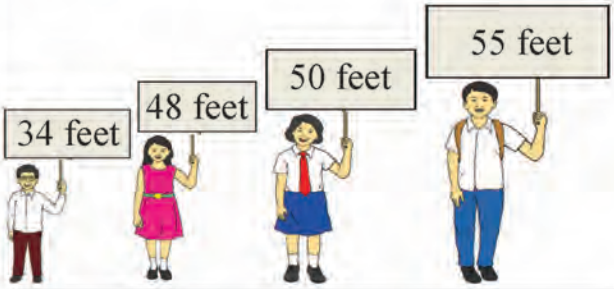
1.



2.

Write in descending order.

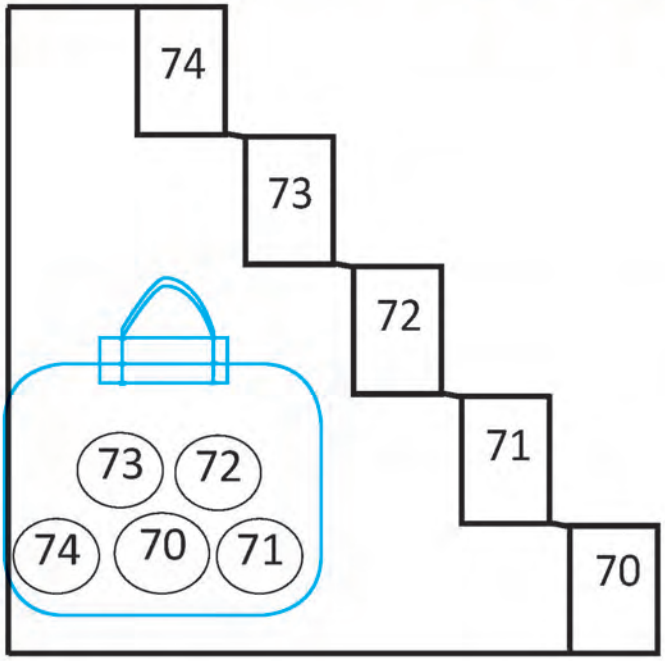
1.

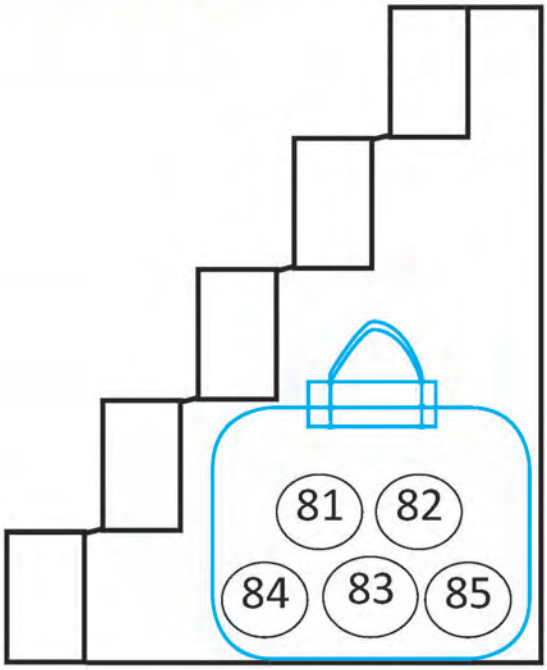


2.

Write in descending order from the top.

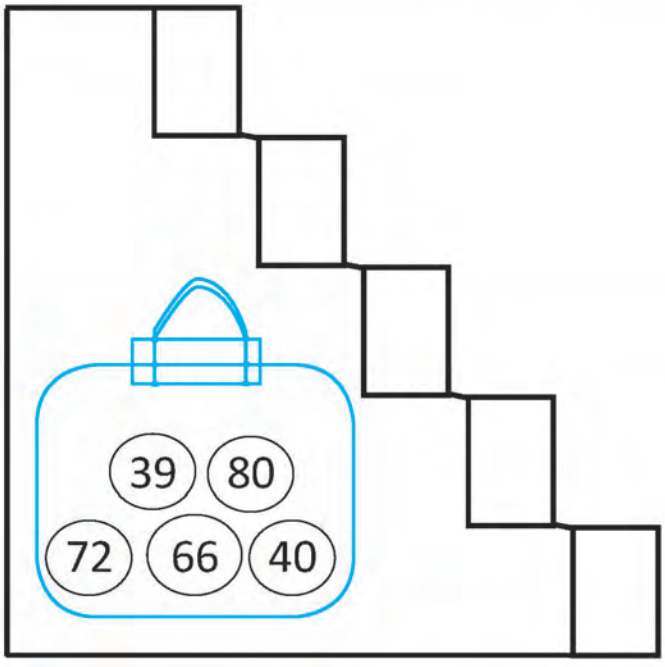
1.



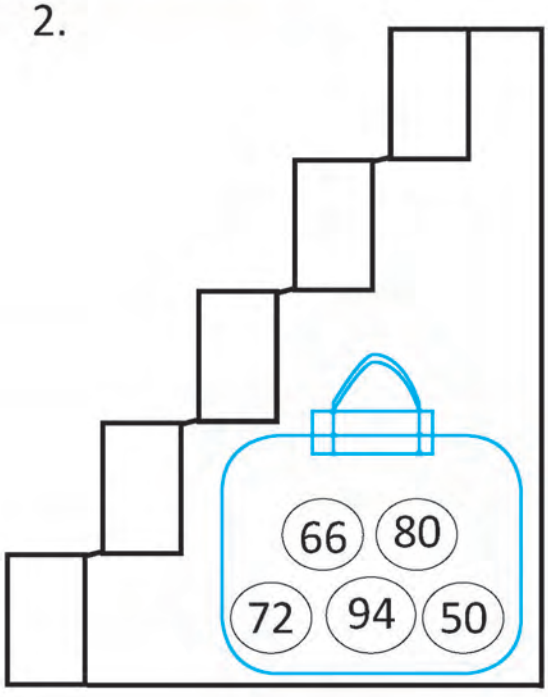


Write in ascending order from the bottom.

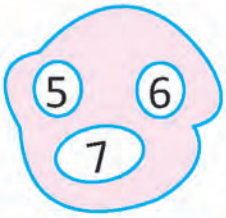
1.



2.

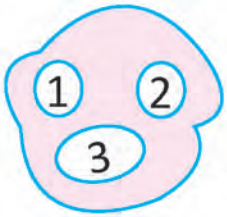


Write any three three-digit numbers that can be formed using the given number cards and rewrite them in ascending order.

1. 

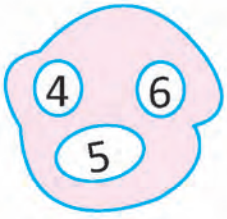
Numbers: 576, 567, 756

Ascending order: 567 576 756

2. 

Numbers:

Ascending order:

3. 

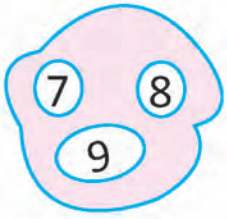
Numbers:

Ascending order:

4. 

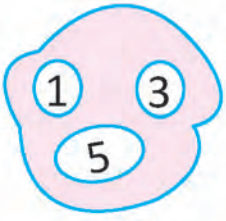
Numbers:

Ascending order:

5. 

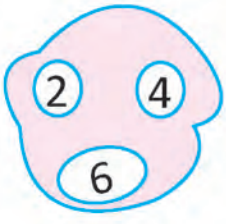
Numbers:

Ascending order:

6. 

Numbers:

Ascending order:

7. 

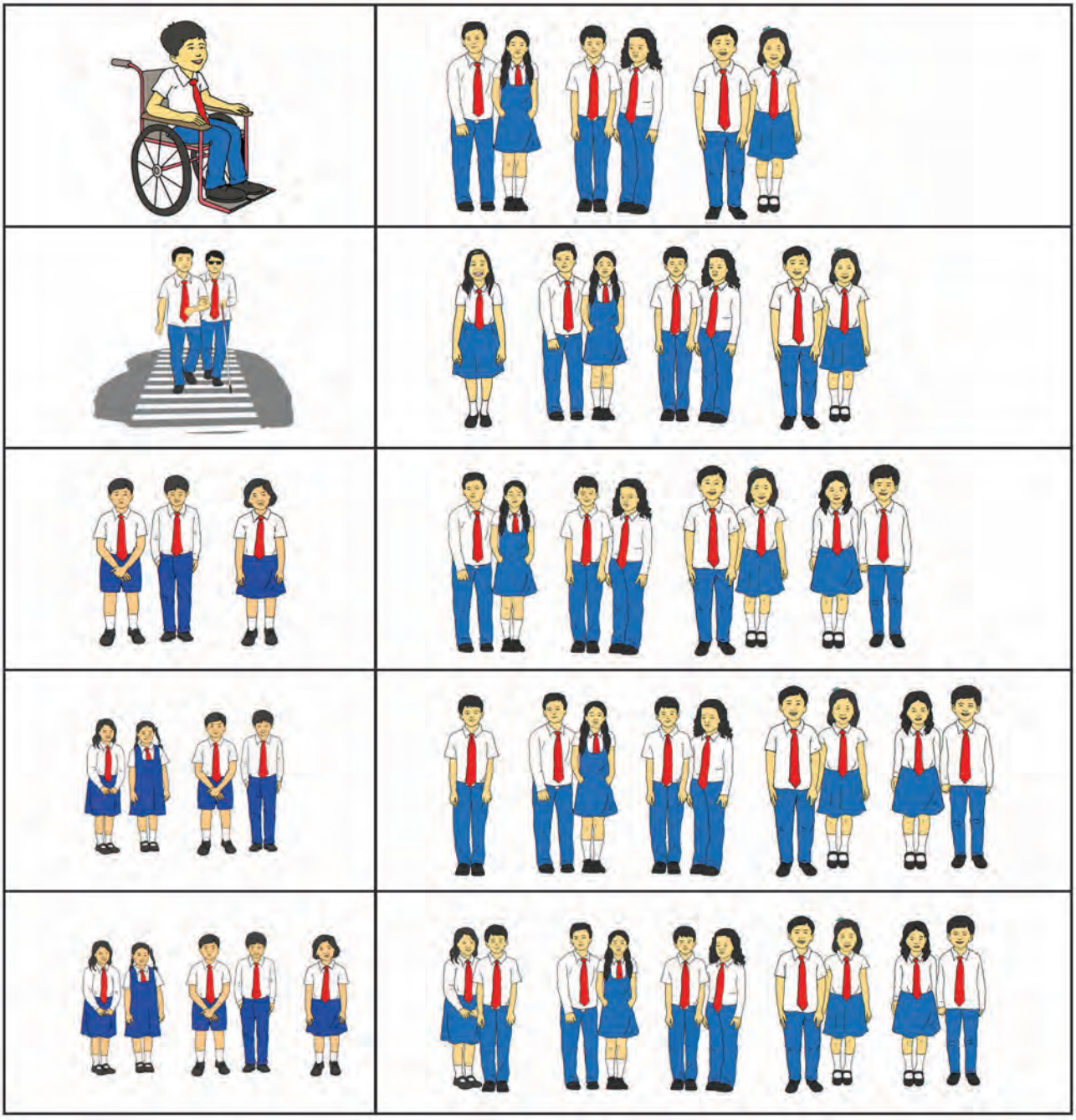
Numbers:

Ascending order:

Lesson 5

Odd and Even Numbers

Look at the pictures of the students standing below and discuss about odd and even numbers.

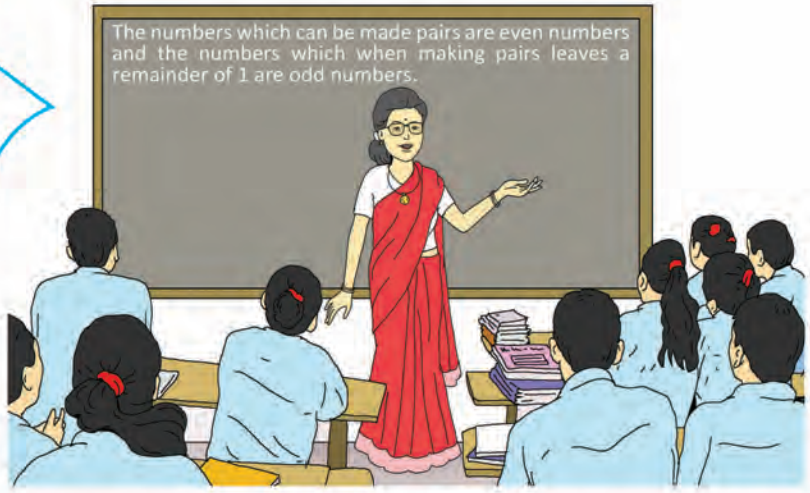


The counting number starts from 1 (odd) and goes on to 2 (even), 3(odd), 4 (even).

Take the grains like gram, peas, beans which are equal to the numbers given below and make pairs of two; and distinguish odd or even numbers.

Numbers	Odd or Even	Numbers	Odd or even
1		11	
2		12	
3		13	
4		14	
5		15	
6		16	
7		17	
8		18	
9		19	
10		20	

The numbers which can be made pairs are even numbers and the numbers which when making pairs leaves a remainder of 1 are odd numbers.



The numbers with the digits 1, 3, 5, 7 and 9 at ones place are odd numbers.

The numbers with the digits 0, 2, 4, 6 and 8 at ones place are even numbers.

Distinguish odd or even numbers and write.

Numbers	The digit in ones place	Even or Odd
20	0	Even
23	3	Odd
44		
157		
29		
52		
363		
86		
495		
61		
328		
140		
72		
87		
79		
580		
999		
774		

Circle (◯) the even numbers.

21	37	(102)	53	81
86	77	125	220	339
286	315	321	346	279
410	523	677	850	562
673	486	859	962	997

Circle (◯) the odd numbers.

(15)	22	29	99	111
340	246	515	761	665
379	780	445	224	500
666	777	239	553	978
858	486	859	962	997

Circle (◯) the odd numbers.

(a) There are 25 students in my class.

(b) I have a 5 rupees note

(c) There are 12 goats in total in my house.

What type of number I am, odd or even. Write.

(a) There is 3 in my ones place. _____

(b) There are 2 in my hundreds place and 1 in ones place. _____

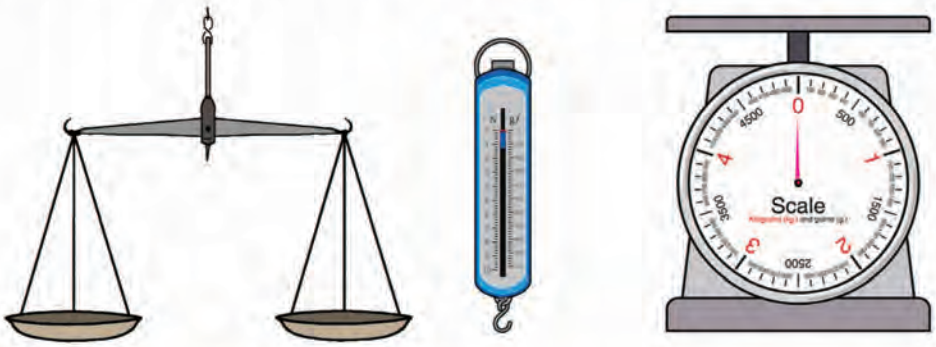
(c) There is 3 in my hundreds place. There are 0 in tens and ones place. _____

Lesson 6

Weight

Discuss.

Ramila went to the market for shopping with her mother. She obtained information by observing the weighing machines in the shops of the market as shown in the picture below.



Guess which one is heavier and mark √ .

1. 

2. 

3. 

4. 

5. 

6. 

Balance and standard weight (Dhaka) given below are used to find the weight of objects. Objects are weighed in the units of kilograms and grams.

50 gram

100 gram

200 gram

500 gram

1 kilogram

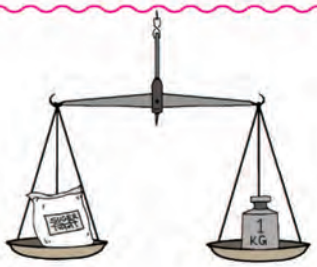
Observe the balance and write the weight of different objects.

1. Orange is ☐ grams.

2. Grapes weigh ☐ grams.

3. Onions weigh ☐ grams.

4. Sugar weighs ☐ kilogram.

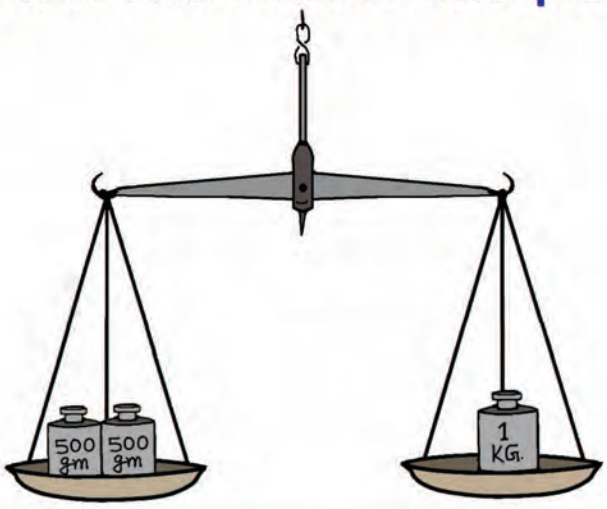


Write the name of any eight objects that are found around your home and write their guessed weight in gram. Use weighing machine to take the weight of that objects and write their actual weight.

S.N.	Name of objects	Guessed weight	Actual weight
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Relation between kilogram and gram

Use one kilogram dhaka on the side and 500 grams, 200 grams and 100 grams dhakas on the other side of the balance and make balance. How many grams are there in 1 kilogram? Find out. For example:



1 kilogram = 1000 grams

Write the appropriate number in the blanks.

1. 1 kilogram = ☐ grams
2. 2 kilograms = ☐ grams
3. 3 kilograms = ☐ grams
4. 4 kilograms = ☐ grams
5. ☐ kilograms = 5000 grams
6. ☐ kilograms = 6000 grams

Which dhakas can be used to weigh the following objects?

 50gm	 100gm	 200gm	 500gm	 1KG

1. 

2. 

3. 

4. 

5. 

6. 

 50gm	 100gm	 200gm	 500gm	 1kg

Which of the above dhakas are suitable for weighing the objects given below?

1. Turmeric 150 gm

Balance

100 gm	50 gm

2. Grapes 600 gm

Balance

.....	.....

3. Apple 300 gm

Balance

.....	.....

4. Cheese 700 gm

Balance

.....	.....

5. Coconut 250 gm

Balance

.....	.....

Our Community

Let's see, how much have I learnt?

1. Write the numbers in ascending order.

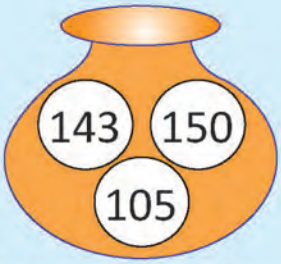
(a)

(b)

2. Write the numbers in descending order.

(a)

(b)



3. Write any three numbers formed from 2, 4 and 6. Write them in ascending and descending order.

Numbers: ☐

Ascending order: ☐ ☐ ☐

Descending order: ☐ ☐ ☐

4. Circle (◯) the even numbers.

274 341 567 852

5. Circle (◯) the odd numbers.

387 640 875 960

6. Write the appropriate number in the blanks.

(a) 5 kilograms = ☐ grams

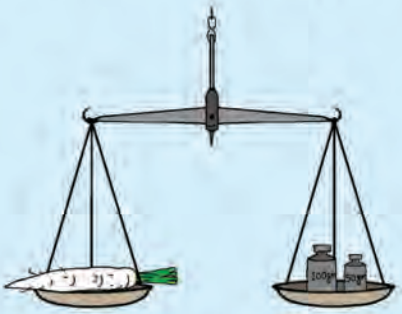
(b) 7 kilograms = ☐ grams

(c) ☐ kilograms = 4000 grams

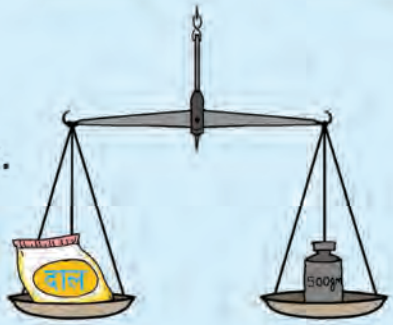
(d) ☐ kilograms = 9000 grams

7. Observe the balance and write the weight of different objects.

(a) Radish weighs ☐ grams.



(a) The packet of Daal weighs ☐ grams.



Teacher's signature

Parent's signature

Lesson 7

Addition

Complete the following mathematical sentences.

1. $9 + 1 = \square$
   $1 + \square = 10$
   $\square + 1 = 10$

2. $8 + 2 = \square$
   $2 + \square = 10$
   $\square + 2 = 10$

3. $7 + 3 = \square$
   $3 + \square = 10$
   $\square + 3 = 10$

4. $6 + 4 = \square$
   $4 + \square = 10$
   $\square + 4 = 10$

5. $5 + 5 = \square$
   $5 + \square = 10$
   $\square + 5 = 10$

6. $8 + 5 = \square$
   $5 + \square = 13$
   $\square + 5 = 13$

7. $9 + 3 = \square$
   $3 + \square = 12$
   $\square + 3 = 12$

8. $8 + 4 = \square$
   $4 + \square = 12$
   $\square + 4 = 12$

Addition of numbers up to two digits

Think how 3 and 24 can be added vertically.

In pasang's opinion

	3	
+	2	4

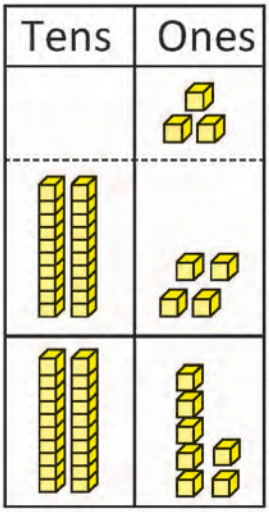
In Dhaniya's opinion

		3
+	2	4

Putting each digit in right place.

	Tens	Ones
		3
+	2	4

3 + 24 = 27



Add vertically.

1. 25 + 4

	Tens	Ones
	2	5
+		4

+ =

2. 31 + 6

	Tens	Ones
+		

+ =

3. 6 + 21

	Tens	Ones
+		

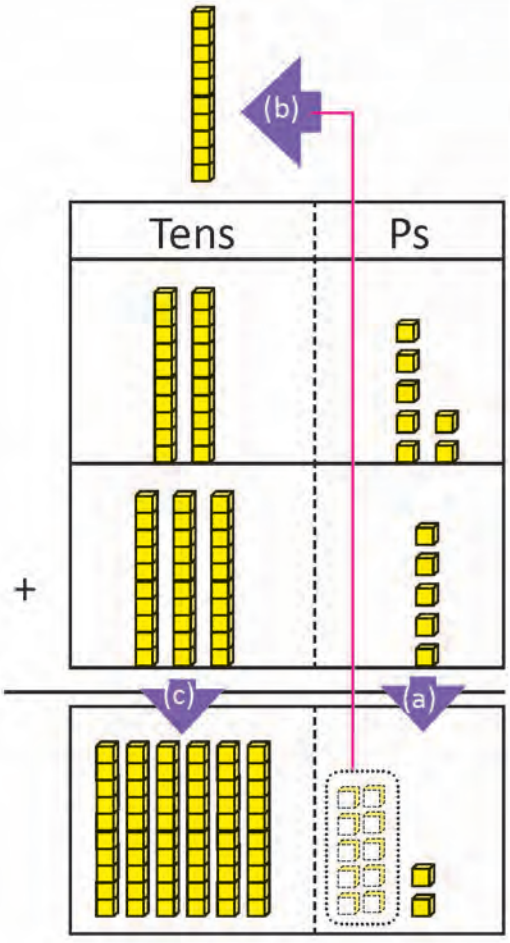
+ =

4. 6 + 33

	Tens	Ones
+		

+ =

Pasang bought some chocolates for Rs. 27 and a ball for Rs. 35. How much does he pay?



(a) There is 7+5 = 12 in Ones places

(b) Carry 10 ones or 1 ten of 12 ones from ones place.

(c) Then, 1, 2 and 3 in the tens place should be added.

It became Rs. 62.

Thus, the number moving from one place to another like in (b) is called "carryover".

Let's see by putting numbers in place value table.

	Tens	Ones
	2	7
+	3	5

	Tens	Ones
	1	
	2	7
+	3	5
		2

	Tens	Ones
	1	
	2	7
+	3	5
	6	2

Write each number according to place value.

(a) Add the numbers in ones place.
7 ones + 5 ones = 12 ones
There is 1 ten and 2 ones in 12 ones.
Write 2 in ones place.

(b) Write 1 ten in tens place like in above table from 1 ten and 2 ones.

There are 1, 2 and 3 in tens place.

(c) Add 1, 2 and 3 in tens place.
1+2+3 = 6
Put 6 in tens place.

Calculate:

1.

	Tens	Ones
	3	6
+	2	9

2.

	Tens	Ones
	1	4
+	6	8

3.

	Tens	Ones
	3	5
+	1	6

4.

	Tens	Ones
	4	8
+	3	9

5.

	Tens	Ones
	5	6
+	3	6

6.

	Tens	Ones
	7	7
+	1	7

Add 65 and 8 by putting it in the place value table.

	T	O
	6	5
+		8

	T	O
	1	
	6	5
+		8
		3

	T	O
	1	
	6	5
+		8
	7	3

Ways of putting numbers in place value table

	T	O
	6	5
+		8

Right

	T	O
	6	5
+	8	

Wrong

In tens place, there is carryover 1 and 6, so 1+6 = 7.

Calculate:

1.

	2	9
+		3

2.

	5	6
+		7

3.

		9
+	6	9

Add 17 and 43 by putting it in the place value table.

	T	O
	1	7
+	4	3

	T	O
	1	
	1	7
+	4	3
		0

	T	O
	1	7
+	4	3
	6	0

There is 7+3 = 10 in ones place.

Don't forget to write 0 in ones place.

Calculate:

1.

	2	5
+	3	5

2.

	6	1
+	2	9

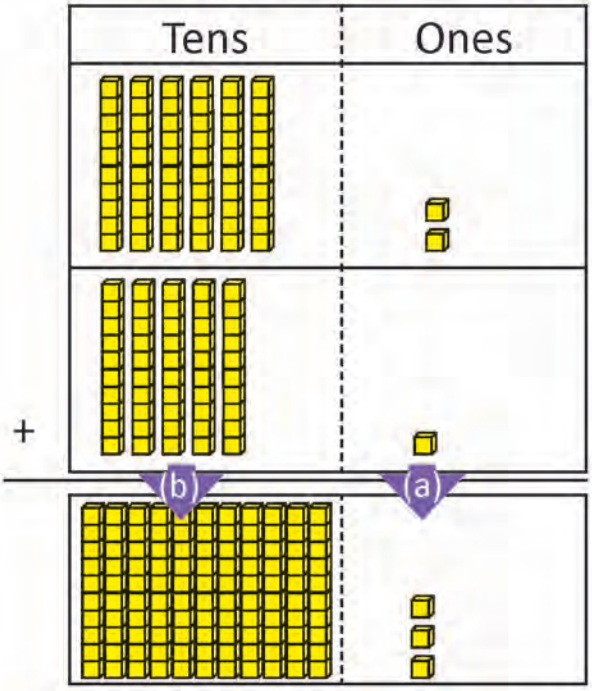
3.

		6
+	4	4

4.

	3	5
+	5	7

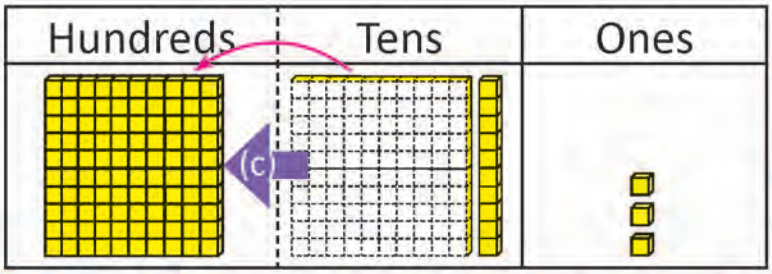
Sita had Rs. 62. Her father gave her Rs. 51, how much money does Sita have now?



(a) Adding 2 and 1 in ones place become 3.

(b) Adding 6 and 5 in tens place become 11.

(c) In his case, 10 tens or 1 hundred should be taken from the tens place.



So, it became Rs. 113.

Let's see by putting the numbers in place value table.

Adding in ones place

Adding in tens place

	H	T	O
		6	2
+		5	1

Write each number according to place value

	H	T	O
		6	2
+		5	1
			3

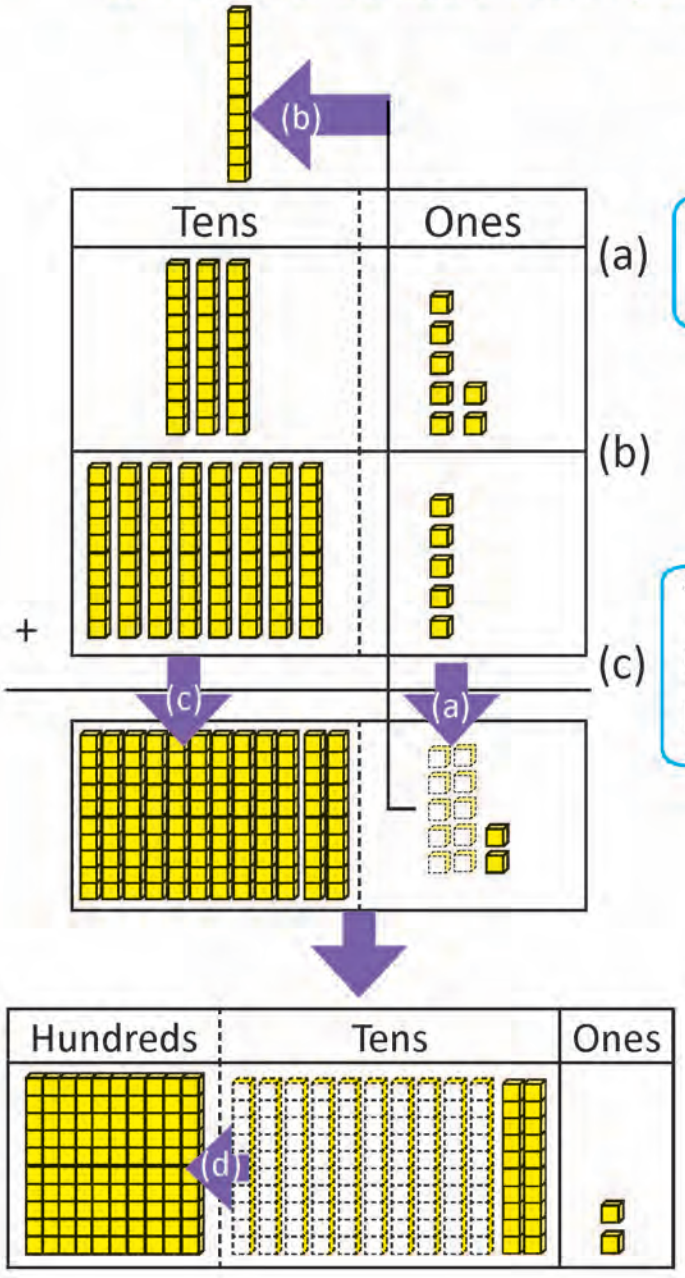
(a) Add the numbers in ones place (2+1 = 3)

	H	T	O
		6	2
+		5	1
	1	1	3

(b) Add the numbers in tens place (6+5 = 11)

(c) Carry 10 tens or 1 hundred to the hundreds place and 1 in hundreds place as shown above.

Your mother volunteered for 37 days and your father did for 85 days in making the road to your home. How many days in total did your father and mother voluneer to make that road from your home?



(a) Adding 7 and 5 in ones place become 12.

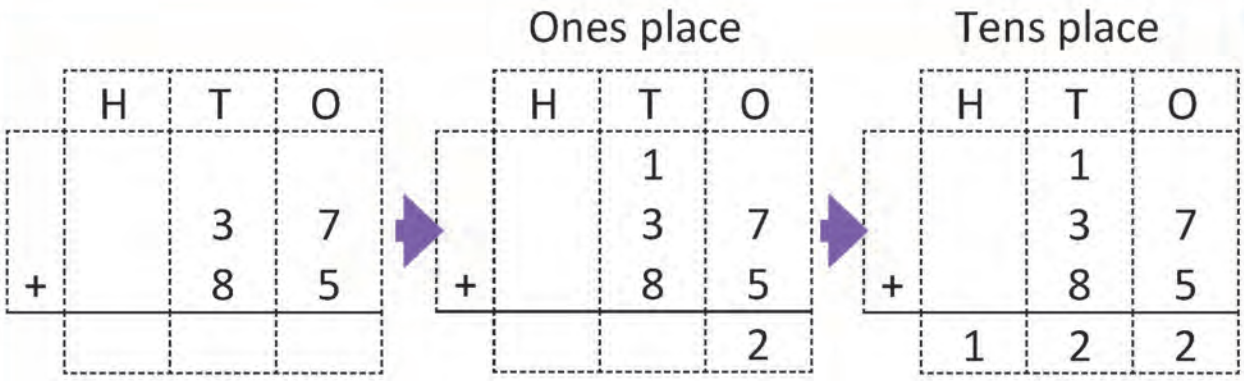
(b) Carry 1 ten in tens place

(c) There are 3, 8 and carryover 1 in tens place. Now, 1+3+8 = 12

(d) Carry 10 ten or 1 hundred to the hundreds place from tens place.

Therefore, the total was 122.

Let's add by putting numbers in place value table.



Write each number according to place value

(a) Add the numbers in ones place.

(7+5) = 12

(b) Carry 1 ten in tens place. Write 1 in tens place and 2 in ones place as shown above.

There are 3, 8 and carryover 1 in tens place.

(c) Now, add 1, 3 and 8 (1+3+8) = 12

(d) Carry 10 tens in hundreds place. Write 1 in hundreds place and 2 in tens place.

Calculate:

1.

		4	2
+		6	4

2.

		6	4
+		5	2

3.

		7	5
+		3	2

Calculate:

1.

	H	T	O
		7	2
+		5	4

2.

	H	T	O
		4	3
+		8	3

3.

	H	T	O
		6	8
+		9	1

4.

	H	T	O
		7	0
+		7	5

5.

		7	4
+		5	8

6.

		8	7
+		8	6

7.

		4	9
+		7	7

8.

		6	9
+		5	9

Add 64 and 38 vertically.

	H	T	O
		6	4
+		3	8

→

	H	T	O
		1	
		6	4
+		3	8
			2

→

	H	T	O
		1	
		6	4
+		3	8
	1	0	2

There are 6, 3 and carryover 1 in tens place. So, 1+6+3 = 10. We have to write 1 hundred while taking 10 tens or 1 hundred. The '0' remained in tens place.

Calculate:

1.

		1	8
+		8	5

2.

		5	9
+		4	7

3.

		3	7
+		6	8

4.

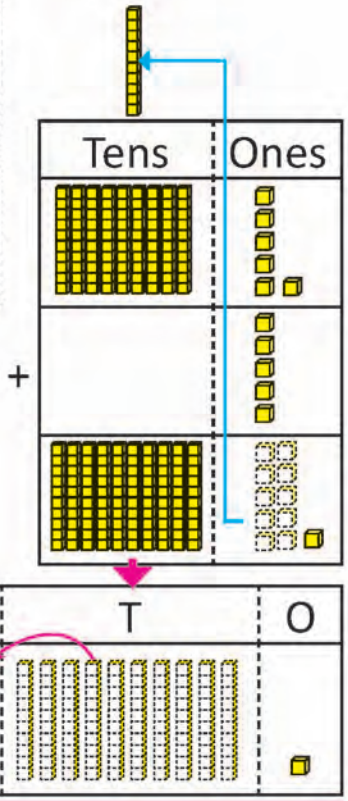
		2	9
+		7	9

Add 96 and 5 by putting in place value table.

	H	T	O
		9	6
+			5

	H	T	O
		1	
		9	6
+			5
			1

	H	T	O
		1	
		9	6
+			5
	1	0	1



There are 9 and carryover 1 from ones place in tens place.
9+1 = 10
Do not forget to write '0' in tens place.

Calculate by putting the numbers in place value table.

1.

	H	T	O
		9	9
+			5

2.

	H	T	O
			7
+		9	7

3.

	H	T	O
		9	3
+			8

4.

	H	T	O
			9
+		9	8

Calculate by putting vertically.

(a) 45 + 29

+			

(b) 81 + 92

+			

(c) 79 + 63

+			

Addition of numbers up to three digits

425 plants were planted on the environment day last year in a green park. 68 plants were planted in the green park this year on the same day. How many plants are there in total in the green park now?

We have already calculated the value of 25 + 68 in the previous lesson.

1.

	H	T	O
	4	2	5
+		6	8

2.

	H	T	O
		1	
	4	2	5
+		6	8
			3

3.

	H	T	O
		1	
	4	2	5
+		6	8
		9	3

4.

	H	T	O
		1	
	4	2	5
+		6	8
	4	9	3

Calculate:

1.

	H	T	O
	3	2	8
+		2	1

2.

	H	T	O
	5	2	4
+		3	7

3.

	H	T	O
			9
+	6	1	5

4.

	H	T	O
		3	4
+	7	5	6

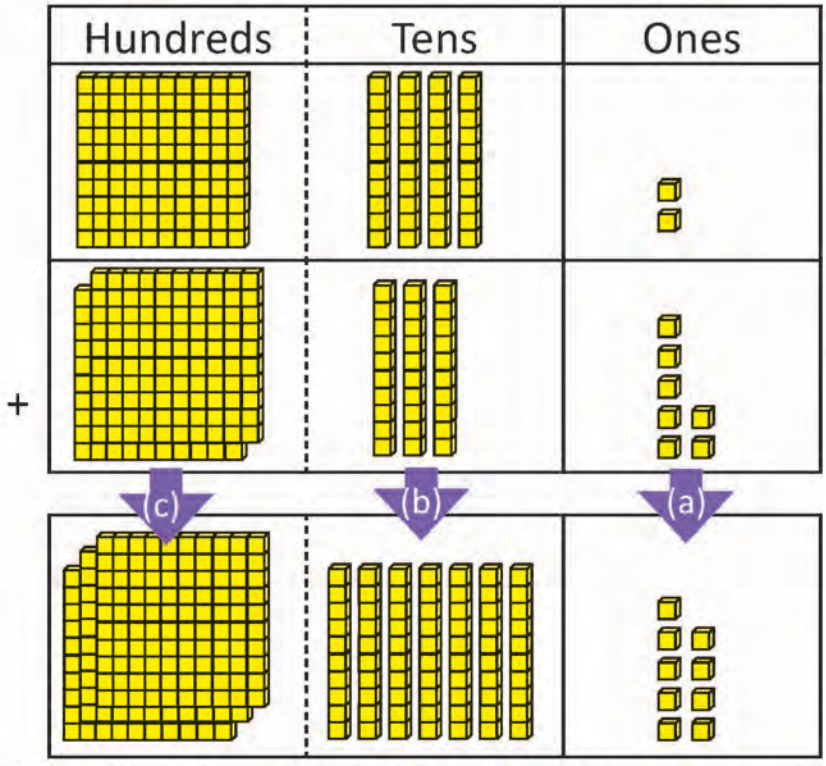
Manisha had Rs. 300. If her friend gave her Rs. 200, then how many rupees does she have now in total?

Mathematical sentence: 300 + 200 = 500
Therefore, Manisha had Rs. 500.

Calculate:

1. 300 + 300 = ☐
2. 400 + 100 = ☐
3. 200 + 200 = ☐
4. 500 + 300 = ☐

142 students are studying from grade one to five in Janata Secondary School. Similarly, 237 students are studying from grade six to ten. How many students are studying from grade one to ten in that school?



(c) In hundreds place 1+2 = 3

(b) In tens place 4+3 = 7

(a) In ones place 2+7 = 9

Remember!
In adding, add
(a) Ones place
(b) Tens place
(c) Hundreds place

	H	T	O
	1	4	2
+	2	3	7
	3	7	9

Calculate:

1.
	3	2	4
+	2	6	3

2.
	5	1	4
+	2	1	5

3.
	2	3	1
+	2	0	5

4.
	7	2	0
+	1	3	1

5.
	3	2	5
+	2	4	3

6.
	2	6	3
+	1	2	6

7.
	4	7	1
+	3	2	6

8.
	6	4	3
+	2	3	5

Add 137 and 215 by putting it in place value table.

We may add in hundreds place also!

Yes, write 1+2 = 3 in hundreds place.

	H	T	O
	1	3	7
+	2	1	5

	H	T	O
		1	
	1	3	7
+	2	1	5
			2

	H	T	O
		1	
	1	3	7
+	2	1	5
		5	2

	H	T	O
		1	
	1	3	7
+	2	1	5
	3	5	2

Add 491 and 325 by putting it in place value table.

1+5 = 6 ones in ones place
9+2 = 11 tens in tens place

Carry 10 tens equals 100 from tens place, which is shown in the place value table below.

	H	T	O
	4	9	1
+	3	2	5

	H	T	O
	4	9	1
+	3	2	5
			6

	H	T	O
	1		
	4	9	1
+	3	2	5
		1	6

	H	T	O
	1		
	4	9	1
+	3	2	5
	8	1	6

Calculate:

1.

	2	1	8
+	5	2	4

2.

	4	9	2
+	1	8	3

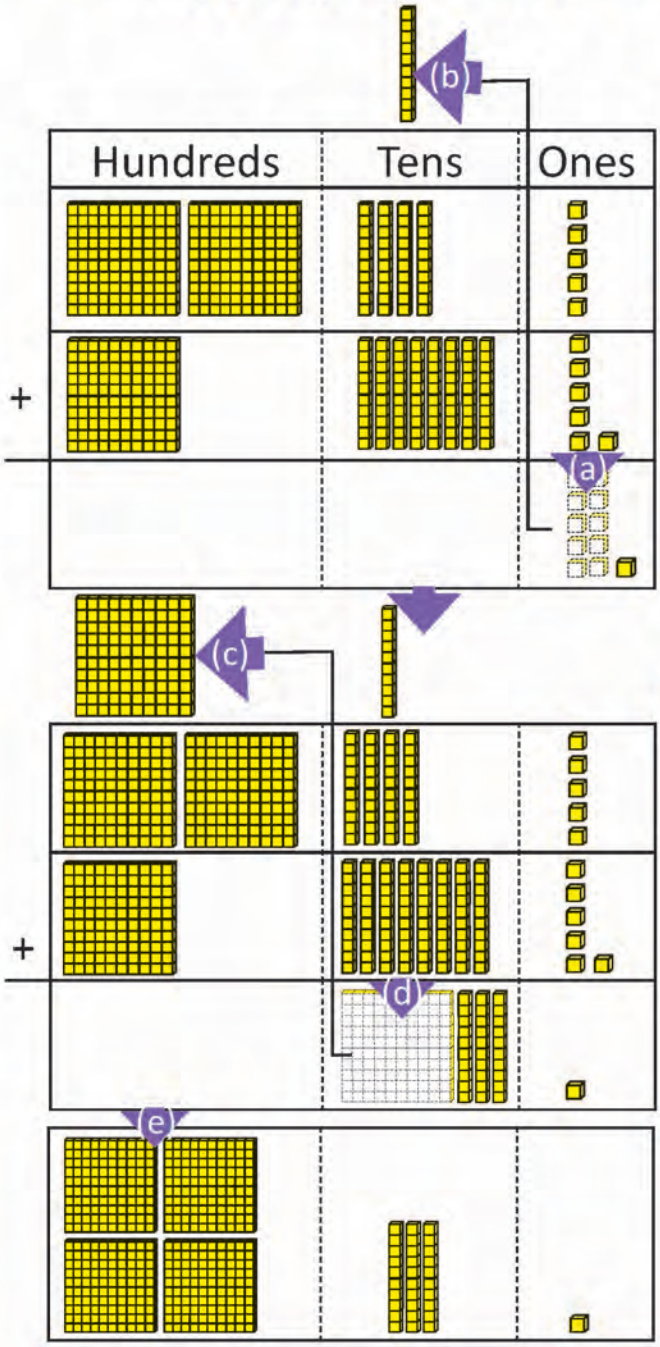
3.

	4	5	2
+		9	1

4.

	5	6	5
+	3	8	1

A youth club conducted a blood donation program for two days with the slogan "Blood Donation, Life Donation". 245 people donated blood on the first day and 186 people donated blood on the second day. How many people donated blood in both the days in total?



	H	T	O
	2	4	5
+	1	8	6

(a) In ones place, 5+6 = 11

(b) Carry 1 ten from ones place to tens place

	H	T	O
		1	
	2	4	5
+	1	8	6
			1

(c) There are 4, 8 and carryover 1 in tens place. So,

1+4+8 = 13

(d) Carry 10 tens from tens place to hundreds place.

	H	T	O
	2	4	5
+	1	8	6
		3	1

(e) Now, there are 2, 1 and carryover 1 from tens place. So, 1+2+1 + 4 hundreds.

	H	T	O
	1	1	
	2	4	5
+	1	8	6
	4	3	1

Calculate:

1.

	4	8	8
+	1	2	3

2.

	2	7	3
+	2	5	9

3.

	2	8	7
+	3	6	7

4.

	4	6	5
+	2	9	5

In addition, Remember!

- Ones place ⟶ Ten place ⟶ Hundreds place respectively.
- If there is a sum of 10 in every place, the carry 1 to the upper place.

Add 787 and 36 by putting it in place value table.

	H	T	O
	7	8	7
+		3	6

	H	T	O
	7	1 8	7
+		3	6
			3

	H	T	O
	1 7	1 8	7
+		3	6
		2	3

	H	T	O
	1 7	1 8	7
+		3	6
	8	2	8

Calculate:

1.

	3	6	8
+		9	5

2.

		7	6
+	2	3	6

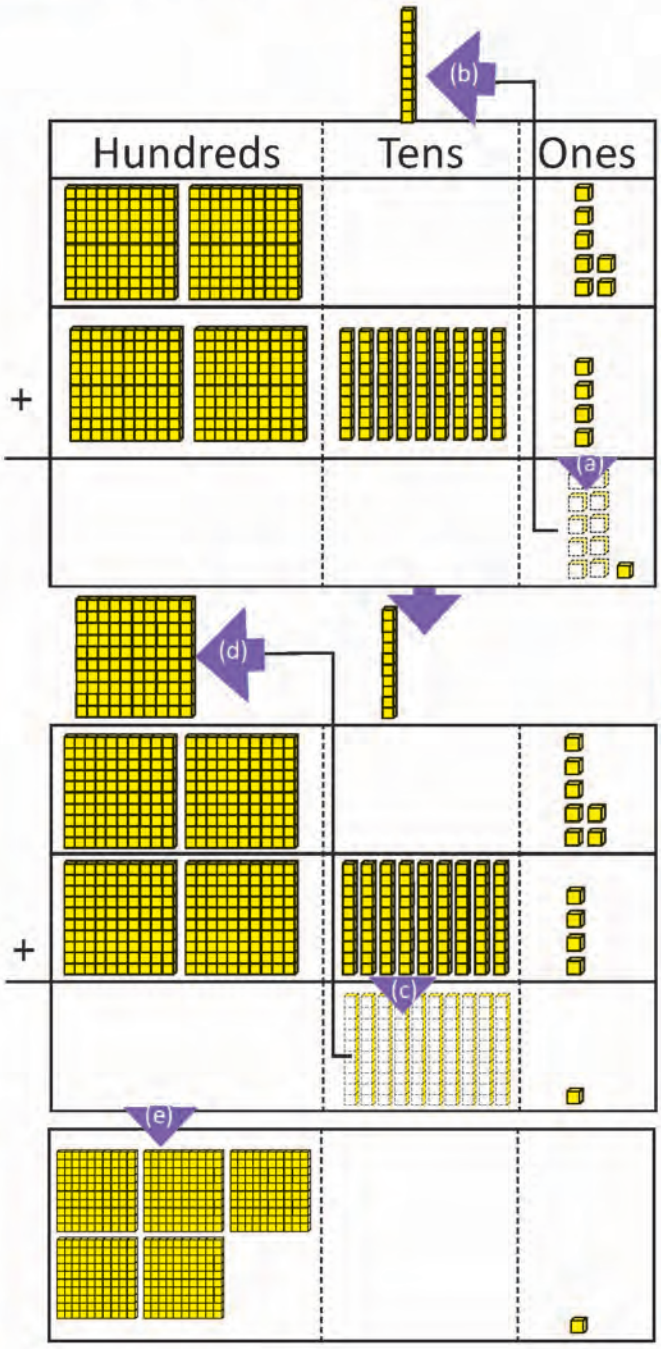
3.

	1	4	3
+		8	7

4.

		5	9
+	6	8	8

Add 207 and 294.



	H	T	O
	2	0	7
+	2	9	4

There are o and 9 in tens place. So, there may not be carryover from tens place?

	H	T	O
		1	
	2	0	7
+	2	9	4
			1

(a) Let's start adding from the ones place.

7+4 + 11

Carryover is needed.

	H	T	O
	1	1	
	2	0	7
+	2	9	4
		0	1

(b) There are 0, 9 and carryover 1 from the ones place.

Therefore,

(c) 1+0+9 = 10 tens carryover is needed place to hundreds place.

(d) there are 2, 2 and carryover 1 from the tens place. Therefore,

(e) 1+2+2 = 5

	H	T	O
	1	1	
	2	0	7
+	2	9	4
	5	0	1

calculate:

1.

	2	5	9
+	3	4	6

2.

	1	8	4
+	1	1	8

3.

	3	2	5
+	5	7	5

4.

	1	9	2
+	3	0	8

5.

	7	3	5
+		6	7

6.

			6
+	4	9	7

7.

		9	2
+	3	0	9

8.

	3	9	4
+			8

9.

	2	5	9
+	3	4	6

10.

	1	8	4
+	1	1	8

11.

	3	2	5
+	5	7	5

12.

	1	9	2
+	3	0	8

Don't forget the process of addition and don't give up.

Add in each place from ones place to hundreds place.

If there is a sum of 10 in any place, then take 1 as carryover to the previous place.

Calculate:

1.

	1	3	3
	1	4	3
+	1	0	3
	3	7	9

2.

	4	7	6
	3	5	0
+		5	5

3.

	5	3	8
	2	8	4
+	1	4	3

4.

	3	7	6
	2	9	7
+	3	1	2

5.

	5	3	8
	1	3	6
+		3	4

6.

	1	4	3
	2	5	5
+	3	4	5

7.

	2	6	8
	3	4	0
+	3	1	5

8.

	3	1	0
	1	8	5
+	2	4	5

9.

	5	2	0
	2	7	5
+	1	3	7

Calculate:

1. $\begin{array}{r} 26 \\ +\ 15 \\ \hline \end{array}$

2. $\begin{array}{r} 345 \\ +\ 104 \\ \hline \end{array}$

3. $\begin{array}{r} 425 \\ +\ 260 \\ \hline \end{array}$

4. $\begin{array}{r} 468 \\ +\ \ 12 \\ \hline \end{array}$

5. $\begin{array}{r} 659 \\ +\ 241 \\ \hline \end{array}$

6. $\begin{array}{r} 355 \\ +\ 260 \\ \hline \end{array}$

7. $\begin{array}{r} 123 \\ 245 \\ +\ \ 48 \\ \hline \end{array}$

8. $\begin{array}{r} 540 \\ 285 \\ +\ \ 27 \\ \hline \end{array}$

9. $\begin{array}{r} 89 \\ 123 \\ +\ 245 \\ \hline \end{array}$

10. $\begin{array}{r} 624 \\ 268 \\ +\ \ \ 9 \\ \hline \end{array}$

11. $\begin{array}{r} 407 \\ 282 \\ +\ 155 \\ \hline \end{array}$

12. $\begin{array}{r} 555 \\ 344 \\ +\ \ 38 \\ \hline \end{array}$

13. $\begin{array}{r} 146 \\ 279 \\ +\ 138 \\ \hline \end{array}$

14. $\begin{array}{r} 254 \\ 319 \\ +\ \ 87 \\ \hline \end{array}$

15. $\begin{array}{r} 478 \\ \ \ 63 \\ +\ 309 \\ \hline \end{array}$

Calculate:

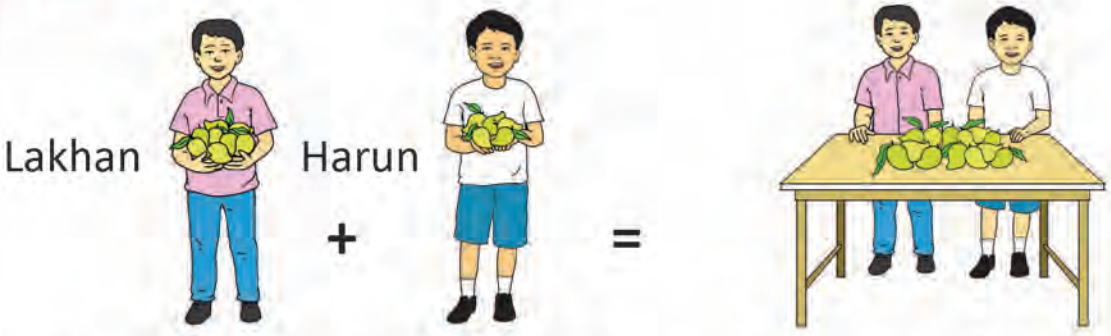
1. There are 46 students in grade 1 and 33 students in grade 2 in Janata Basic School. How many students are there in both the grades 1 and 2?

2. There were 139 plants in one garden. If 87 new plants were added to the garden, how many plants are there now?

3. One library had 658 books. If 189 new books were bought and added to the library, how many books are there now?

Relation between Addition and Subtraction

Discuss:

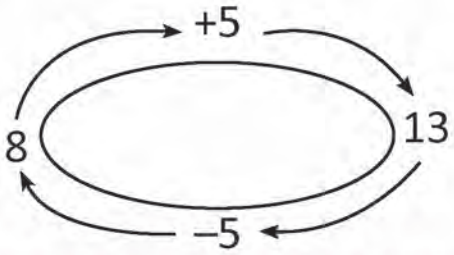


Lakhan and Harun went to the garden to pick mangoes. Lakhan picked 8 mangoes. Harun picked 5 mangoes. How many mangoes did they pick?

8 + 5 = 13, 13 mangoes.

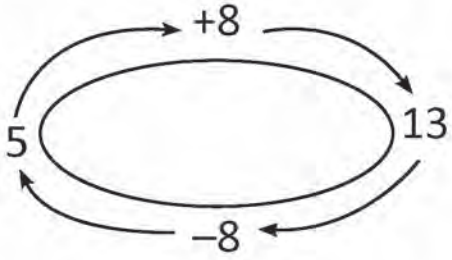
They put all the mangoes is the same bag and went home. Harun's home was close. He took the five mangoes he had picked. How many mangoes are left in Lakhan's bag now?

13 – 5 = 8



8 + 5 = 13

13 - 5– = 8

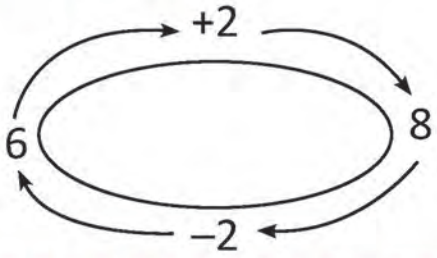


5 + 8 = ☐

13 – 8 = ☐

Calculate:

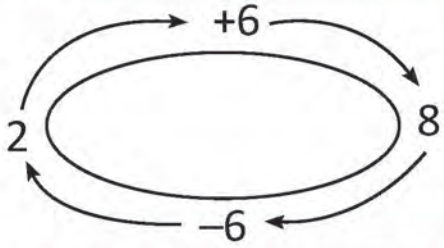
1.



6 + 2 = ☐

8 – 2 = ☐

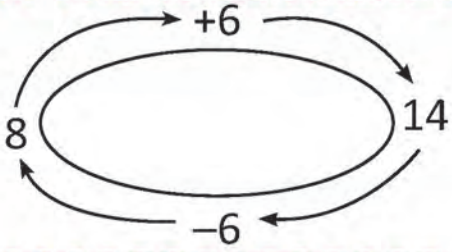
2.



2 + 6 = ☐

8 – 6 = ☐

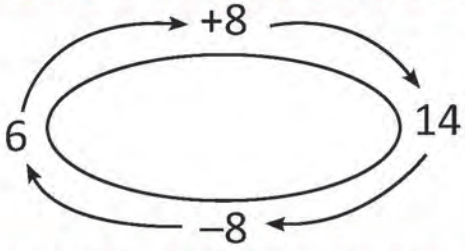
3.



8 + 6 = 14

14 – 6 = 8

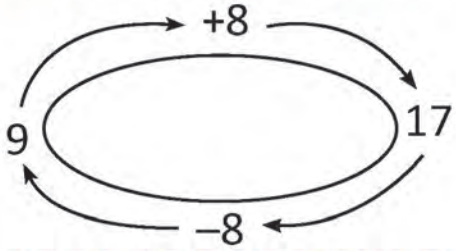
4.



6 + 8 = ☐

14 – 8 = ☐

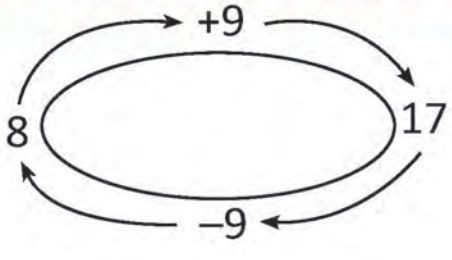
5.



9 + 8 = ☐

17 – 8 = ☐

6.

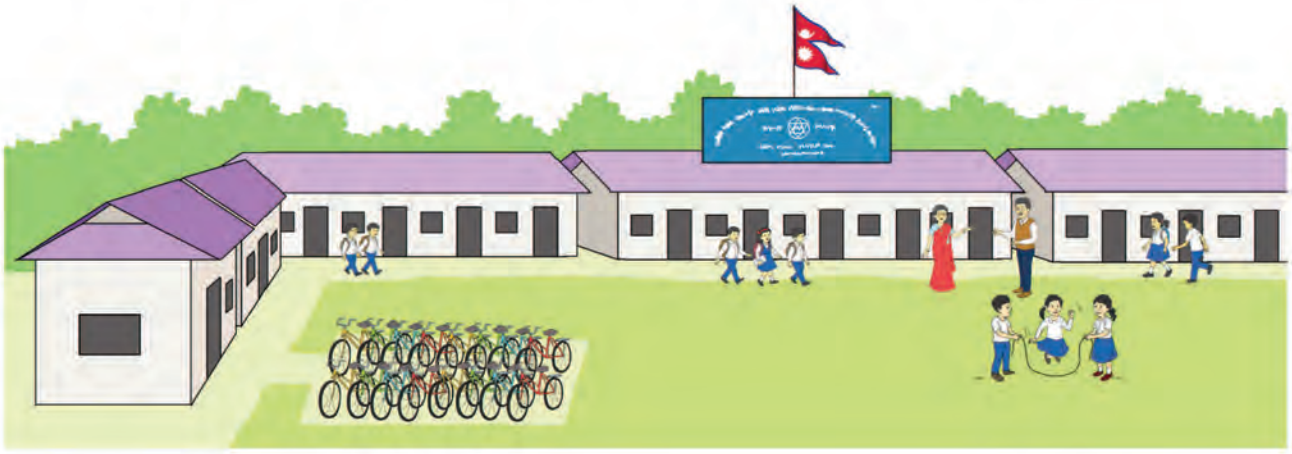


8 + 9 = ☐

17 – 9 = ☐

Subtraction

There are 34 bicycles in a school in Saptari. If 12 of them belong to the teachers and the rest to the students, how many bicycles do the students belong to?



Writing in mathematical sentence: 34 – 12 = 22

Students have 22 bicycles.

	Tens	Ones
	3	4
–	1	2
	2	2

Calculate:

1.

	Tens	Ones
	3	1
–		1

2.

	Tens	Ones
	4	3
–	1	2

3.

	Tens	Ones
	5	9
–	1	4

4.

	Tens	Ones
	6	8
–	3	5

5.

	Tens	Ones
	7	8
–	5	6

6.

	Tens	Ones
	8	8
–	3	5

7.

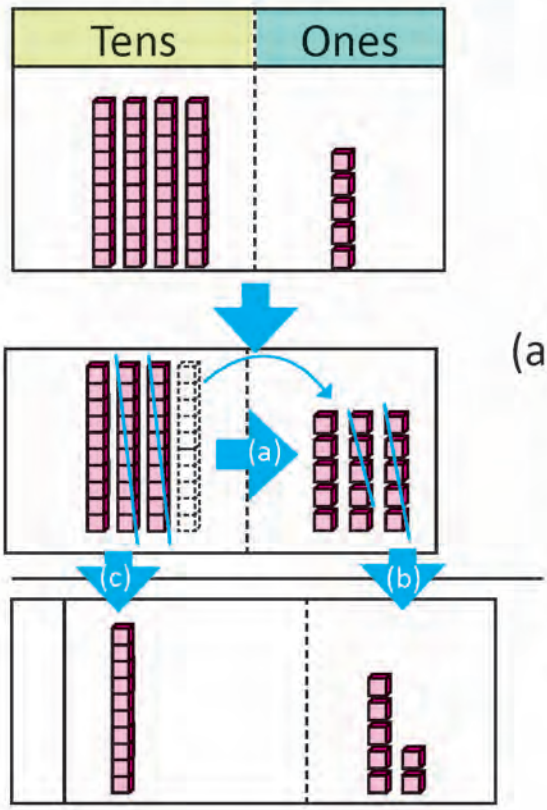
	Tens	Ones
	9	3
–	6	3

8.

	Tens	Ones
	8	6
–	3	3

Hari has a book of 45 pages in total. He studied 28 pages of the book. Now, how many pages are left to study?

45 pages



We have to subtract 8 from 5 in ones place but we can't.

(a) In such a case, moving 1 ten from tens place to ones place gives 10 ones. Now, 10 ones and 5 ones make 15 ones.

(b) Now, we can subtract 8 from 15.

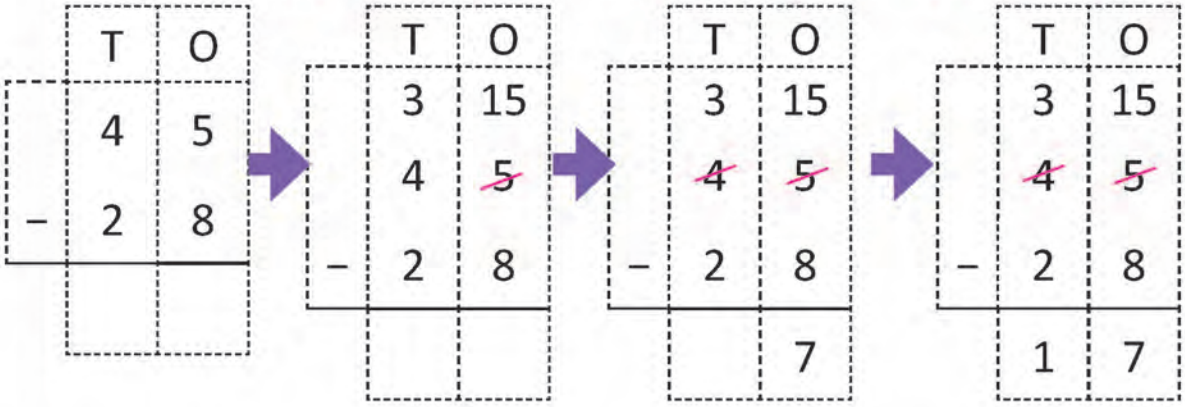
(c) Then, subtract 2 tens from the remaining 3 tens in the tens place.

Now, 17 pages remained to study.

Thus, as mentioned above, moving numbers from one place to another is called regrouping.

How do we calculate by putting numbers in the place value table? think it.

(a) borrow (b) Ones place (c) Tens place



Write numbers according to place value.

We cannot subtract 8 from 5 in ones place. Therefore,

(a) Borrow 1 ten from 4 of tens place. Write 3 above 4 in tens place and write 15 above 5 in ones place.

(b) Then, subtract 8 from 15 in ones place.

(c) Subtract 2 from 3 in tens place.

Subtract by using the place value table.

1.

	T	O
	6	3
–	1	5

2.

	T	O
	4	4
–	2	8

3.

	T	O
	5	5
–	3	7

4.

	T	O
	8	2
–	3	4

Subtract 14 from 50 by putting it in the place valute table

	T	O
	5	0
–	1	4

	T	O
	4	10
	~~5~~	~~0~~
–	1	4

	T	O
	4	10
	~~5~~	~~0~~
–	1	4
		6

	T	O
	4	10
	~~5~~	~~0~~
–	1	4
	3	6

Borrow one ten from tens place to the ones place and subtract 4 from 10.

Calculate:

1.

	4	0
–	2	7

2.

	7	0
–	4	1

3.

	6	0
–	3	8

Subtract 29 from 34 by putting it in the place value table.

	T	O
	3	4
–	2	9

	T	O
	2	14
	~~3~~	~~4~~
–	2	9

	T	O
	2	14
	~~3~~	~~4~~
–	2	9
		5

In tens place, 2–2 = 0.
Therefore, the answer is 05

05 and 5 are the same. So, only 5 is written.

Calculate:

	5	1
–	3	3

	6	2
–	2	5

	8	3
–	7	8

Subtract 7 from 32 by putting it in the place value table.

Look at the place of 7.
This number is in ones place.

	Tens	Ones
	3	2
–		7

→

	Tens	Ones
	2	12
	~~3~~	~~2~~
–		7

→

	Tens	Ones
	2	12
	~~3~~	~~2~~
–		7
		5

→

	Tens	Ones
	2	12
	~~3~~	~~2~~
–		7
	2	5

2 is left in tens place. We do not need to subtract only umber from 2.

So, 2 is left.

Calculate by using the place value table.

1. 44 — 8

	Tens	Ones
	4	4
–		8

2. 31 — 3

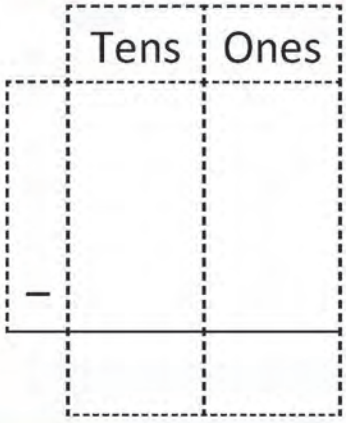
	Tens	Ones
–		

3. 70 — 6

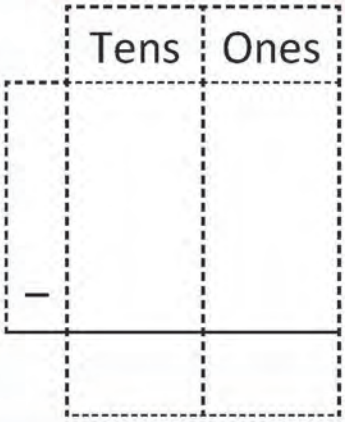
	Tens	Ones
–		

Subtract by using the place value table.

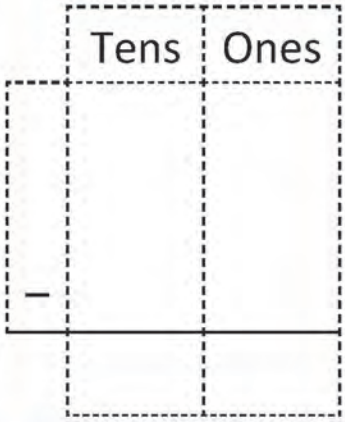
1. 65 – 37



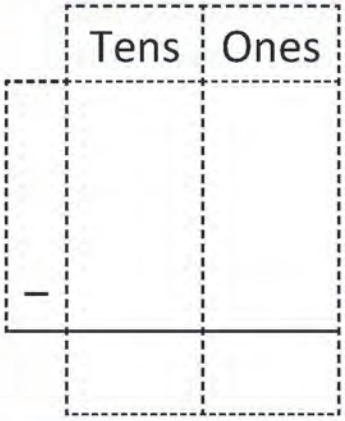
2. 80 – 22



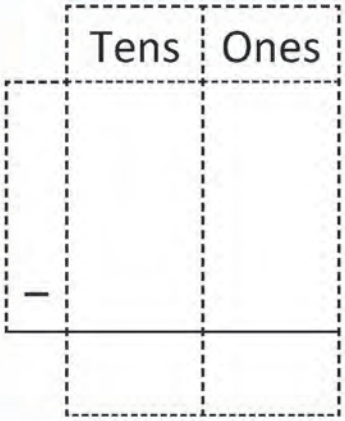
3. 51– 47



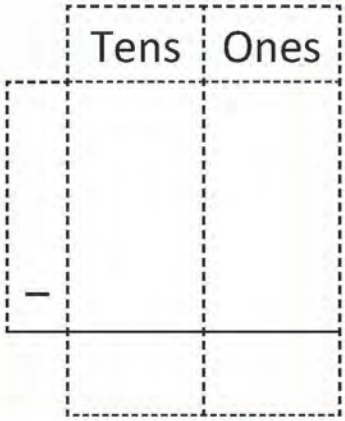
4. 53 – 45



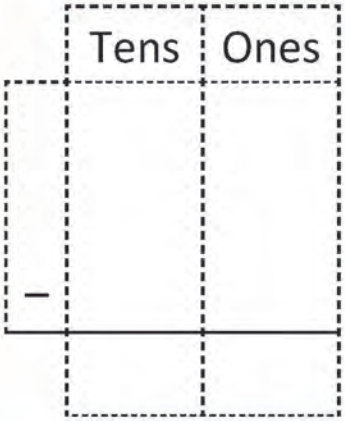
5. 57 – 9



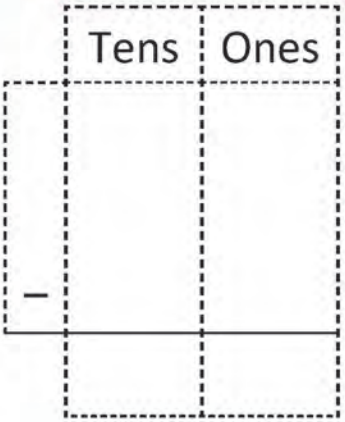
6. 67 – 42



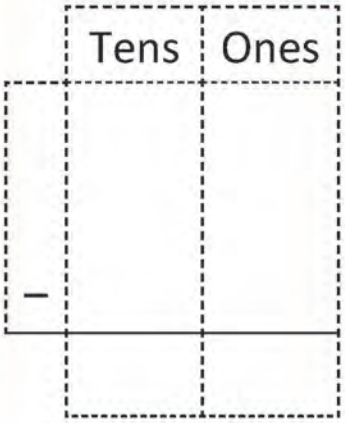
7. 69 – 38



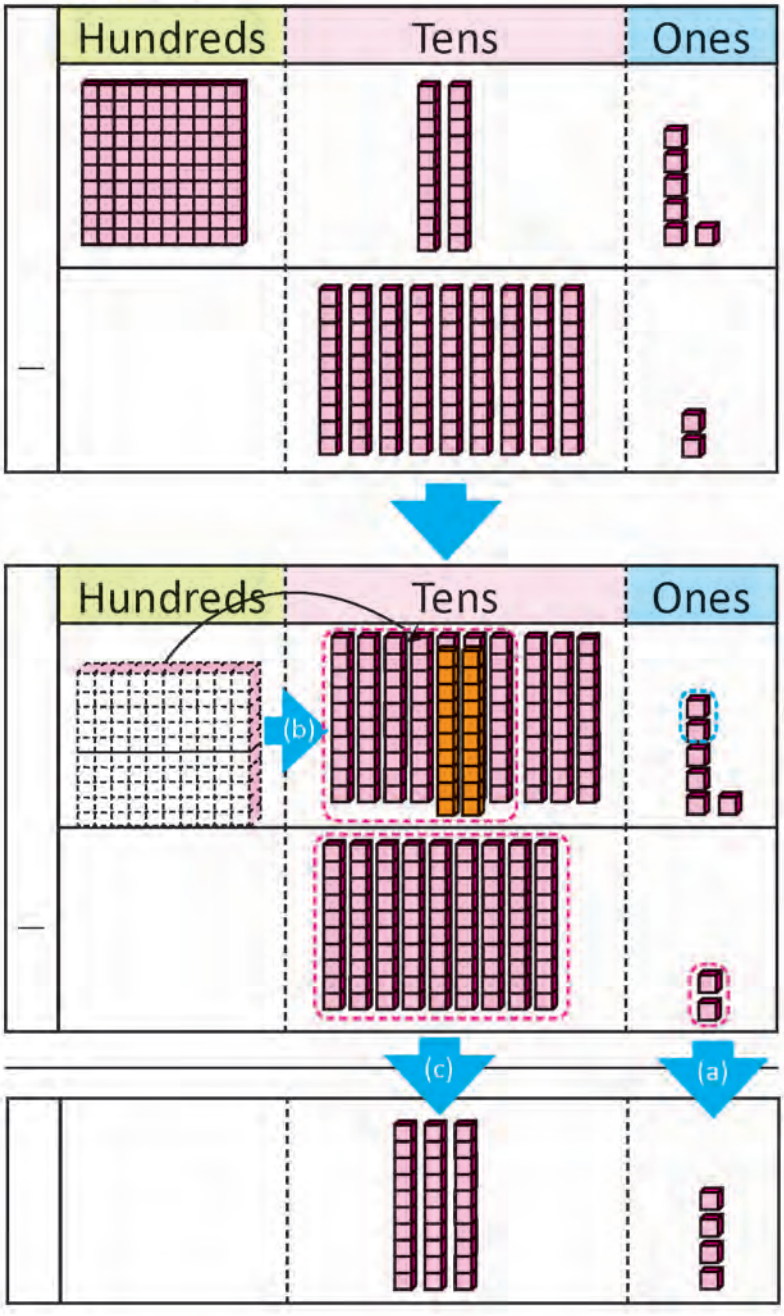
8. 84 – 68



9. 92 – 5



Sita had Rs. 126 in total. She bought an exercise book and a pen for Rs 92. How many rupees does she have now?



Subtracting 2 ones from 6 ones gives 4 ones in ones place.

But in tens place, we cannot subtract 9 tens from 2 tens.

In such a case,

We have to borrow 1 hundred from hundreds place. There are 10 tens in one hundred.

Then we have to subtract 9 tens from 12 tens in tens place.

There was no number left in hundreds place, when 1 hundred was borrowed from hundreds place to the tens place.

Now, Sita has Rs. 34.

Calculate by using the place value table.

	H	T	O
	1	2	6
–		9	2

(a) Ones place

	H	T	O
	1	2	6
–		9	2
			4

(b) Tens palce

	H	T	O
		12	
	~~1~~	~~2~~	6
–		9	2
			4

Writing numbers according to place value.

(a) Subtract 2 from 6 in ones place.

(b) 9 can not be subtracted from 2 in tens place. So, borrow 1 hundred or 10 tens which is in hundreds place. Cut 1 in hundreds place by slanting line and write 12 above 2 in tens place.

(c) Then, subtract 9 from 12 in tens place.

	H	T	O
		12	
	~~1~~	~~2~~	6
–		9	2
		3	4

Calculate by using the place value table.

1.

	H	T	O
	1	2	3
–		8	1

2.

	H	T	O
	1	1	8
–		4	3

3.

	H	T	O
	1	8	7
–		9	4

4.

	H	T	O
	1	4	6
–		5	2

5.

	H	T	O
	1	3	9
–		6	3

6.

	H	T	O
	1	5	2
–		7	0

7.

	H	T	O
	1	3	4
–		7	2

8.

	H	T	O
	1	6	7
–		9	5

9.

	H	T	O
	1	5	9
–		6	7

10.

	H	T	O
	1	2	7
–		4	5

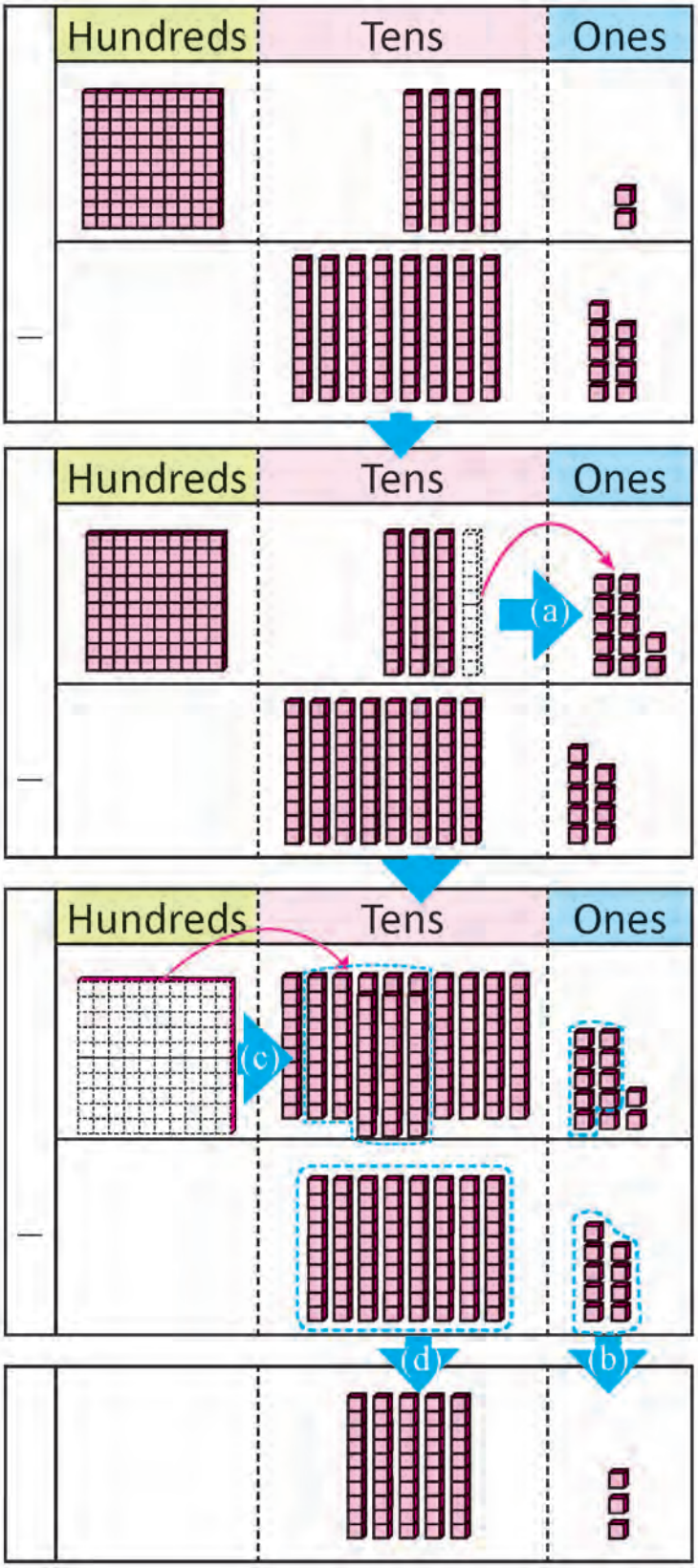
11.

	H	T	O
	1	3	9
–		9	1

12.

	H	T	O
	1	8	7
–		9	6

How much is left when 89 is subtracted from 142?



We cannot subtract 9 from 2 in ones place. So, borrow 1 ten from tens place.

Now, 10 ones and 2 ones make 12 ones.

Then, subtract 9 from 12.

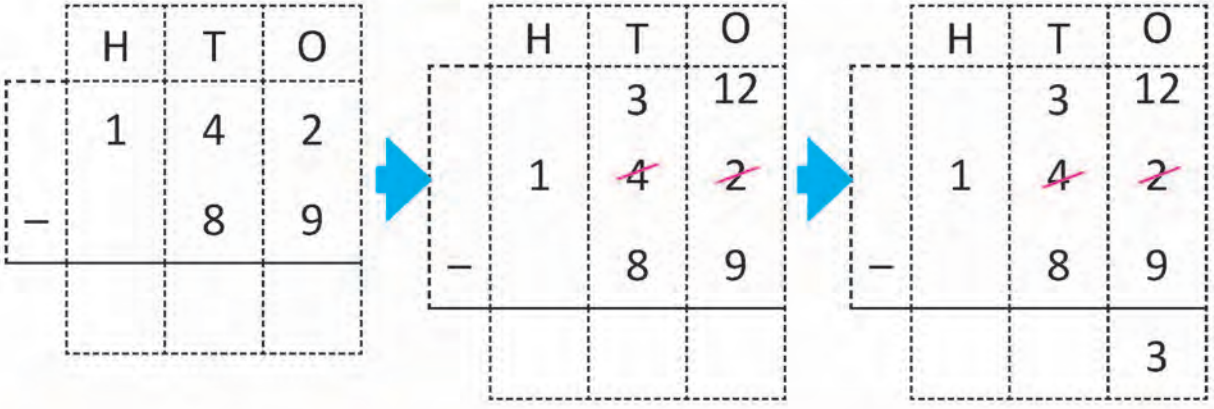
We cannot subtract 8 from the remaining number 3 in tens place. So, borrow 1 hundred or 10 tens from the hundreds place.

Now, 10 tens and 3 tens make 13 tens.
Then, subtract 8 tens from 13 tens.

It remained 53!

How do we subtract numbers in the place value table? Think it.

(a) Calculating in ones place



	H	T	O
	1	4	2
–		8	9

	H	T	O
		3	12
	1	~~4~~	~~2~~
–		8	9

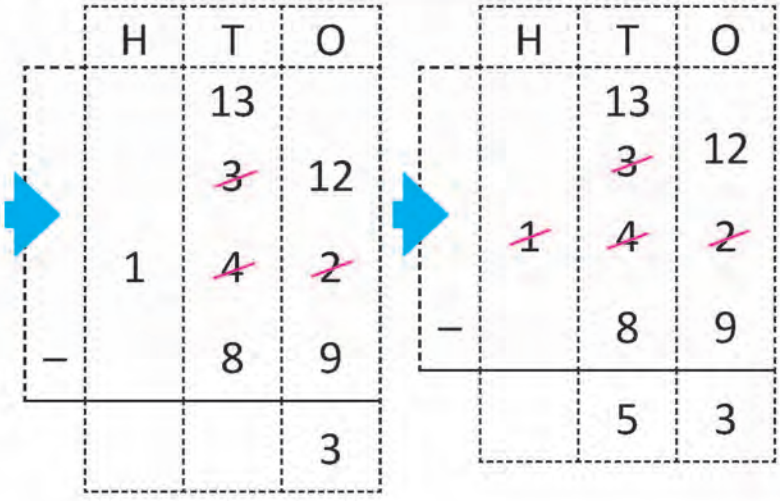
	H	T	O
		3	12
	1	~~4~~	~~2~~
–		8	9
			3

Write numbers according to place value

We cannot subtract 9 from 2 in ones place. So, borrow 1 ten or 10 ones from tens place.

After that, subtract 9 from 12 in ones place.

(b) Calculating in tens place.



	H	T	O
		13	
		~~3~~	12
	1	~~4~~	~~2~~
–		8	9
			3

	H	T	O
		13	
		~~3~~	12
	~~1~~	~~4~~	~~2~~
–		8	9
		5	3

We cannot subtract 8 from the remaining number 3 in tens place. So, borrow 1 hundred or 10 tens from hundreds place.

After that, subtract 8 tens from 13 tens in tens place.

Calculate:

1.

	1	3	1
–		7	9

2.

	1	2	5
–		3	8

3.

	1	4	2
–		9	7

4.

	1	7	6
–		8	8

Subtract 8 from 105.

	H	T	O
	1	0	5
–			8

→

	H	T	O
	~~1~~	10	
		~~0~~	5
–			8

→

	H	T	O
		9	
	1	~~10~~	15
	~~1~~	~~0~~	~~5~~
–			8

	H	T	O
		9	
	~~1~~	~~10~~	15
	~~1~~	~~0~~	~~5~~
–			8
			7

→

	H	T	O
		9	
	~~1~~	~~10~~	15
	~~1~~	~~0~~	~~5~~
–			8
		9	7

Finally 9 tens is remained. So, write it in the tens place.

Calculate:

1.

	1	0	3
–			5

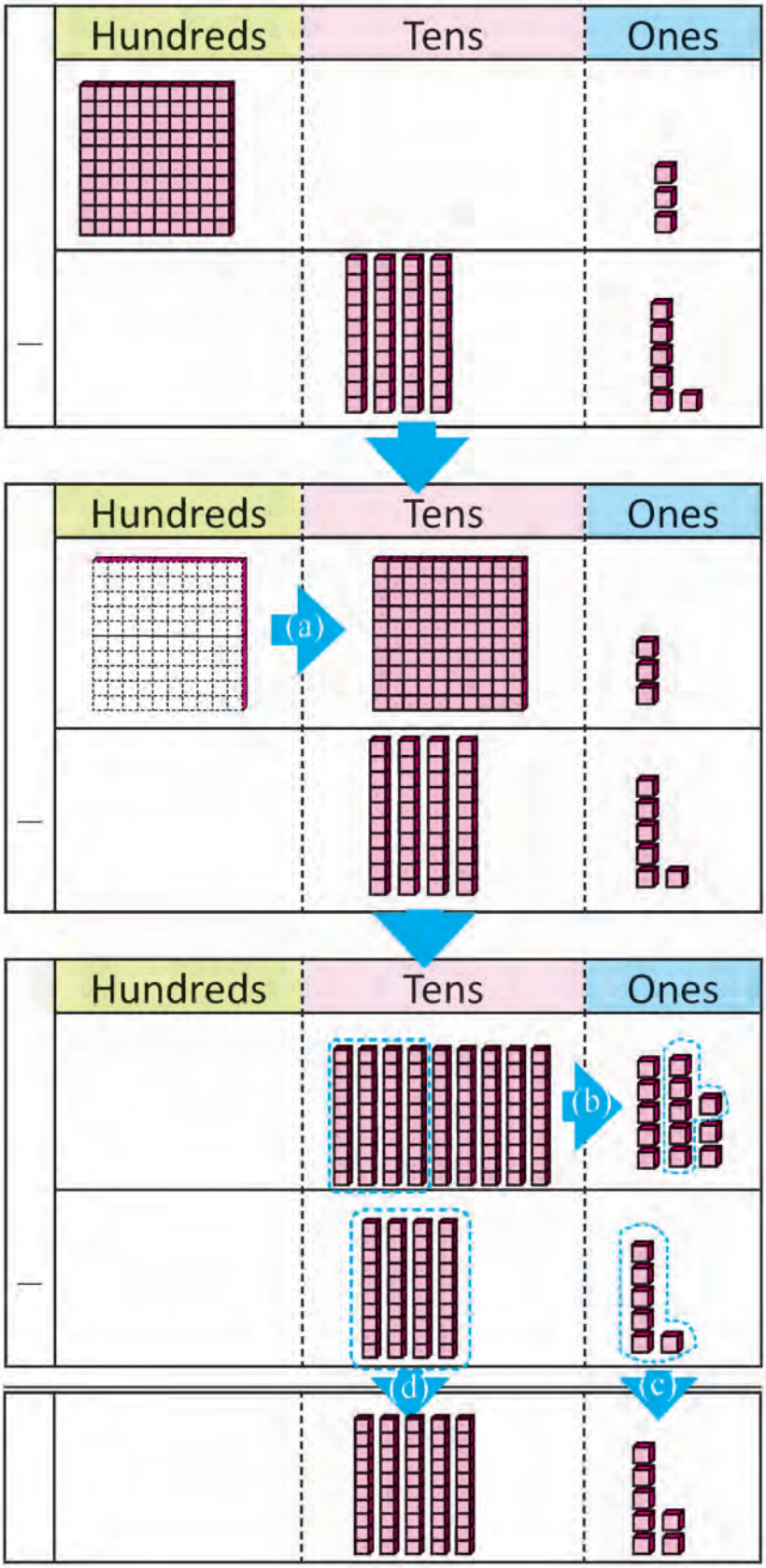
2.

	1	0	7
–			8

3.

	1	0	6
–			9

How much is left when subtracting 46 from 103?



We cannot subtract 6 from 3 in ones place. So, borrow 1 ten from tens place.

Oh! there is 0 is tens place, so we cannot take borrow from it.

In such a case,

(a) We have to borrow 1 hundred or 10 tens from hundreds place.

(b) Thus, we have to borrow 1 ten from the tens place.

After that,

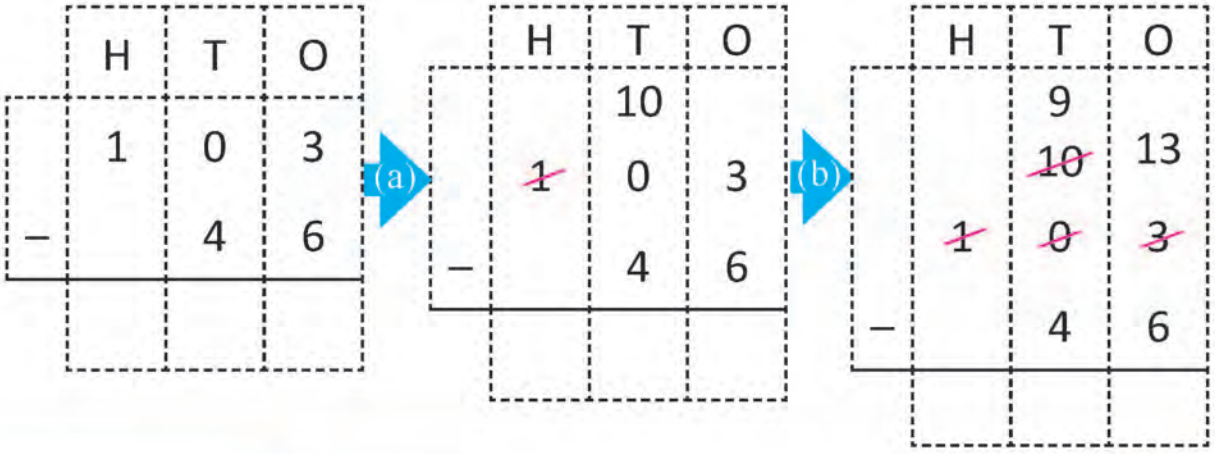
(c) Subtract 6 from 13 in ones place.

(b) Similarly, subtract 4 from 9 in ten place.

Now,
it remained 57

Subtract the numbers in the place value table.

1. Calculating in ones place.



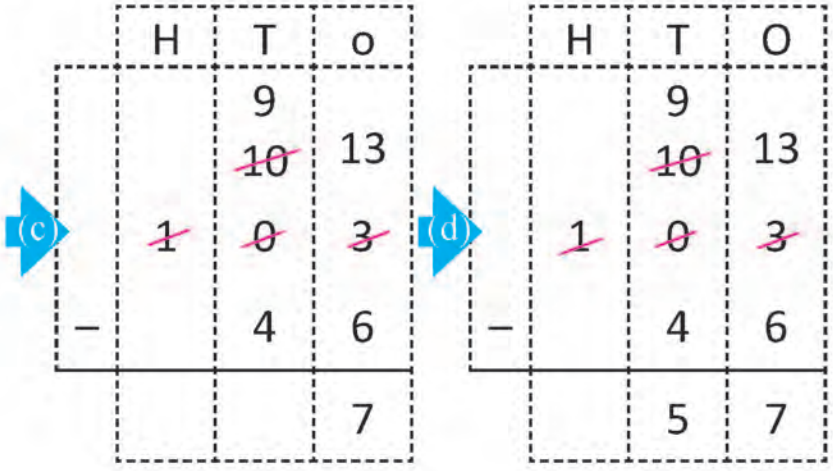
Write the numbers according to the place value

We cannot subtract 6 from 3 in ones place and there is no any number to borrow. Therefore,

(a) Borrow 1 hundred from hundreds place

(b) After that, borrow 1 ten from the tens place.

2. Calculating in tens place



(c) Subtract 6 from 13 in ones place.

(d) After that subtract 4 from 9 in tens place and write answer.

Calculate:

1.
$$\begin{array}{r} 104 \\ -\ \ 45 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 107 \\ -\ \ 29 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 105 \\ -\ \ 57 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 106 \\ -\ \ 58 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 108 \\ -\ \ 19 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 104 \\ -\ \ 45 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 104 \\ -\ \ 98 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 108 \\ -\ \ 99 \\ \hline \end{array}$$

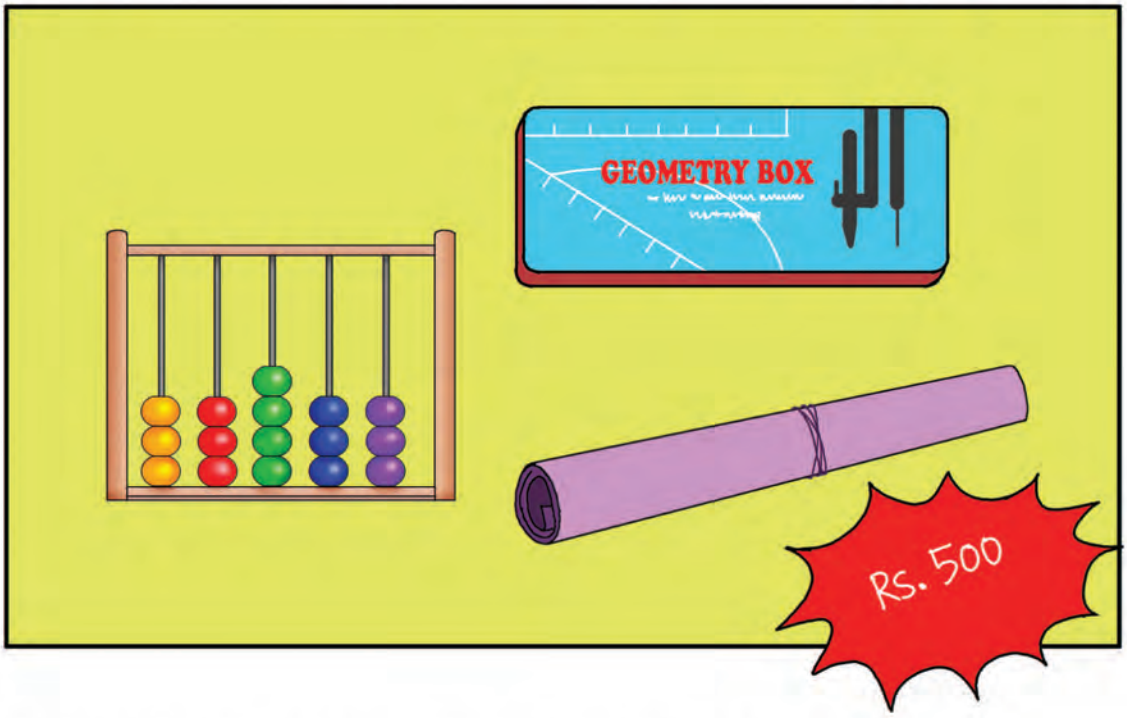
9.
$$\begin{array}{r} 101 \\ -\ \ 93 \\ \hline \end{array}$$

10.
$$\begin{array}{r} 106 \\ -\ \ 37 \\ \hline \end{array}$$

11.
$$\begin{array}{r} 103 \\ -\ \ 54 \\ \hline \end{array}$$

12.
$$\begin{array}{r} 107 \\ -\ \ 58 \\ \hline \end{array}$$

Hima has Rs. 700. If she buys some mathematics materials for Rs. 500, how much money is left to her?



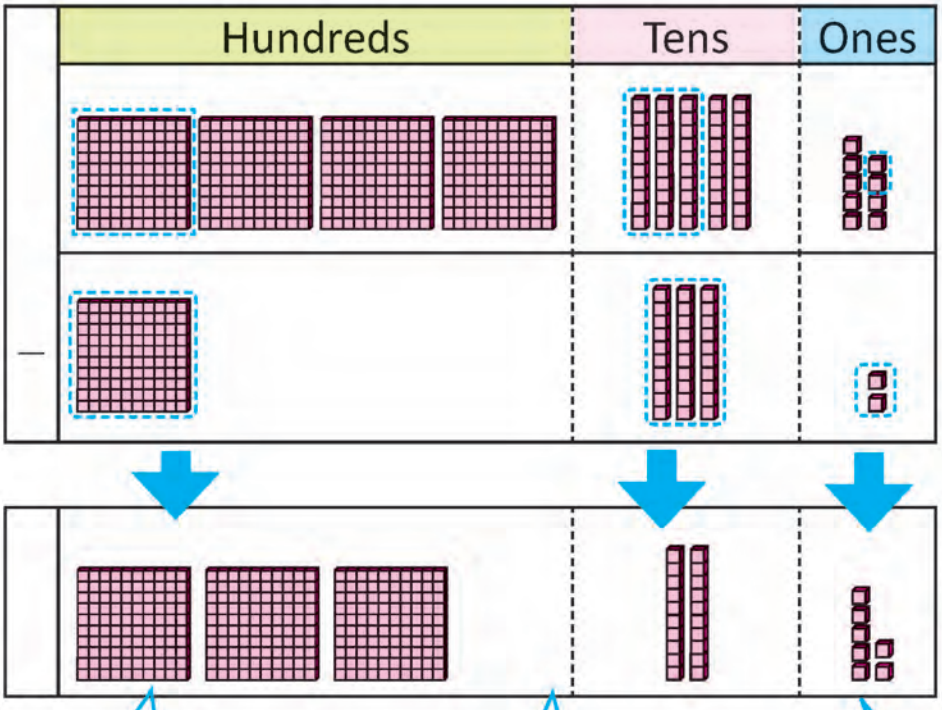
Mathematical sentence: 700 – 500 = 200

Rs. 200 is left.

Calculate:

1.	500 – 300 =		2.	500 — 100 =	
3.	900 – 200 =		4.	800 — 600 =	
5.	900 – 300 =		6.	900 — 400 =	
7.	800 – 500 =		8.	400 — 200 =	
9.	700 – 100 =		10.	700 — 500 =	

The traffic police has checked the driver's license of 459 drivers. Of them 132 were driving without a driver's license. How many of those checked have a driver's license?



	H	T	O
	4	5	9
−	1	3	2
	3	2	7

In hundreds place, 4–1 = 3

In tens place, 5 – 3 = 2

In ones place, 9 – 2 = 7

Subtract:

1.

	6	7	8
−	2	1	5

2.

	5	7	4
−	4	5	3

3.

	9	8	1
−	1	2	0

Subtract 118 from 353 in the place value table.

We cannot subtract 8 from 3 in ones place.

So, borrow 1 ten from the tens place.

	H	T	O
	3	5	3
–	1	1	8

→

	H	T	O
		4	13
	3	~~5~~	~~3~~
–	1	1	8
			5

→

	H	T	O
		4	13
	3	~~5~~	~~3~~
–	1	1	8
		3	5

→

	H	T	O
		4	13
	3	~~5~~	~~3~~
–	1	1	8
	2	3	5

Subtract 192 from 726 in the place value table.

We can subtract 2 from 6 in ones place.

But we cannot subtract 9 from 2 in tens place.

We can borrow 1 hundred or 10 tens from hundreds place.

	H	T	O
	7	2	6
–	1	9	2

→

	H	T	O
	7	2	6
–	1	9	2
			4

→

	H	T	O
	6	12	
	~~7~~	~~2~~	6
–	1	9	2
		3	4

→

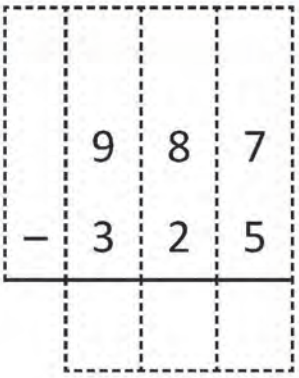
	H	T	O
	6	12	
	~~7~~	~~2~~	6
–	1	9	2
	5	3	4

Calculate:

1.

2.

3.



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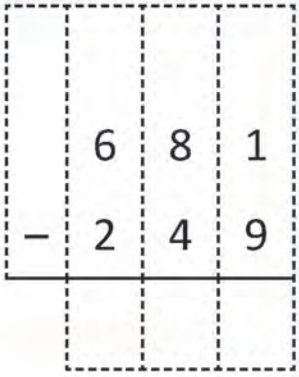
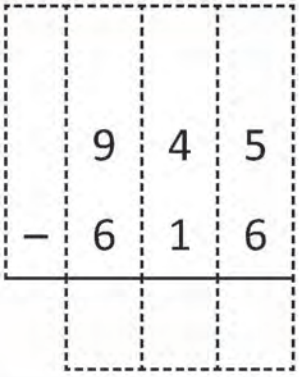
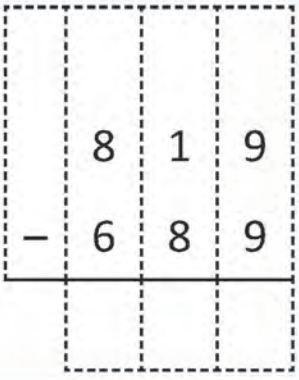


5.

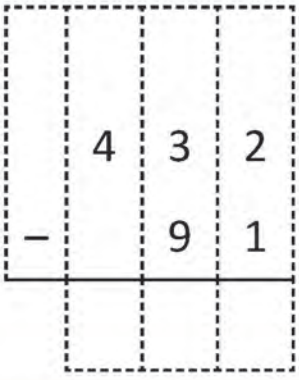
6.



7.



8.



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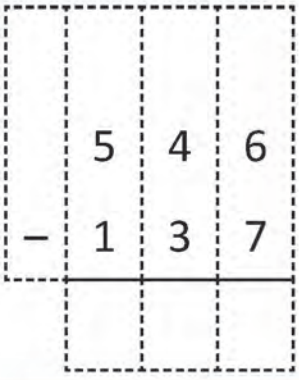

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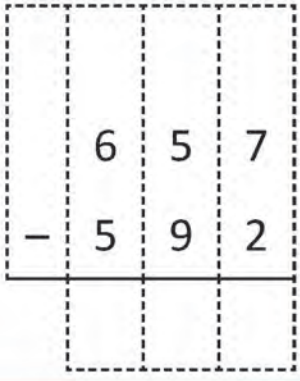
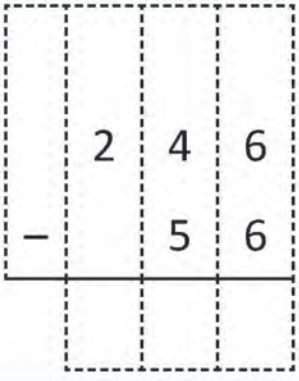
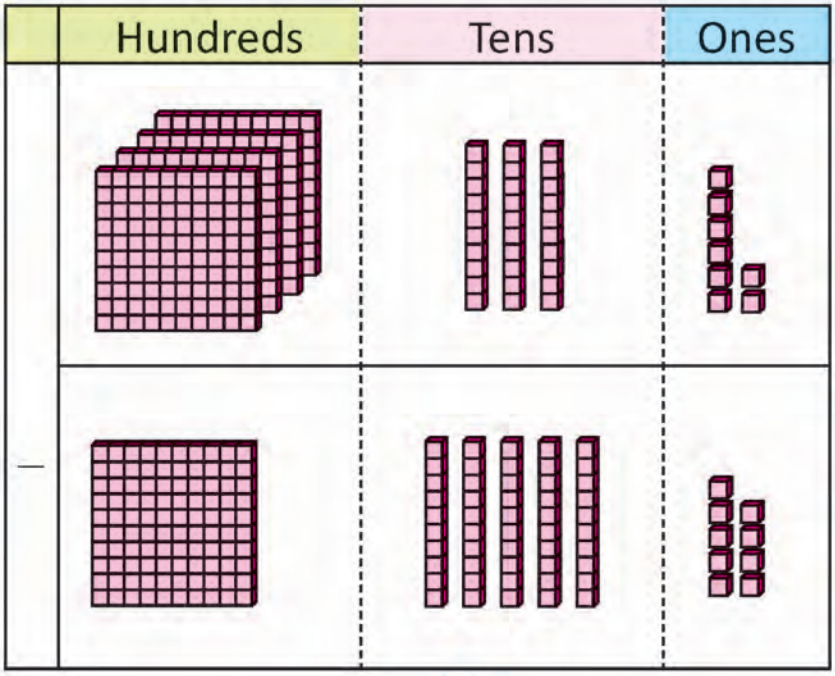


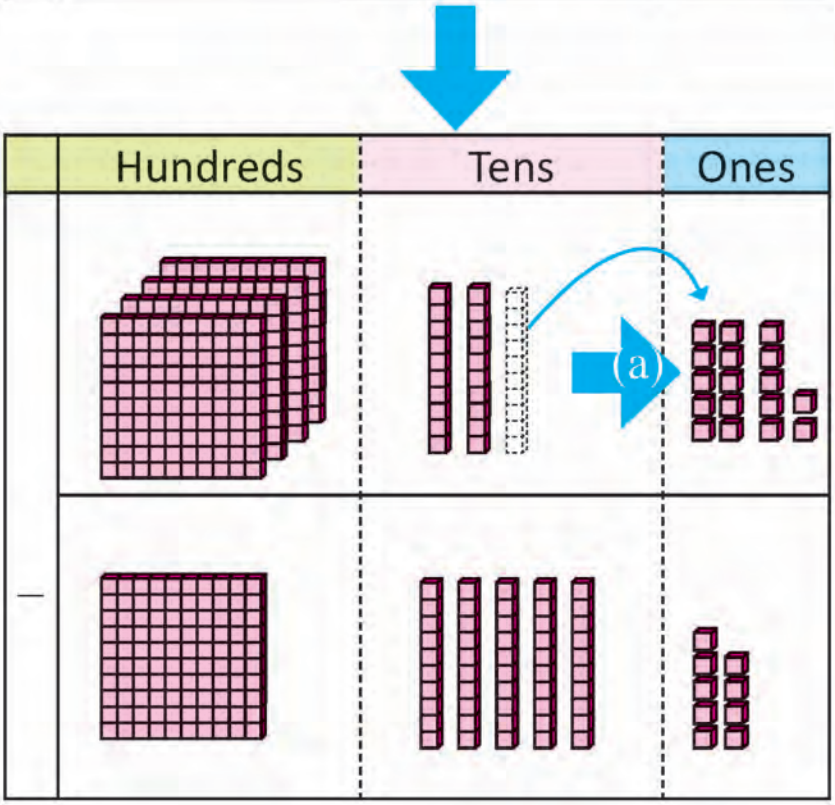
11.



12.

How much is left when subtracting 159 from 437?





	H	T	O
	4	3	7
–	1	5	9

We cannot subtract 9 from 7 in ones place.

Therefore,

(a) Borrow 1 ten or 10 ones from the tens place.

7 ones and 10 ones make 17 ones.

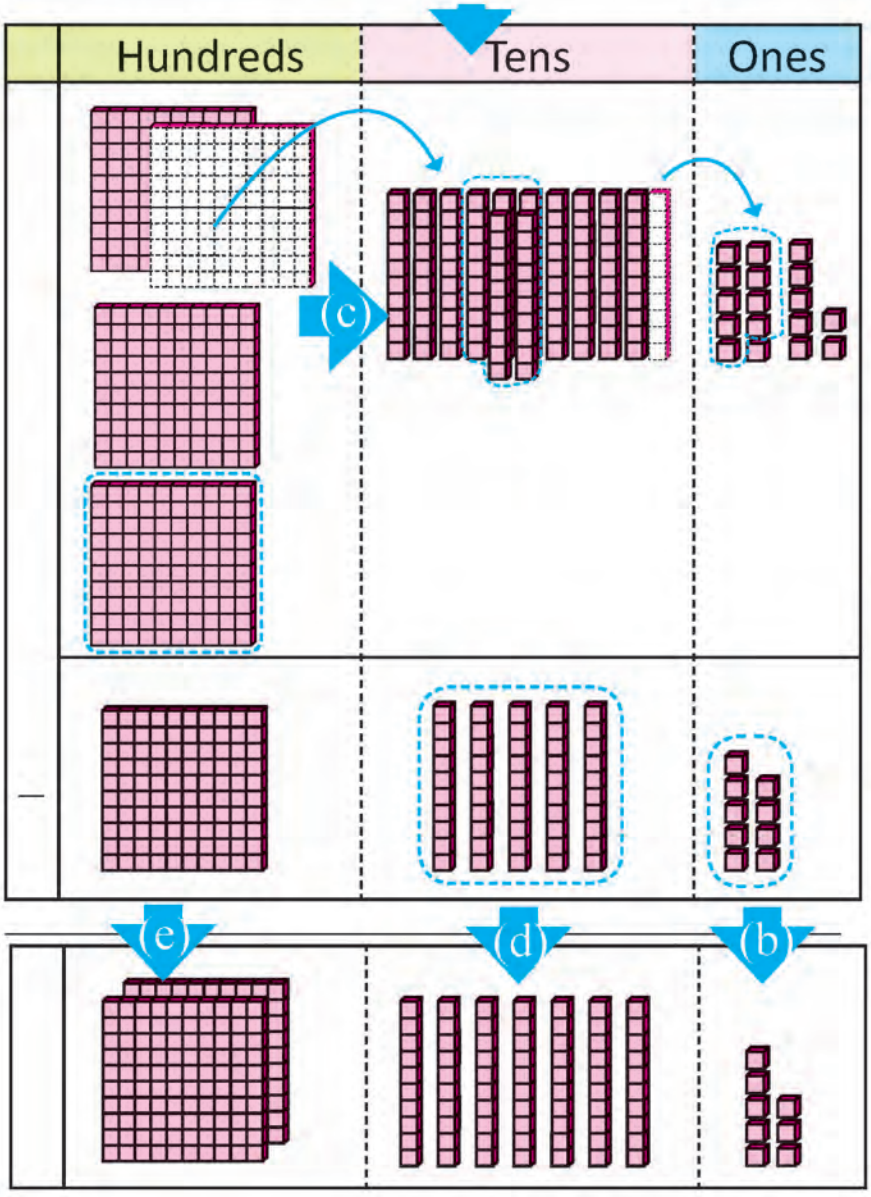
(b) After that, subtract 9 from 17.

	H	T	O
		2	17
	4	~~3~~	~~7~~
–	1	5	9
			8

We cannot subtract 5 from the remaining number 2 in the tens place. Therefore,

(c) Borrow 1 hundred or 10 tens from hundreds place.

(d) After that, subtract 5 tens from 12 tens.



	H	T	O
		12	
	3	~~2~~	17
	~~4~~	~~3~~	~~7~~
–	1	5	9
		7	8

(e) After that, subtract 1 from 3 in hundreds place.

	H	T	O
		12	
	3	~~2~~	17
	~~4~~	3	~~7~~
–	1	5	9
	2	7	8

– Calculate:

1.

	6	3	2
–	2	5	4

2.

	7	7	1
–	5	9	8

3.

	4	2	3
–	1	4	9

Subtract 53 from 351 in the place value table.

We can subtract in tens place because 5 – 5 = 0

But we have to borrow 1 ten or 10 ones in subtracting in ones place.

	H	T	O
	3	5	1
–		5	3

→

	H	T	O
		4	11
	3	5	1
–		5	3
			8

→

	H	T	O
	2	14	11
	3	5	1
–		5	3
		9	8

→

	H	T	O
	2	14	11
	3	5	1
–		5	3
	2	9	8

Calculate:

1.

	2	1	4
–		1	9

2.

	5	6	7
–	1	6	6

3.

	4	9	2
–		9	8

4.

	6	1	7
–	1	1	8

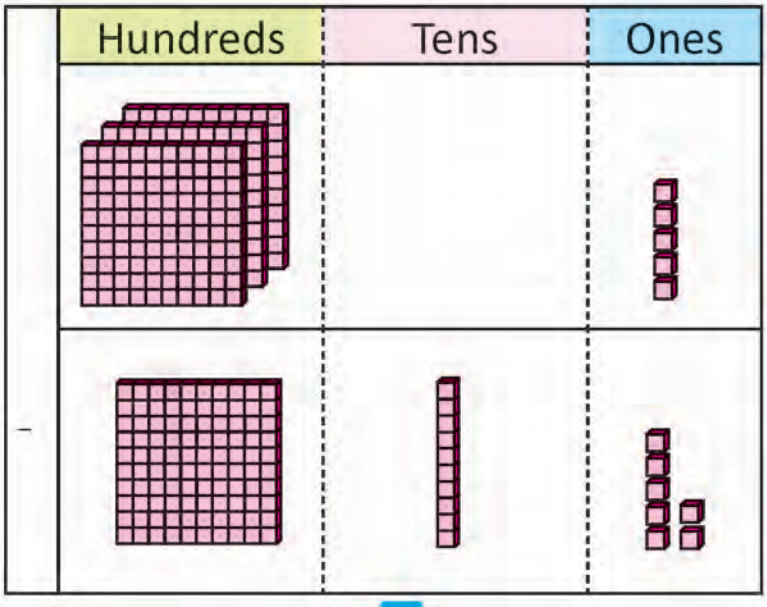
5.

	7	7	8
–	1	6	9

6.

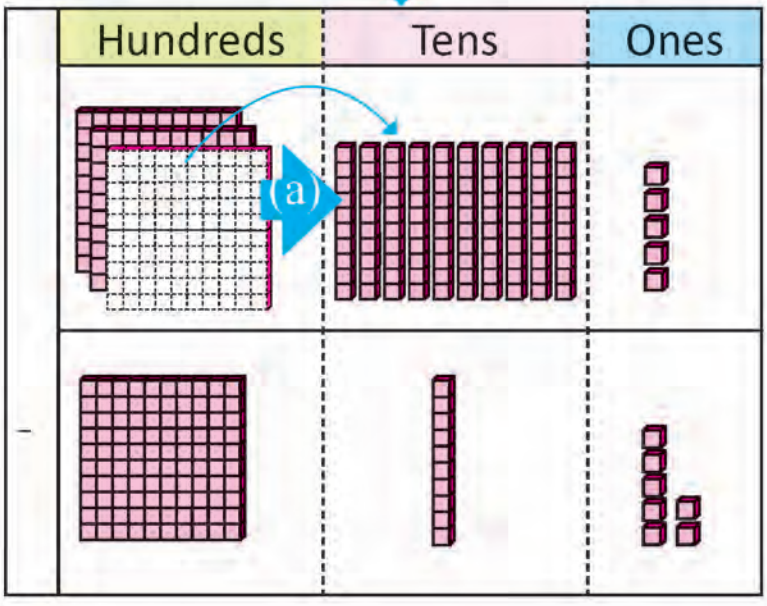
	9	8	3
–	1	9	6

Subtract 117 from 305 in the place value table.



	H	T	O
	3	0	5
–	1	1	7

We cannot subtract 7 from 5 in ones place. So, we have to borrow 1 ten or 10 ones from tens place but there is no any number to borrow.



(a)

	H	T	O
	2	10	
	3	~~0~~	5
–	1	1	7

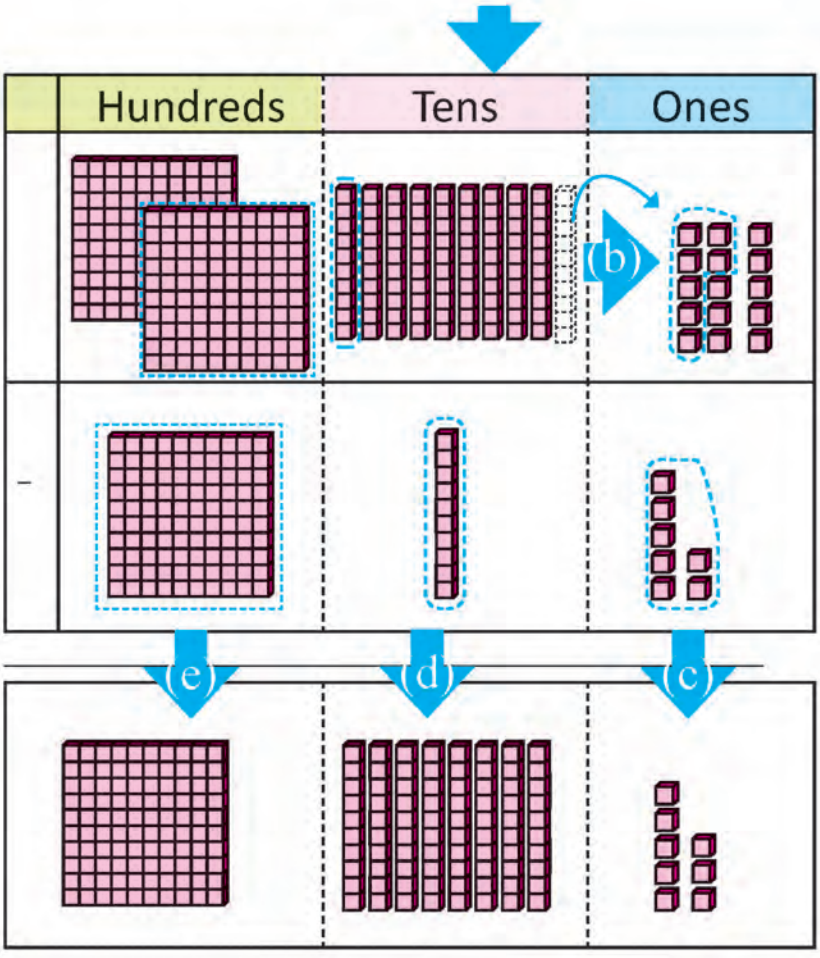
(b)

	H	T	O
	2	9	
	~~3~~	~~0~~	5
–	1	1	7

Therefore,

(a) At first, borrow 1 hundred or 10 tens from hundreds place.

(b) After that, borrow 1 ten (10) from the tens place.



After that calculate in:

(c) Ones place
(d) Tens place and
(e) Hundreds place respectively

(c)

	H	T	O
	2	9 10	15
	3	0	5
–	1	1	7
			8

(d)

	H	T	O
	2	9 10	15
	3	0	5
–	1	1	7
		8	8

(e)

	H	T	O
	2	9 10	15
	3	0	5
–	1	1	7
	1	8	8

– Calculate:

1.

	7	0	1
–	4	9	5

2.

	6	0	4
–	2	0	9

3.

	8	0	6
–	3	5	9

4.

	7	0	6
–	5	3	7

Calculate:

1. $85 - 34$

2. $97 - 58$

3. $50 - 35$

4. $123 - 45$

5. $236 - 78$

6. $308 - 129$

7. $835 - 370$

8. $350 - 176$

9. $237 - 160$

10. $703 - 74$

Calculate:

1. There are 250 households in a village. If 240 households have television, how many households do not have television?

2. Rosan kept 225 toys at a fair to sell. If 121 toys were sold at the end of he fair, how many toys are left?

3. A mathematics book has 224 pages. Of which 106 pages have pictures. How many pages do not have pictures?

Calculate:

1. Out of 41 computers in a school, 13 were spoiled. How many computers are in good condition?

2. A football costs Rs. 820. If Sumit has Rs. 630, how much money is not enough to buy that football?

3. There are 425 children of the age group of vitamin A feeding in a village. Of these, only 375 children were given vitamin A on the first day. How many children are left to be given vitamin A?

Calculate:

1. There are 465 sheep and 389 *changra* in one herd. How many more sheep are there than *changra*?

2. Out of 738 students in Janahit Basic School, 265 come in vehicles with their parents. If the rest of the students come to school by walking, how many are they to come on foot?

3. If a shopkeeper sold 68 out of 144 packets of salt in a box, how many packets of salt are left to be sold?

Basic operations of Mathematics 1

Let's see, how much have I learnt?

1. Calculate:

(a)

	1	2	3
+	2	4	1

(b)

	5	2	7
+	2	3	1

(c)

	8	0	2
+	1	4	2

(d)

	5	6	7
+	2	0	1

(e)

	5	3	7
+	3	8	4

(f)

	2	3	9
+	3	9	2

(g)

	8	4	9
–	3	2	5

(h)

	8	4	9
–	3	2	5

(i)

	3	4	3
–	2	1	2

(j)

	5	7	3
–	4	2	9

(k)

	7	8	7
–	6	5	9

(l)

	2	3	4
–	3	5	5

2. A book of Nepali language poetry has 128 pages. Another English language storybook has 264 pages. How many pages did Rabin read if the read all the pages of both books.

	H	T	O

3. A farmer raised 455 chickens. He sold 142 chickens. Now, how many chicken were left with him?

	H	T	O

4. There are 756 people live in Gita's tole. 698 people live in Rahaman's tole. How many more people are there in which of the both toles?

	H	T	O

Teacher's signature

Parent's signature

Lesson 9

Length

Sita and Hari are talking on the telephone about the length of the bottle.

The length of my bottle is equal to two pencils.

The length of my bottle is equal to length of three pencils. So, my bottle is long.

■ At school tomorrow ■

Oh! your bottle is longer than mine, how?

Your pencil may be shorter than my pencil.

To compare the lengths of two bottles, we need to measure a pencil of the same length.

Use the pencil you have to measure the length of objects in your classroom.

Discuss:

Have you seen your mother, father and other family members measuring the ropes in your house? What do they use to measure?

Measured by meter tape.

Measured by cubit and span.

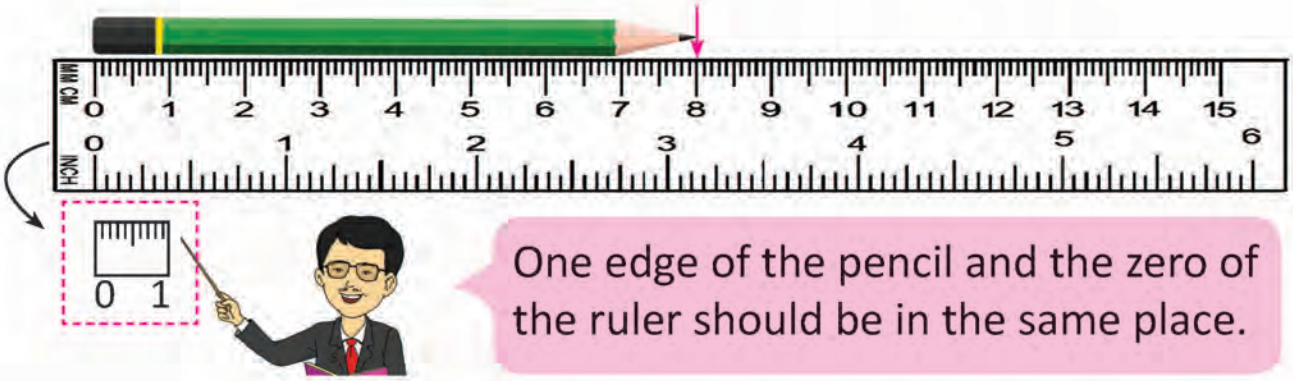
Now, Measure this stick by cubit.

When we measured a stick, different measurements came!

Now, what to do to get the same size?

Measure using a ruler.

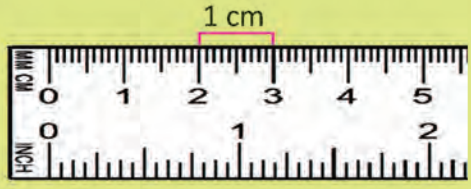
Measure the length of the pencil given below using a ruler.



One edge of the pencil and the zero of the ruler should be in the same place.

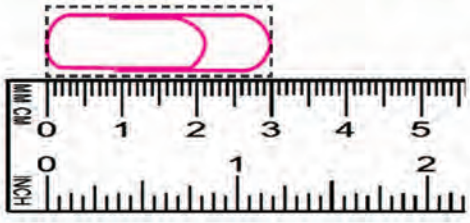
The length of this pencil is equal to digit 8 of the ruler.

The length of one digit to another of the ruler indicates one cm. Therefore, this pencil is 8 cm long.



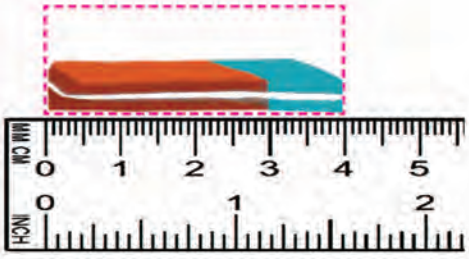
How many cm is the lengths of the objects given below?

1.



cm.

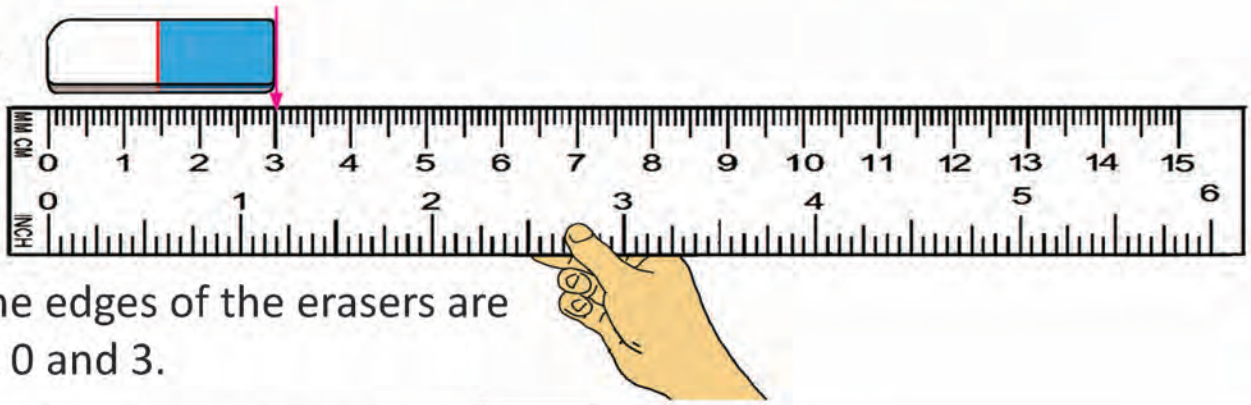
2.



cm.

Observe the pictures given and find the lengths of them.

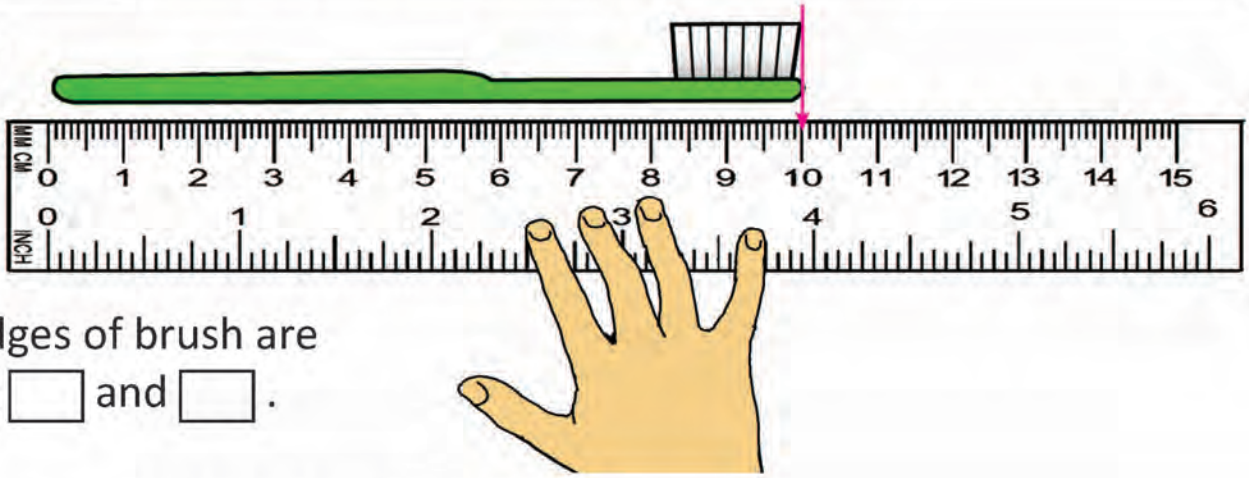
1.



The edges of the erasers are at 0 and 3.

The length of the eraser is ☐ cm.

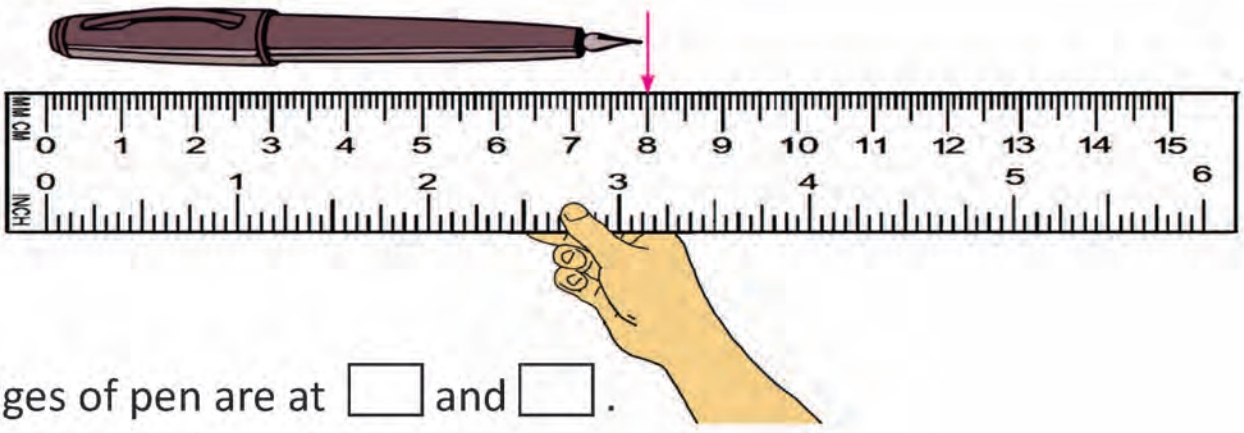
2.



Edges of brush are at ☐ and ☐.

The length of the brush is ☐ cm.

3.



Edges of pen are at ☐ and ☐.

Its length is ☐ cm.

Measure the length of the eraser using a ruler.

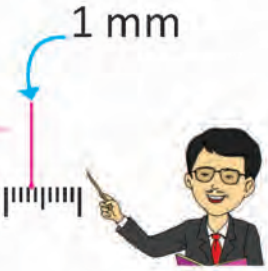
Eraser is longer than 3 cm but shorter than 4 cm, how can we express it?

We have smaller unit than cm.

1 cm. = 10 cm.

One cm is divided into 10 equal parts. Length of one line to another line in ruler is 1 millimeter.

Millimeter is written in short form as mm.

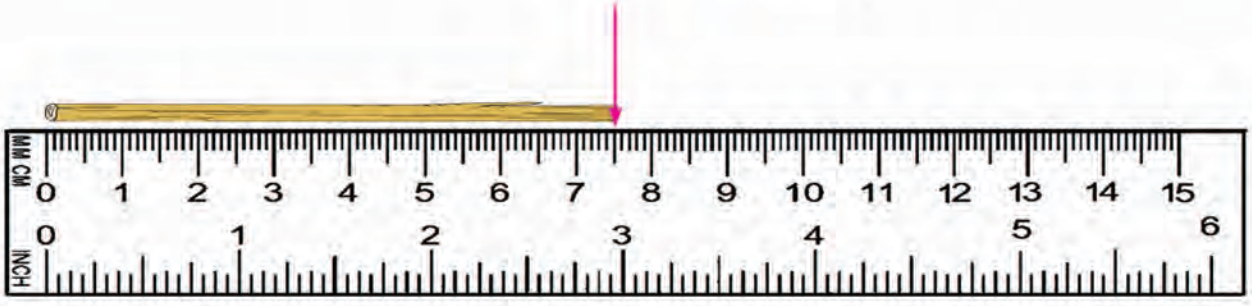


The eraser is 3 cm and 5 millimeters long. Hence, the length of the eraser is 3 cm 5 mm.

Read and discuss.

This pencil is longer than 8 cm. The tip of pencil shown 5 small lines behind 8. Its length is 8 cm and 5 mm.

1 cm = 10 mm

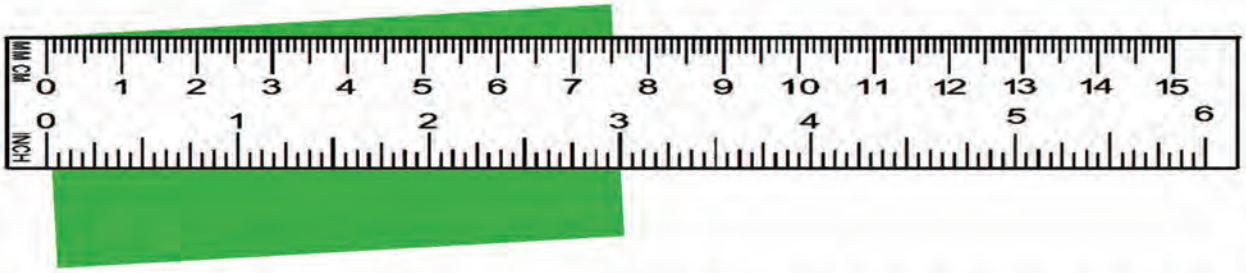


This piece of wood is longer than 7cm.

The second edge of this piece shown 5 small lines behind 7.

Its length is 7cm 5mm.

Which method for measuring length is correct? Discuss.



Observe the picture and find the length of the pencil.

☐ cm ☐ mm

Find the objects in the classroom longer than 7 cm.

Measure the length:

I have a 15 cm ruler. How do you measure the length and breadth of a table's surface?

Start measuring from one side of the table. Mark at 15 cm and measure again from the same marked place. Similarly, measure the full length of the table and find the full length of the table by adding all the measurements.

The length of the surface of this table is ☐ cm.

The breadth of the surface of this table is ☐ cm.

The height of this table is ☐ cm.

This notice board is ☐ cm long.

Its breadth is ☐ cm.

The difference between length and breadth is ☐ cm.

Measure the lengths of the objects below around you.

1. Level ☐ 	2. Battery ☐ 
3. Bed ☐ 	4. Mobile phone ☐ 
5. Comb ☐ 	6. Bag ☐ 

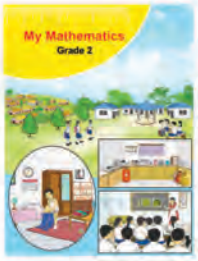
Measure the following real objects in your home with a ruler and write the lengths of the objects.

1.  Laddle	☐ cm ☐ mm
2.  Knife	☐ cm ☐ mm
3.  *Paniu*	☐ cm ☐ mm
4.  Spoon	☐ cm ☐ mm
5.  Broom	☐ cm ☐ mm

Measure the lengths of any two objects around you and present them in the class.

S.N.	Objects	Length

Which of the objects that you used is longer? Guess and write:



(a) How long is my mathematics book? _____

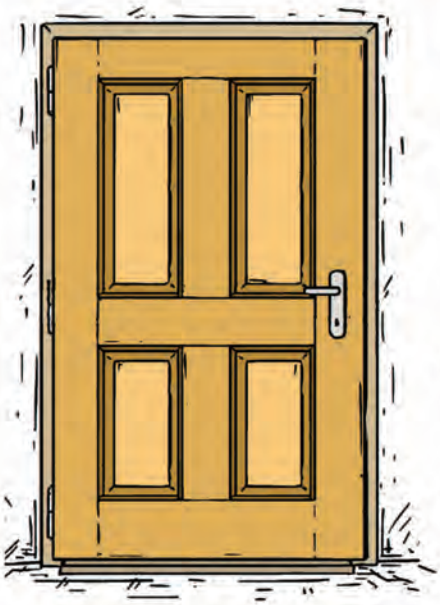
(b) How long is the exercise book? _____

(c) Which is longer, my mathematics book or exercisebook? _____

(a) How many cm long is the key? _____

(b) How many cm long is the pen? _____

(c) Which is longer, pen or key? _____



(a) What is the height of the window in cm? _____

(b) What is the height of the door in cm _____

(c) Which is higher, window or door? _____

Various objects are given in the picture. Guess the lengths of those objects.

1. Key 	2. Board marker 	3. Pen 
4. Match box 	5. Table 	6. Laddle 

(a) Which is longer, key or match box? _____

(b) Which is longer, pen or key? _____

(c) Which is longer, pen or Laddle? _____

(d) Which is longer, board marker or pen? _____

Guess the Length of the key?

It may be 3 cm long!

It may be 5 cm long.

Ruler should be used to know the actual length.

Guess the length of each object given below. Then, measure the actual length of each object and write in the table below:

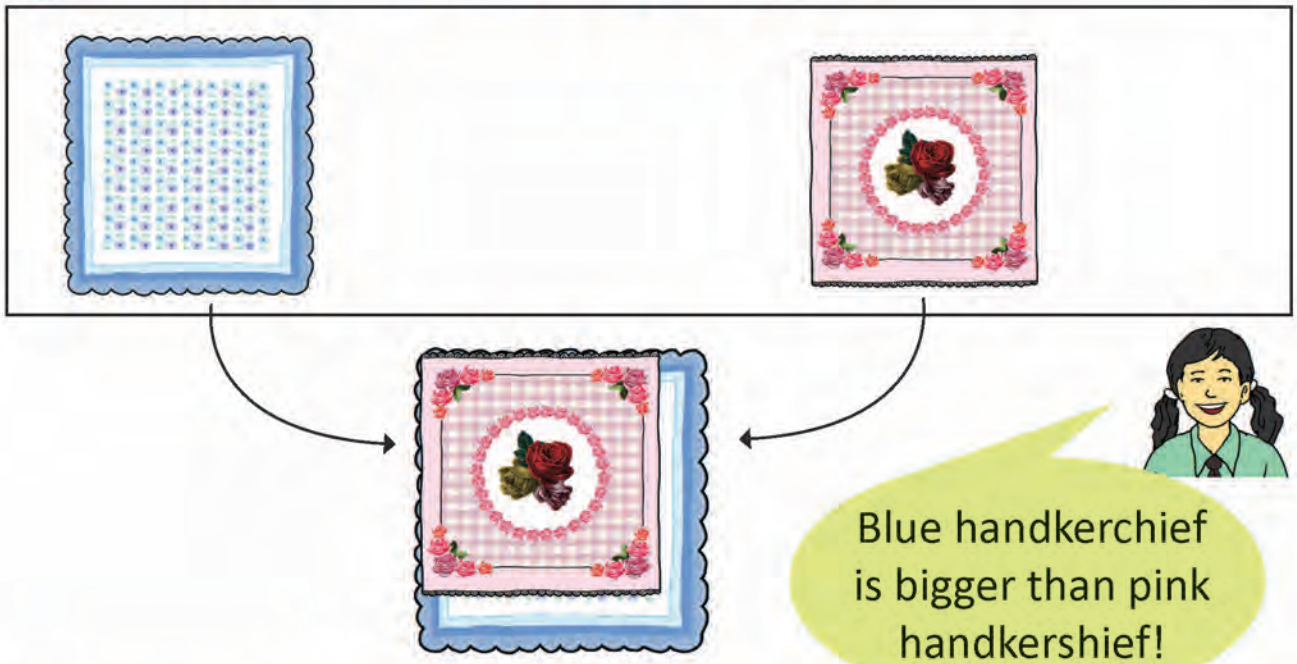
S.N.	Objects	Guessed length	Actual length
1.	Key 		
2.	Pen 		
3.	Match box 		
4.	Upper surface 		
5.	Laddle 		

Lesson 10

Area

Comparison of area

Which handkerchief may be bigger?



Write the name of other objects in your school which are greater and similar with my mathematics text book of grade 2.

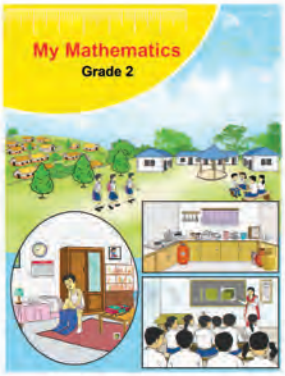
1.	4.
2.	5.
3.	

Compare the area of two rectangular objects around your school and write.

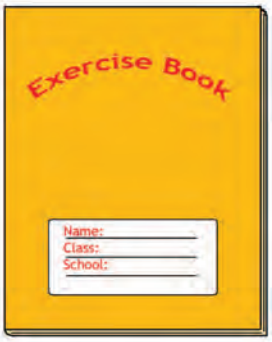
S.N.	Objects	Objects having more area	Objects having less area
1.	_____ and _____		
2.	_____ and _____		

Compare any two objects as given in the picture and write the name of objects with less area and more area.

1.



A

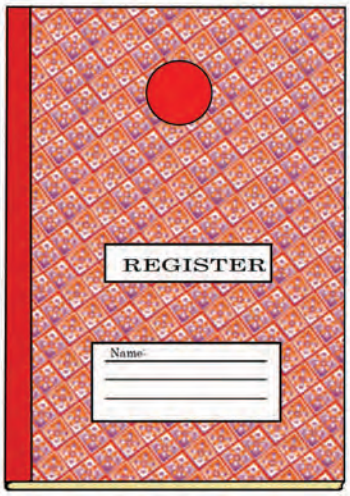


B

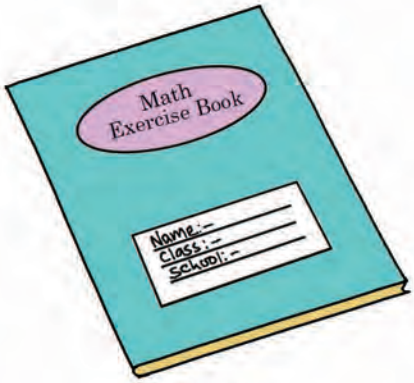
Less: .....

More: .....

2.



M



N

Less: .....

More: .....

Observe the figures given below. Write them in ascending and descending order according to their area.

1.

A B C

Ascending order: ☐, ☐, ☐

Descending order: ☐, ☐, ☐

2.

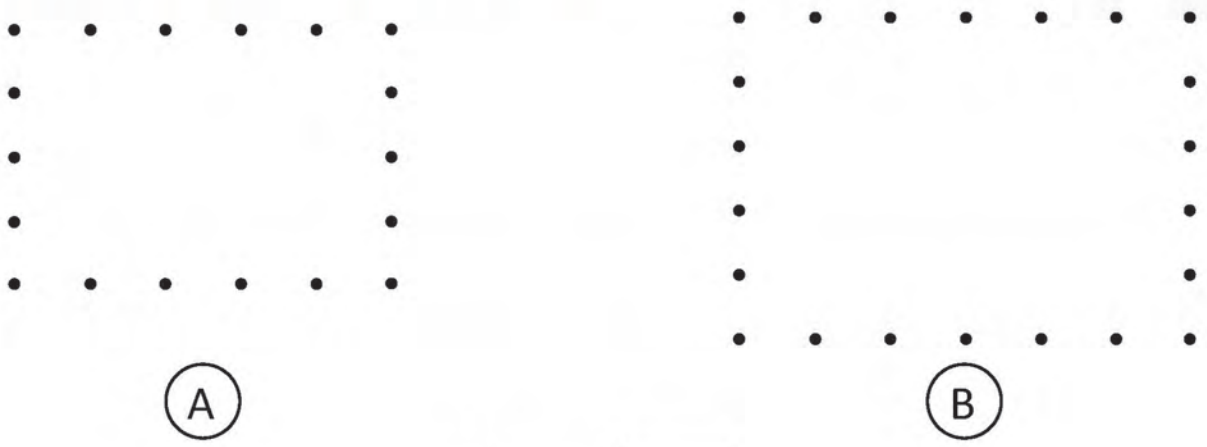
D E F

Ascending order: ☐, ☐, ☐

Descending order: ☐, ☐, ☐

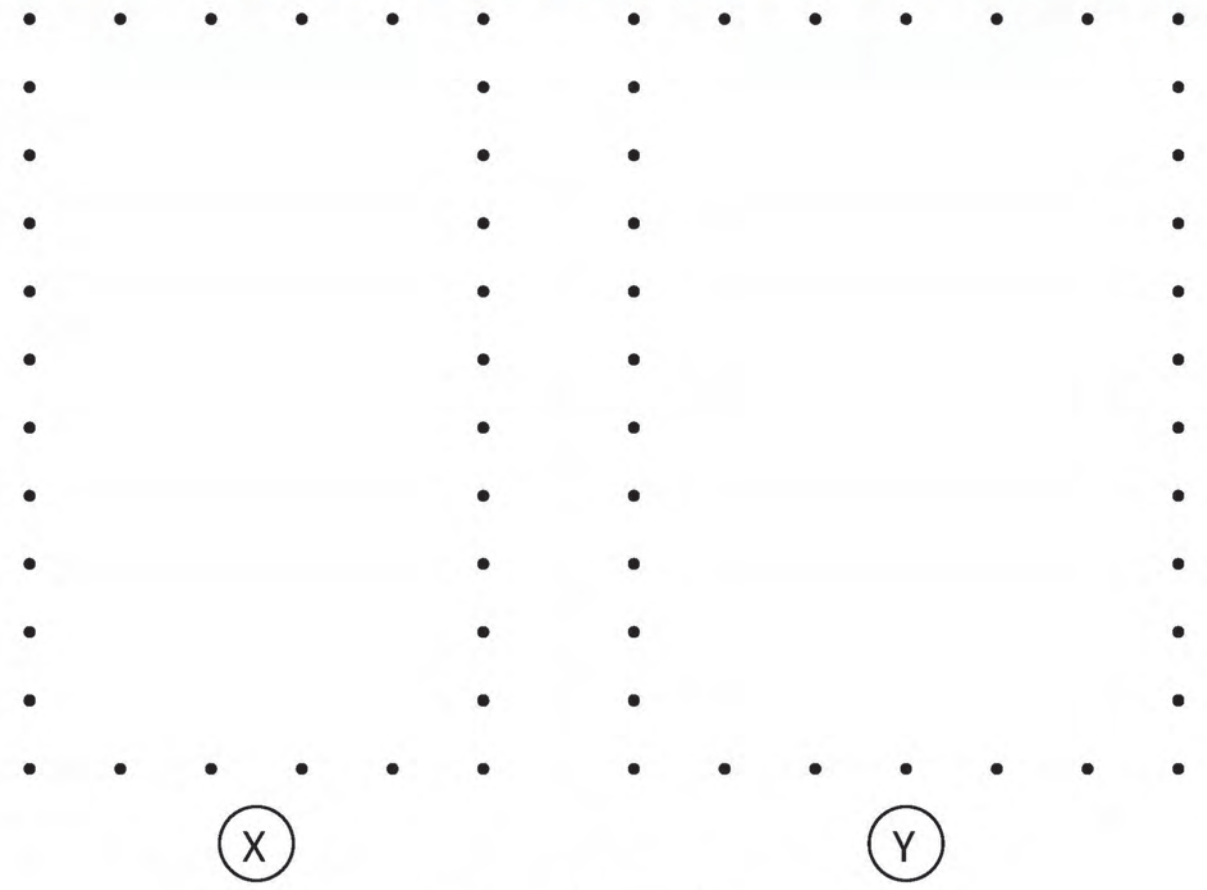
Connect the dots in the picture and write the name of picture having more area.

1.



Picture: ☐

2.



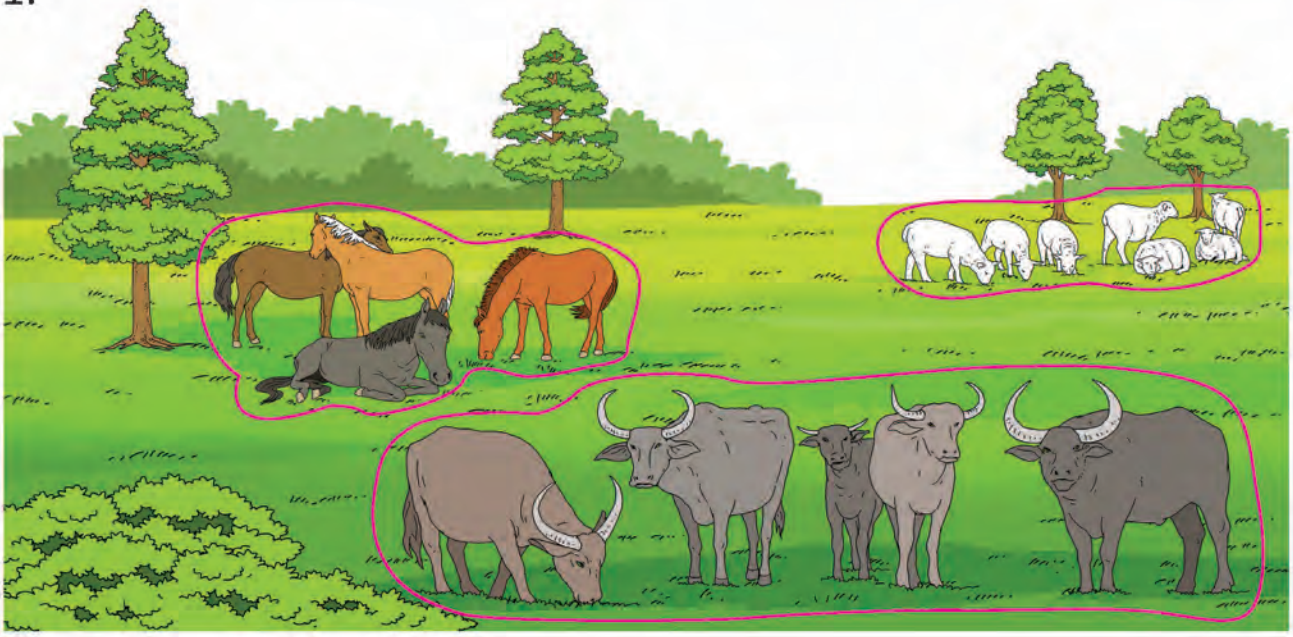
Picture: ☐

Lesson 11

Multiplication 1

Discuss.

1.



(a) How many groups are there? _____

(b) How many horses are there? _____

(c) How many sheep are there? _____

(d) How many buffaloes are there? _____

2.

(a) _____ Groups

(b) _____ bowls in 1 group

(c) Total _____ Bowls

Observe and write.

1.

(a) How many people are riding horse? _____

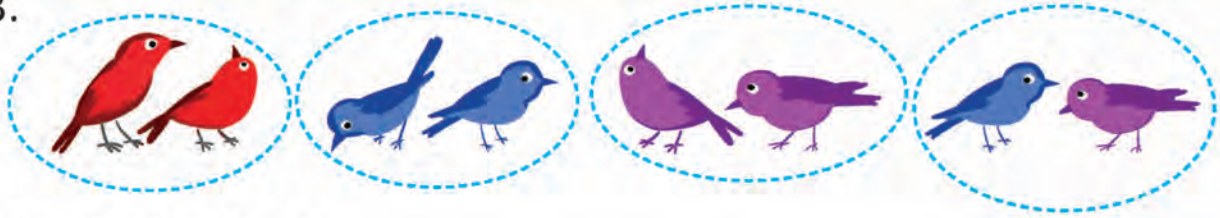
2.

(a) 2 + 2 + 2 + 2 = _____

(b) How many children are in each vehicle? _____

(c) How many children are in the vehicles? _____

3.

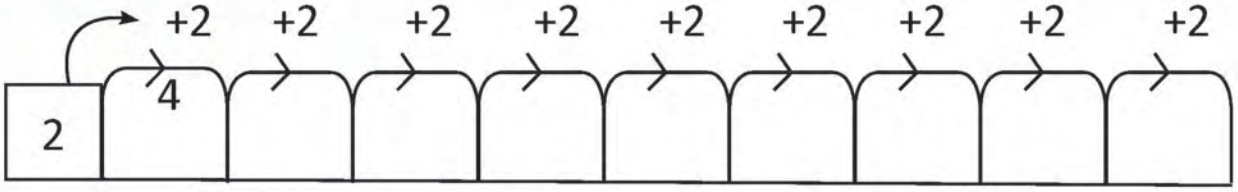


(a) 2 + 2 + 2 + 2 = _____

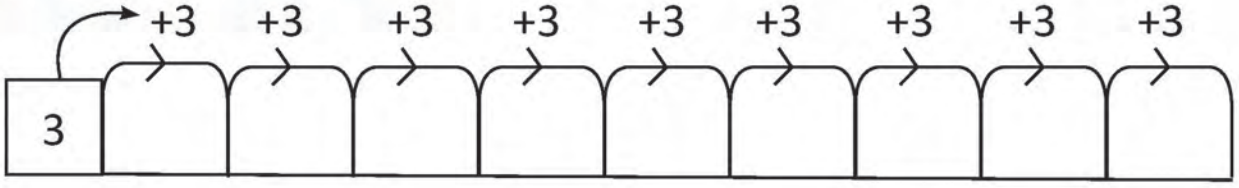
(b) How many birds are in each group? _____

(c) How many birds are there? _____

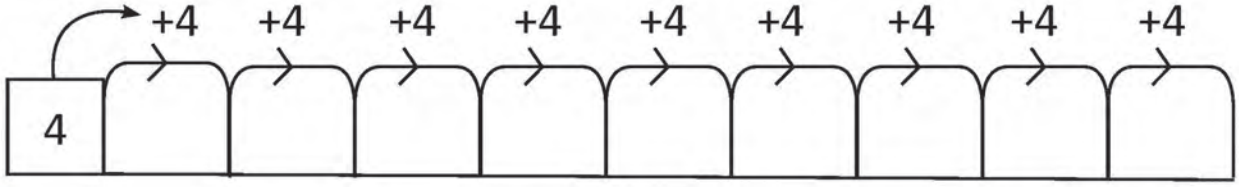
Add 2 each time.



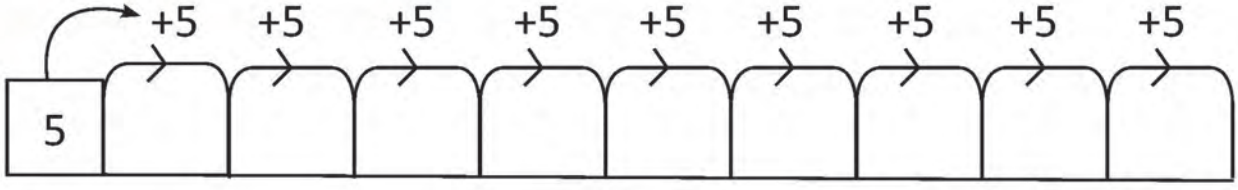
Add 3 each time.



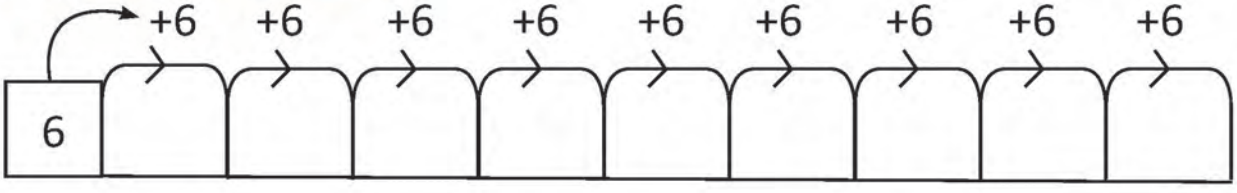
Add 4 each time.



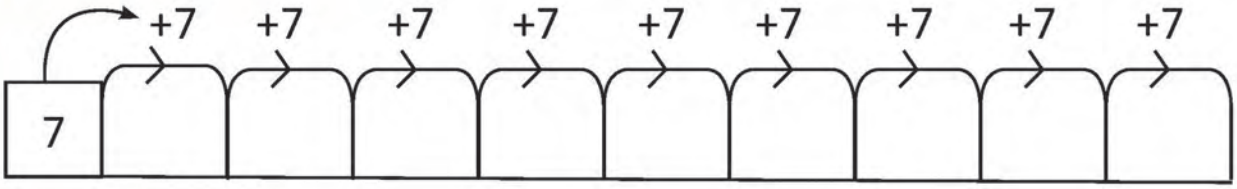
Add 5 each time.



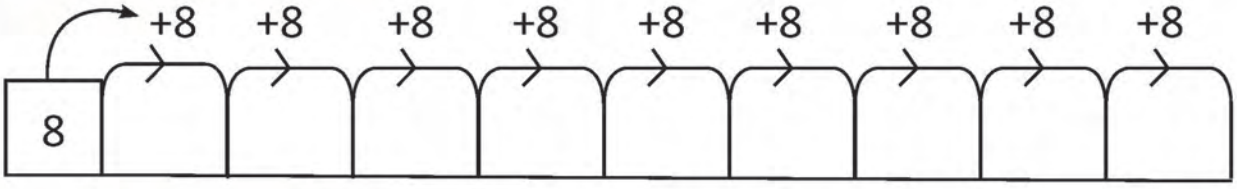
Add 6 each time.



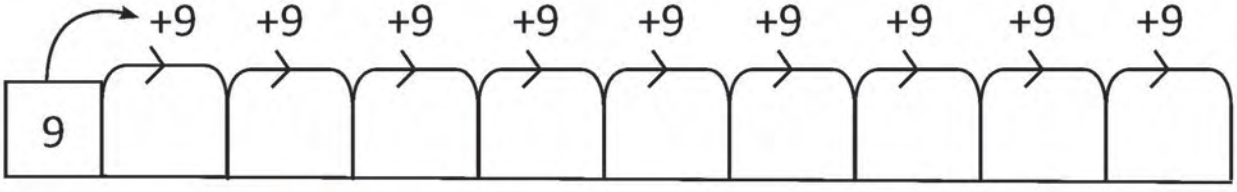
Add 7 each time.



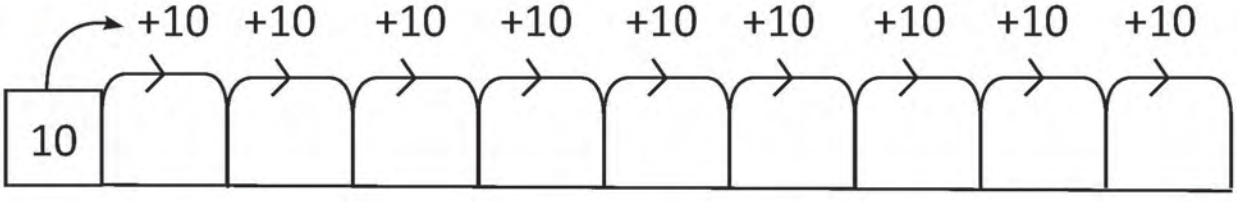
Add 8 each time.



Add 9 each time.



Add 10 each time.



Colour every second number starting with 2.

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

Colour every third number starting with 3.

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

Colour every fourth number starting with 4.

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

Colour every fifth number starting with 5.

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

Colour every sixth number starting with 6.

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

Colour every seventh number starting with 7.

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

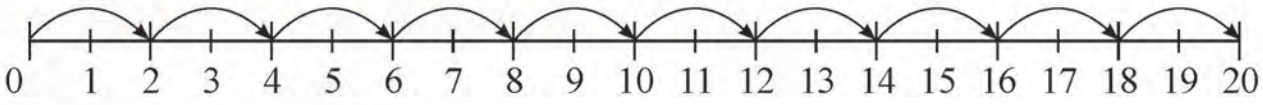
Colour every eigth number starting with 8.

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

Colour every ninth number starting with 9.

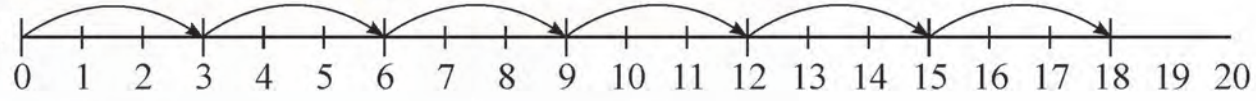
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Skip count by two and write.

1. 

2. 2, 4, 6, 8, 10, 12, _____, _____, _____, _____

Skip count by three and write.

1. 

2. 3, 6, 9, 12, _____, _____,

Skip count by 2 and write.

1. 2, 4, 6, _____, _____, _____, _____, _____, _____

2. 1, 3, 5, 7, _____, _____, _____, _____, _____, _____

Skip count by three and write.

1. 3, 6, 9, 12, _____, _____, _____, _____, _____

2. 1, 4, 7, 10, _____, _____, _____, _____, _____

Study the following situations.

There are six children in three boats with two children each boat.

It can be expressed in mathematical sentence like this.

$2 \times 3 = 6$

2 three times = 6

It means
"2 three times = 6"
'×' symbol is used to indicate multiply

$\boxed{2} \times \boxed{3} = \boxed{6}$

Number of children on each boat

Number of boats

Total number of children

Calculating 2×3 in this way is called 'multiplication'.

Observe the picture and fill in the blanks.

1. 

2 + 2 + 2 + 2 + 2 = 10

2 five times = 10

2 × 5 = 10 Total 10 balloons

2. 

__ + __ + __ + __ + __ + __ = __

__ 6 times = __

__ × __ = __ Total __ balloons

3. 

__ + __ + __ + __ + __ + __ + __ = __

__ seven times = __

__ × __ = __ Total __ balloons

Observe the picture and fill in the blanks.

4.

— + — + — + — + — + — + — + — = —

☐ eight times = ☐

☐ × ☐ = ☐ Total ☐ balloons

5.

— + — + — + — + — + — + — + — + — = —

☐ nine times = ☐

☐ × ☐ = ☐ Total ☐ balloons

6.

— + — + — + — + — + — + — + — + — + — = —

☐ ten times = ☐

☐ × ☐ = ☐ Total ☐ balloons

Lesson 12

Fraction

Let's divide equally:

My mother had sent a roti to school for lunch. One of my friend had not brought the tiffin that day. We both shared the roti equally and ate it.

How much roti did one person eat?

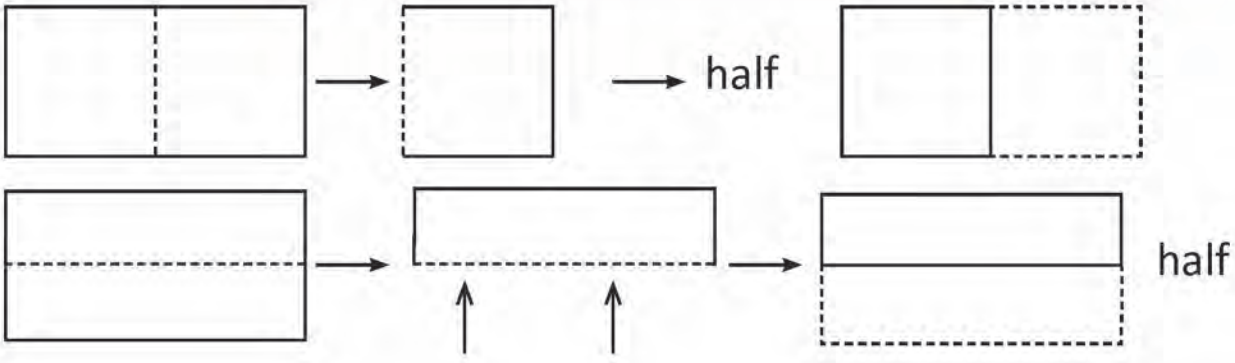
Make a half:

Take a sheet of an exercise book.

Whole

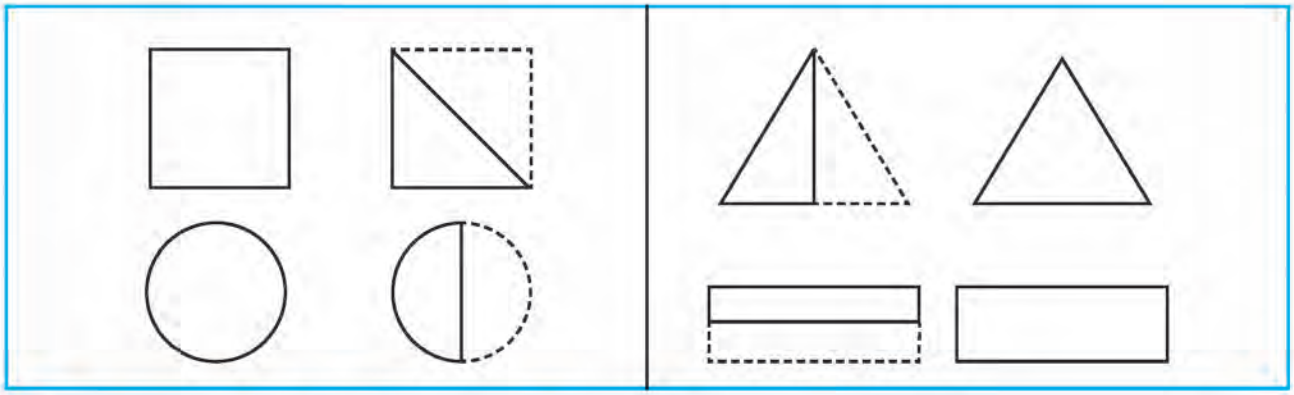
Now, make a half by folding the sheet of the exercise book.

How many ways can a sheet of an exercise book be folded in half?

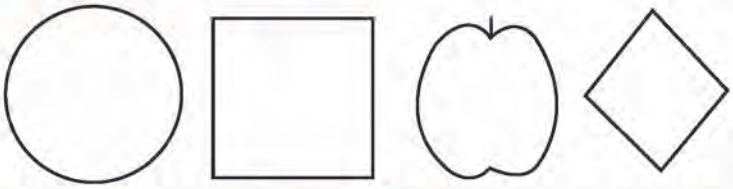


Fill colour.

Fill the whole with blue and half with black colour.

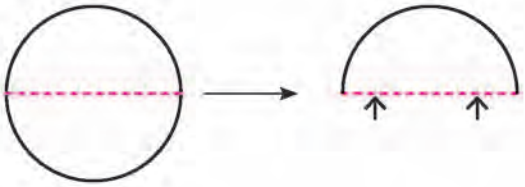


Make half using a ruler and pencil.



Take a circular paper and do the activities as given below.

Fold one time.



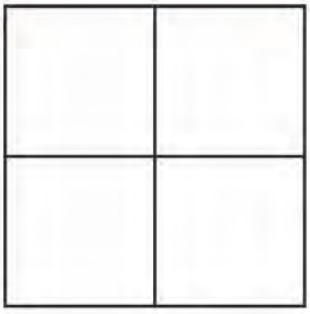
Fold another time again.

Now, open the folded part. Divide into four equal parts using a ruler. One part is a quarter

One quarter

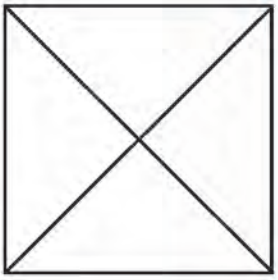
Fill the colour in one of the quarters.

(a)

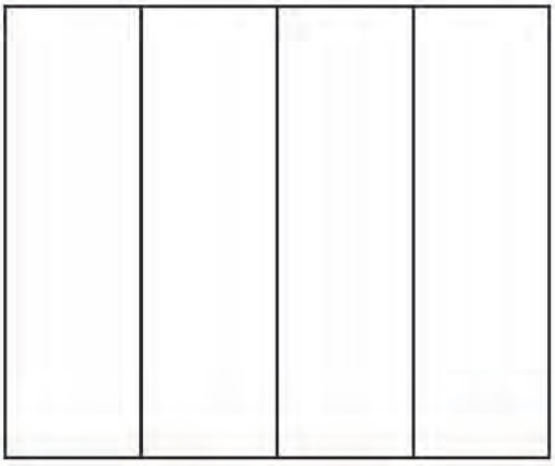


(b)

(c)

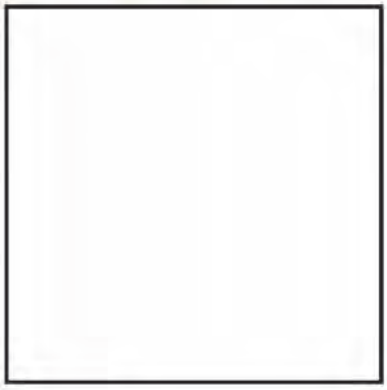


(d)



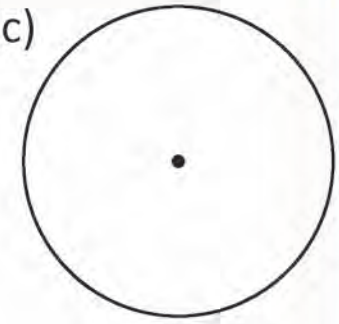
Divide the whole into four equal parts and fill colour in one of the quarters.

(a)



(b)

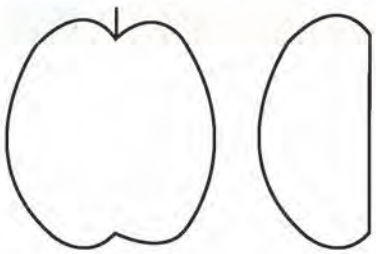
(c)



(d)

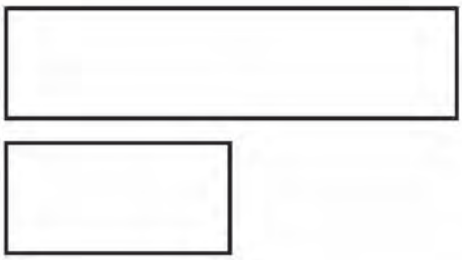
Circle the greater part of the same type of object.

1.

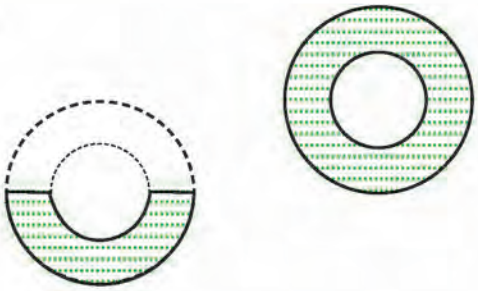


2.

3.



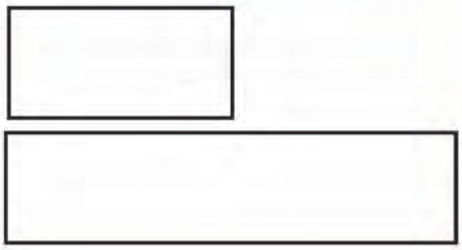
4.



Tick (√) the smaller and cross (×) the greater.

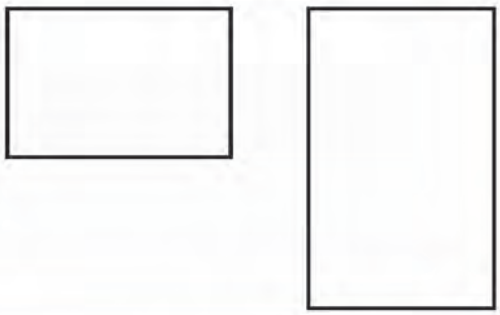
1.

2.



3.

4.



My school

Let's see, how much have I learnt?

1. Guess the lengths of the objects given below in centimetre and write.

(a)

(b)

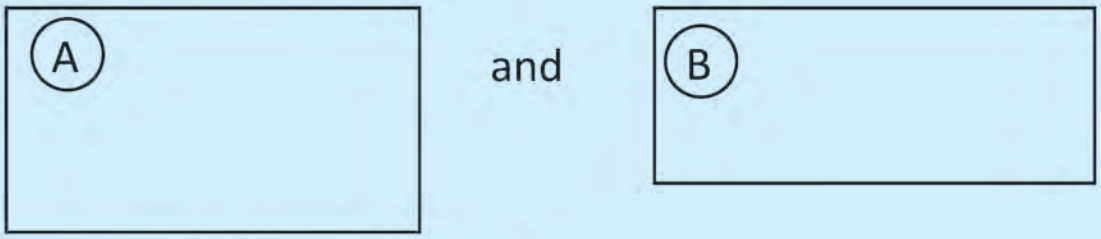
(c)

(d)

---

2. Write the name of the figure with less area and more area in the picture below.

(a)



(b) Figure with less area: ☐

Figure with more area: ☐

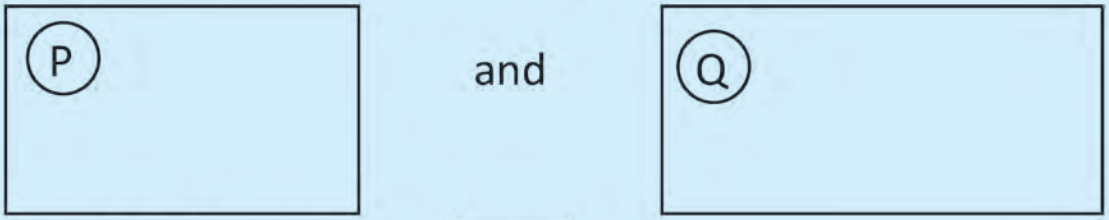


Figure with more area: ☐

Figure with less area: ☐

3. Write as given in the example:

(a)	5+5+5 = 5 × 3	(b)	2+2+2+2 =
(c)	3+3+3+3+3+3 =	(d)	5+5 =
(e)	6+6+6+6 =	(f)	5+5+5+5+5 =
(g)	7+7+7 =	(h)	8+8+8+8+8+8+8 =
(i)	9+9+9+9+9+9 =	(j)	7+7+7+7+7 =

4. Fill the colour in one half.

(a)

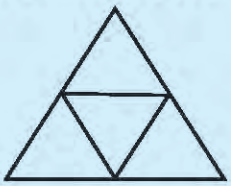
(b)

(c)

(d)

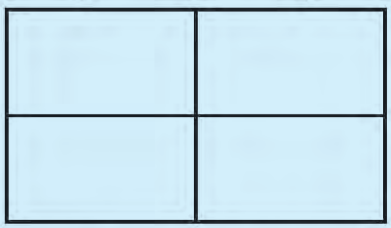
5. Fill the colour in one quarter.

(a)

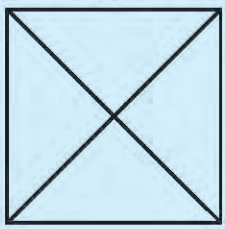


(b)

(c)



(d)



6. Tick (√) the picture with more part coloured.

Teacher's signature

Parent's signature

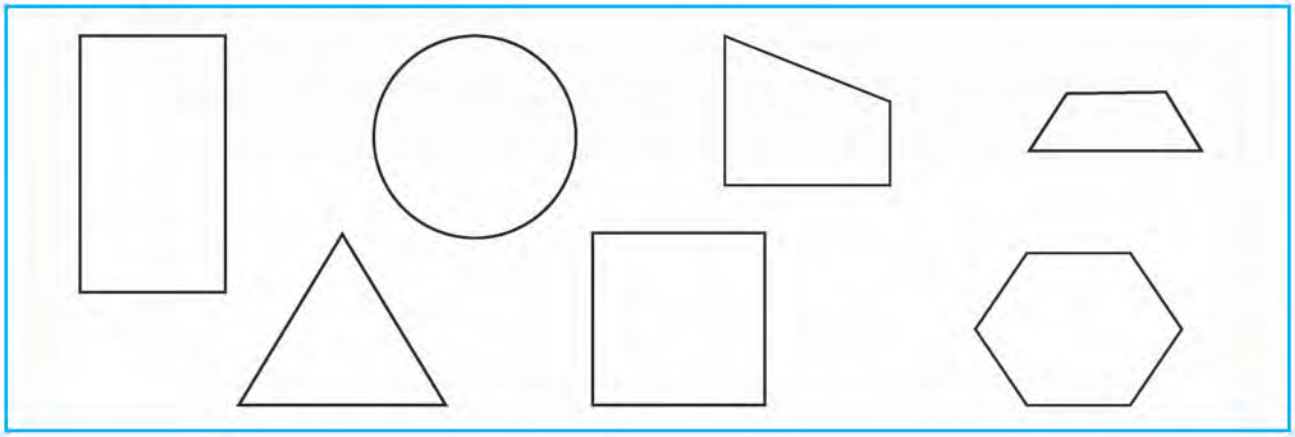
Lesson 13

Geometric shapes

Observe the pictures below and discuss about the geometric shapes.

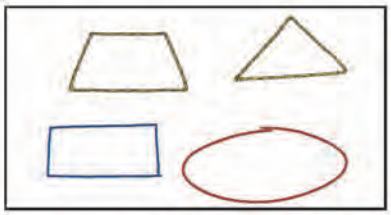
I really like drawing.
The picture above is of my house and school.
What are the shapes in the picture?

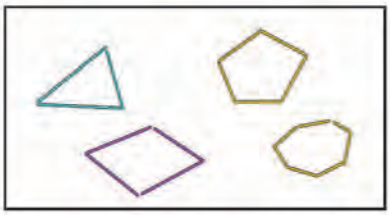
Colour the figures given below which are in the picture above.

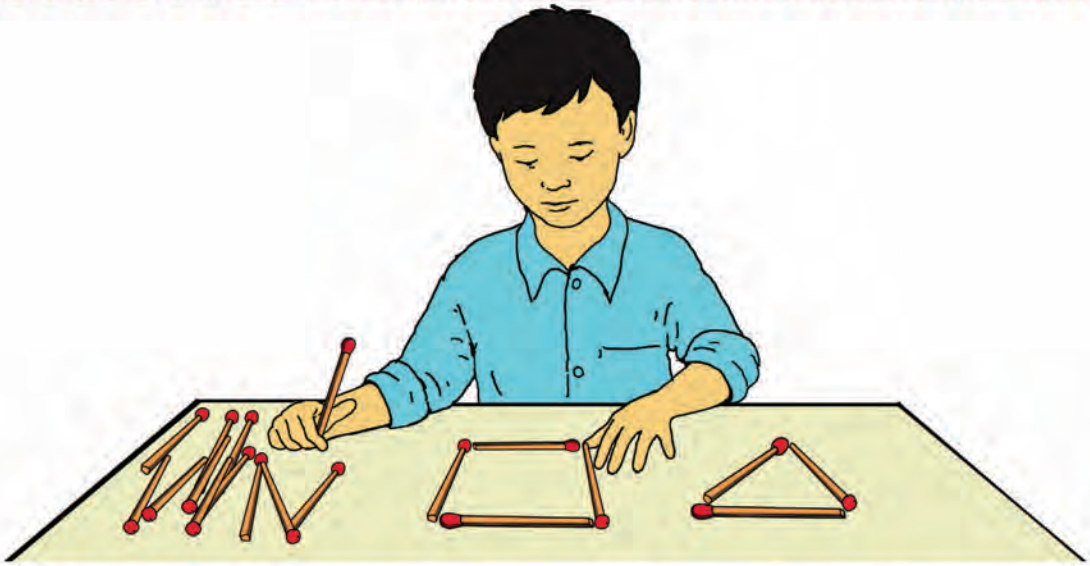


Triangles and Quadrilaterals

Look at the pictures below and where do you see the figures like in the picture, in your school or home? Discuss.







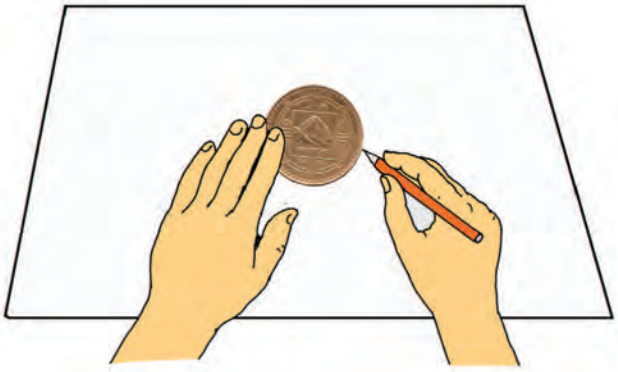
Make the figures given in the picture above by using materials such as sticks, small sticks, wheat pipe, juice pipe, flat stick, pencil, rope, thick string.

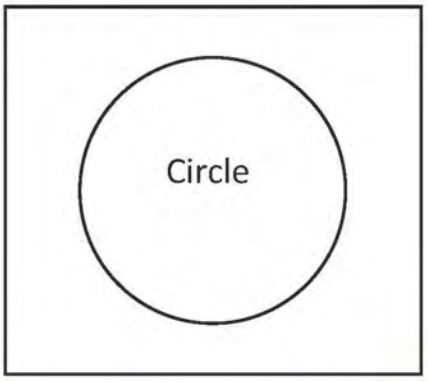
Look at the pictures below and discuss where the circular shapes are.

Draw circles using an object with around shaped top or bottom.

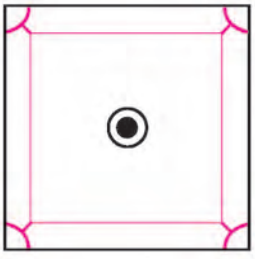
Circle

Put a coin in your exercise book and trace the external boundary of the coin.

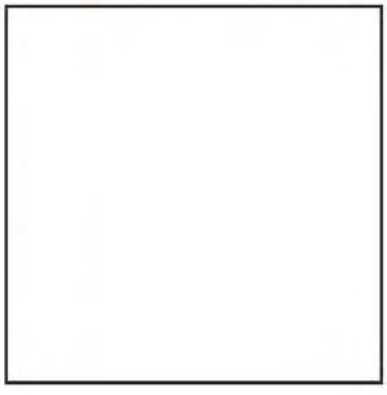


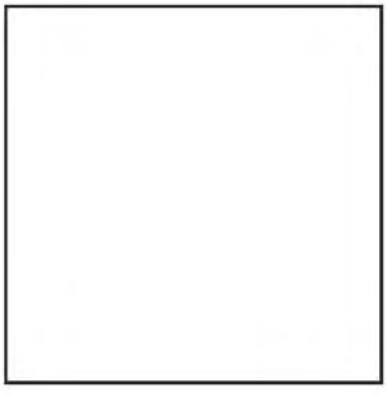


Identity the circular surfaces in the objects below.

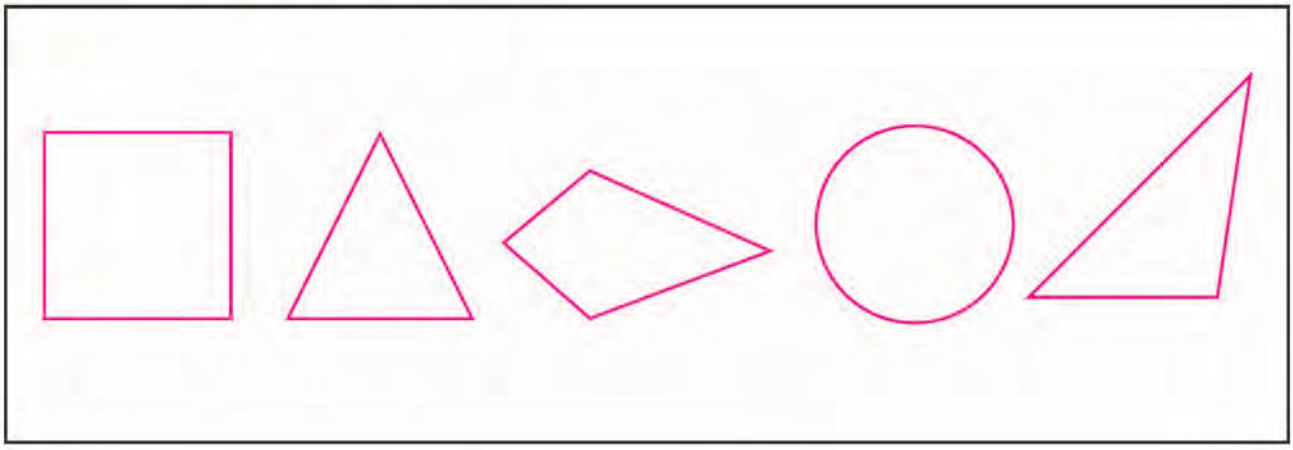


Draw circles using a solid object.

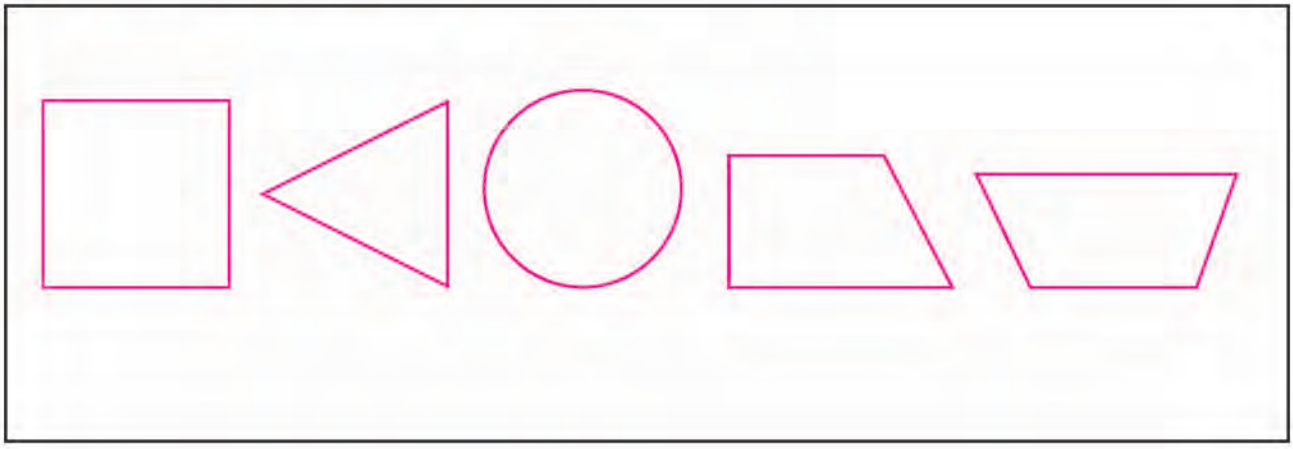




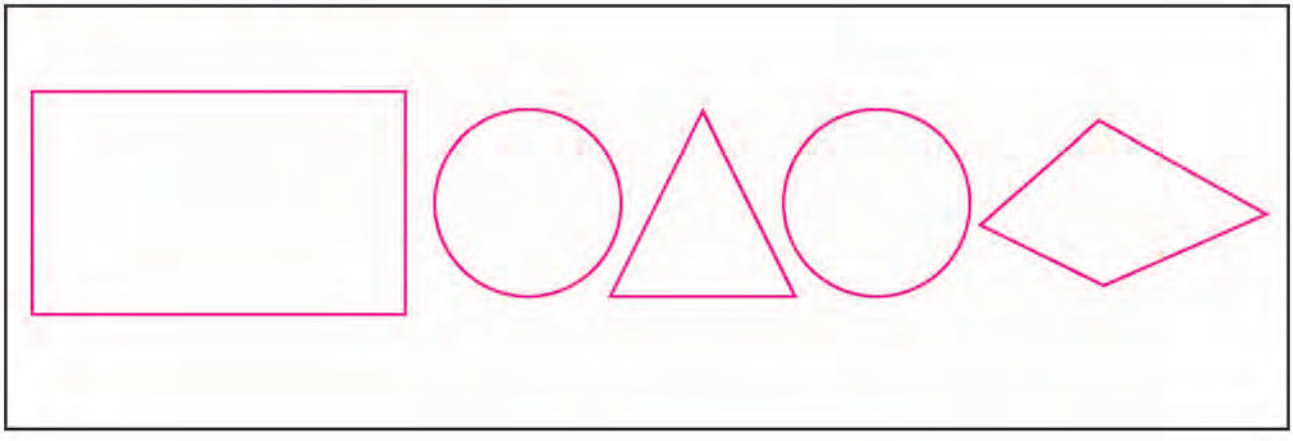
Colour the triangles:



Colour the quadrilaterals:



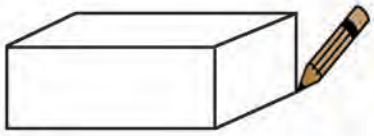
Colour the circles:



Draw triangles using the objects with a triangular surface.

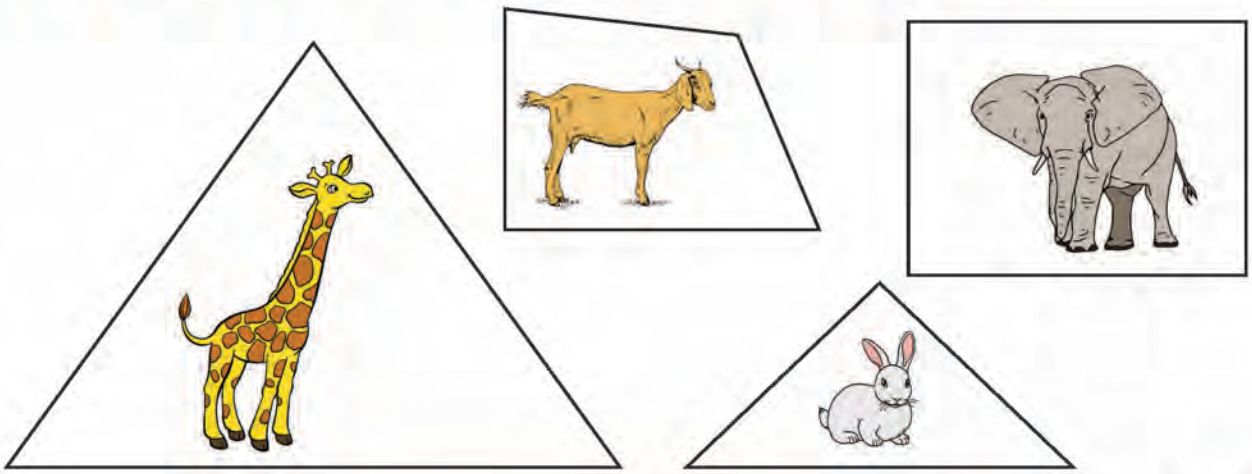
Triangle	Triangle
Triangle	Triangle

Draw quadrilaterals using the objects with quadrangular surface.



Quadrilateral	Quadrilateral
Quadrilateral	Quadrilateral
Quadrilateral	Quadrilateral

Observe the picture cards given below and distinguish which animal's pictures are in which shapes.



Separate the above shapes in two parts.

The number of straight line segments is different.

There are 3 line segments in the picture cards of giraffe and rabbit.

There are 4 line segments in the picture cards of goat and elephant

The number of corners is also different.

There are 3 corners in the picture cards of giraffe and rabbit.

There are 4 corners in the picture cards of goat and elephant.

A triangle has three straight line segments and three corners. The three straight line segments of a triangle are called the sides of the triangle.

A quadrilateral has four straight line segments and four corners. The four straight line segments of a quadrilateral are called the sides of a quadrilateral.

Count the corners and sides. Then, write in numbers:

1. 

Corners: 3

Sides: 3

2. 

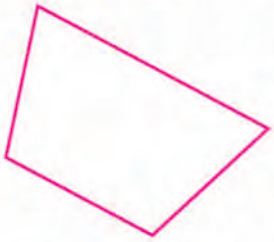
Corners: ☐

Sides: ☐

3. 

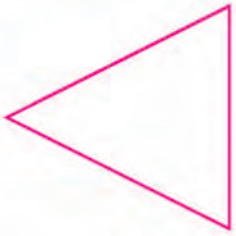
Corners: ☐

Sides: ☐

4. 

Corners: ☐

Sides: ☐

5. 

Corners: ☐

Sides: ☐

6. 

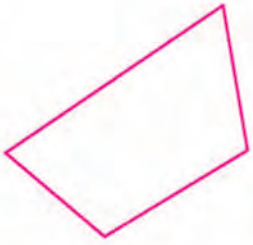
Corners: ☐

Sides: ☐

7. 

Corners: ☐

Sides: ☐

8. 

Corners: ☐

Sides: ☐

9. 

Corners: ☐

Sides: ☐

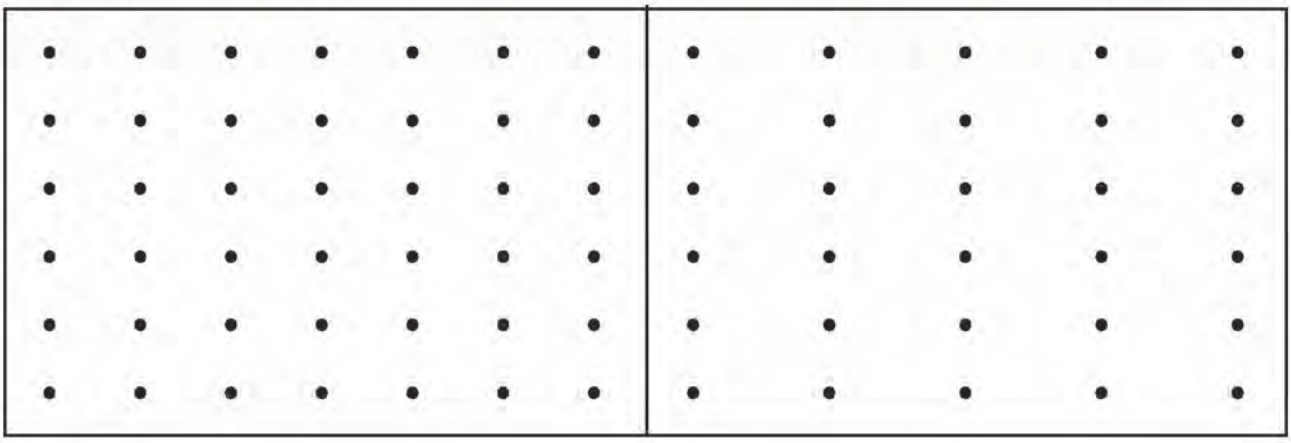
10. 

Corners: ☐

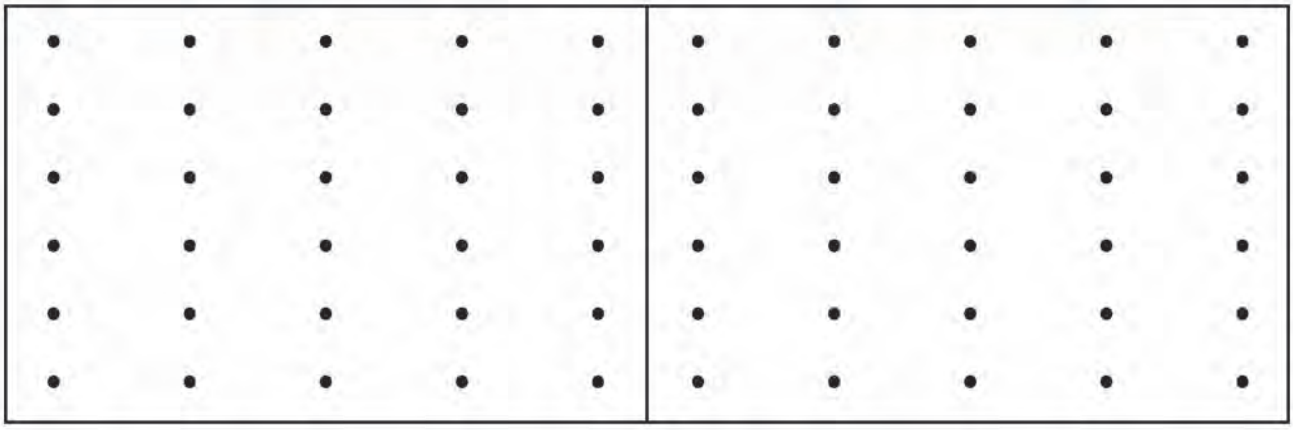
Sides: ☐

Create an image using △, □, ▭, ○ .

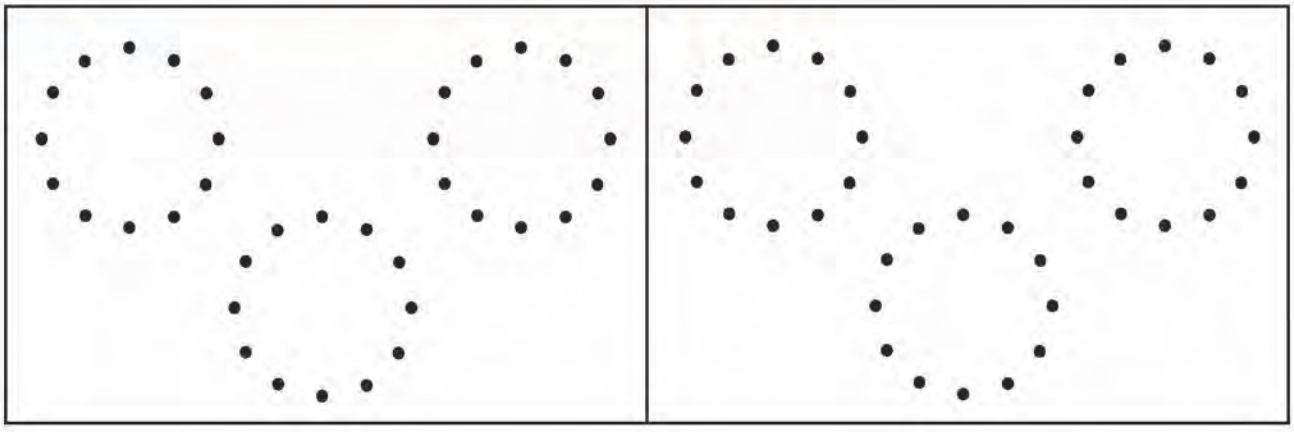
Make triangles by connecting dots using a ruler:



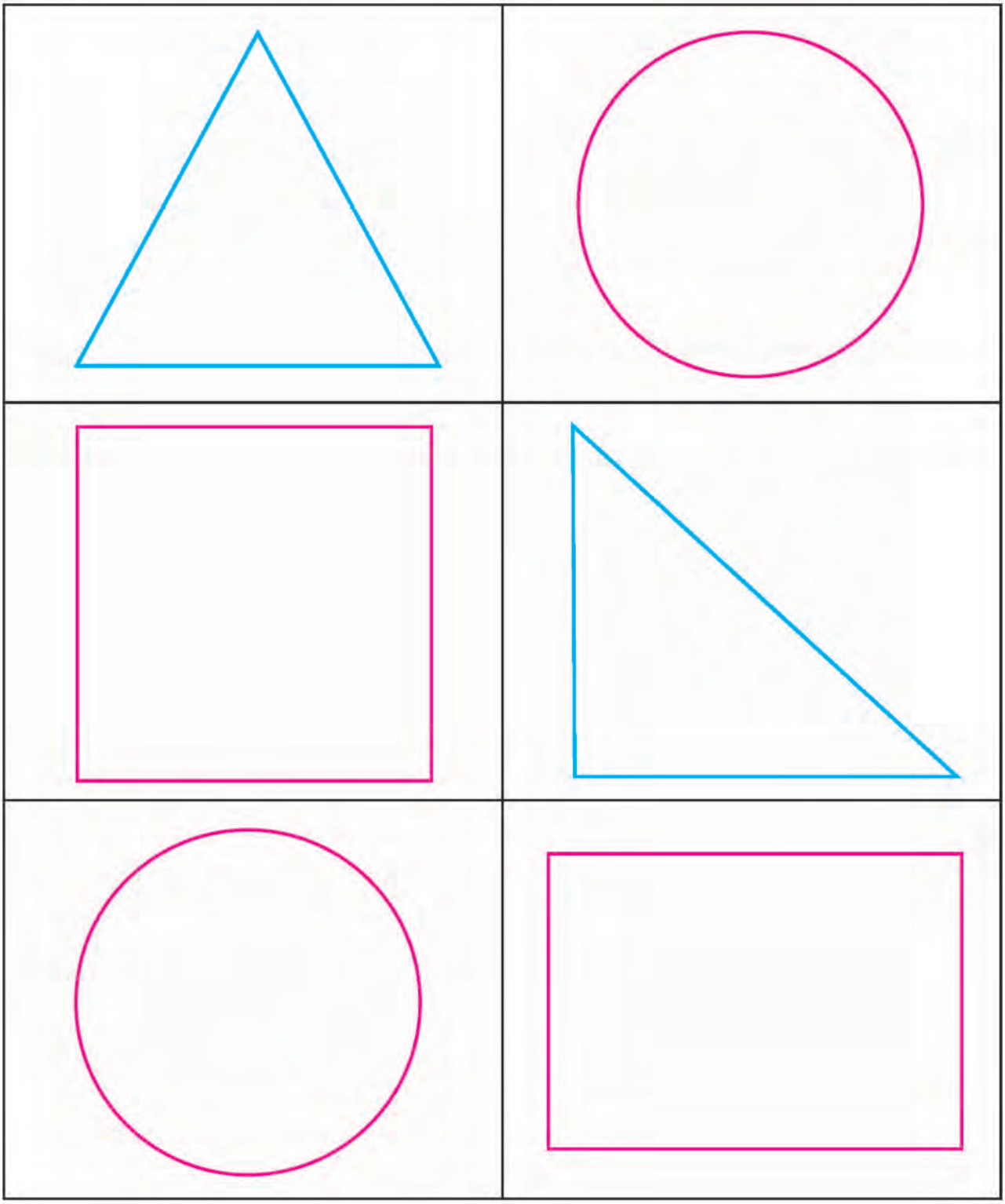
Make quadrilaterals by connecting dots using a ruler:



Make circles by connecting dots:



Draw one fruit inside the triangle, one vegetable inside the quadrilateral and one bird inside the circle and fill colour.



My creation

Let's see, how much have I learnt?

1. Make two triangles using the solid objects like sticks or bamboo peals of different lengths.

2. Make two quadrilaterals using solid objects like juice pipe or straw or pencils of different length.

3. Look at the different shaped objects around your home and school and write the name of objects with following shaped surface.

Objecs with a triangular surface	Objects with a quadrangular surface
1. 2.	1. 2.
Objects with a circular surface	
1. 2.	

4. Write the name of the figures below. Write the number of sides and the number of corners in the figure.

(a)

Name of shape: ☐

Number of sides: ☐

Number of corners: ☐

(b)

Name of shape: ☐

Number of sides: ☐

Number of corners: ☐

(c)

Name of shape: ☐

Number of sides: ☐

Number of corners: ☐

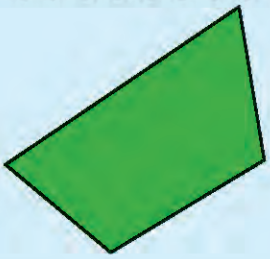
(d)

Name of shape: ☐

Number of sides: ☐

Number of corners: ☐

(e)



Name of shape: ☐

Number of sides: ☐

Number of corners: ☐

Teacher's signature

Parent's signature

Lesson 14

Pictograph and Table

Information from the table

Discuss.

Details of the items sold in a week from Purna's shop are given in the table below:

Items sold				
Items	Pencil	Eraser	Exercise book	Ruler
Number	40	35	150	25

1. How many pencils have been sold?
2. How many exercise books have been sold?
3. Which item has been sold the most?
4. Which item has been sold more eraser or pencil?

Detail's of the textbooks sold from Gyanu Books and Stationery, Sanothimi on the 1st of April are given in the table below:

Details of textbooks sold				
Grade	Grade 1	Grade 2	Grade 3	Grade 4
Textbook sets	30	25	40	50

Answer the following questions by observing the table above.

1. How many sets of textbooks have been sold of grade 1? ☐
2. Which grade's textbooks have been sold the most? ☐
3. Which grade's textbooks have been sold the least? ☐
4. How many more or less textbooks of grade 3 have been sold than grade 4? ☐

Information from the table

The quantity of fruits sold by Phulmaya in three days are given in the table below:

The quantity of fruits sold by Phulmaya in three days in kilograms				
Days \ Fruits →	Apple	Orange	Mousam	Pomegranate
First ↓	5	10	5	6
Second	7	8	4	9
Third	8	12	3	10
Total	20	30	12	25

Answer the following questions by observing the table above.

1. How many kilograms of oranges did Phulmaya sell on the first day? ☐
2. How many kilograms of Mousam did Phulmaya sell in three days in total? ☐
3. Which fruit was sold the most on the second days? ☐

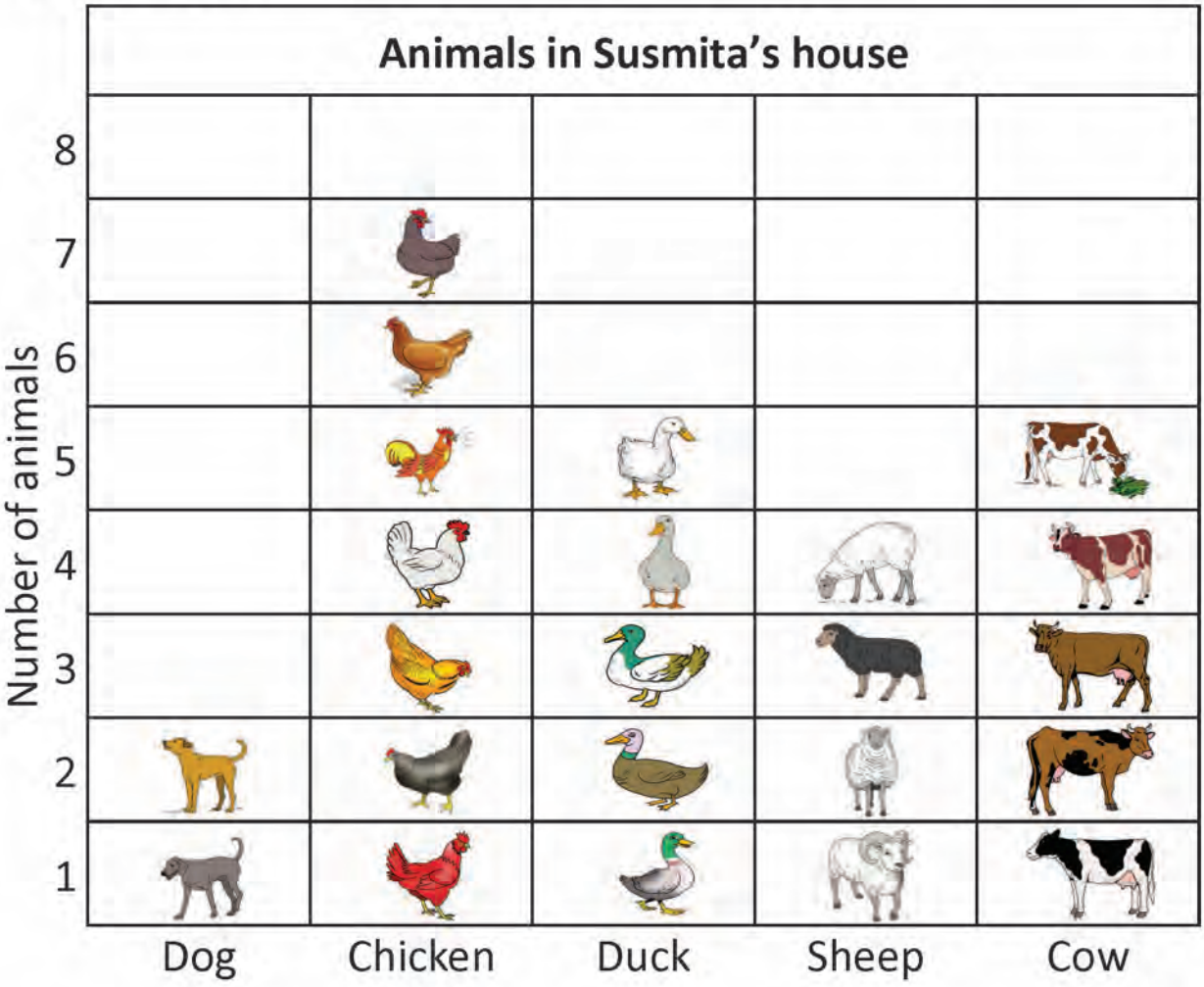
Hari prepared the details of the favorite game of the students of grade 1, 2 and 3 and wrote it on the exercise book. Water has been spilled on the exercise book kept on his desk and the part has been deleted as given below.

Sports	Grade 1	Grade 2	Grade 3	Total
Badminton	3	4		11
Cricket	2	5	7	
Football		6		18
Total	15		14	

Fill in the number in the deleted part.

Present the information from the pictograph in the table:

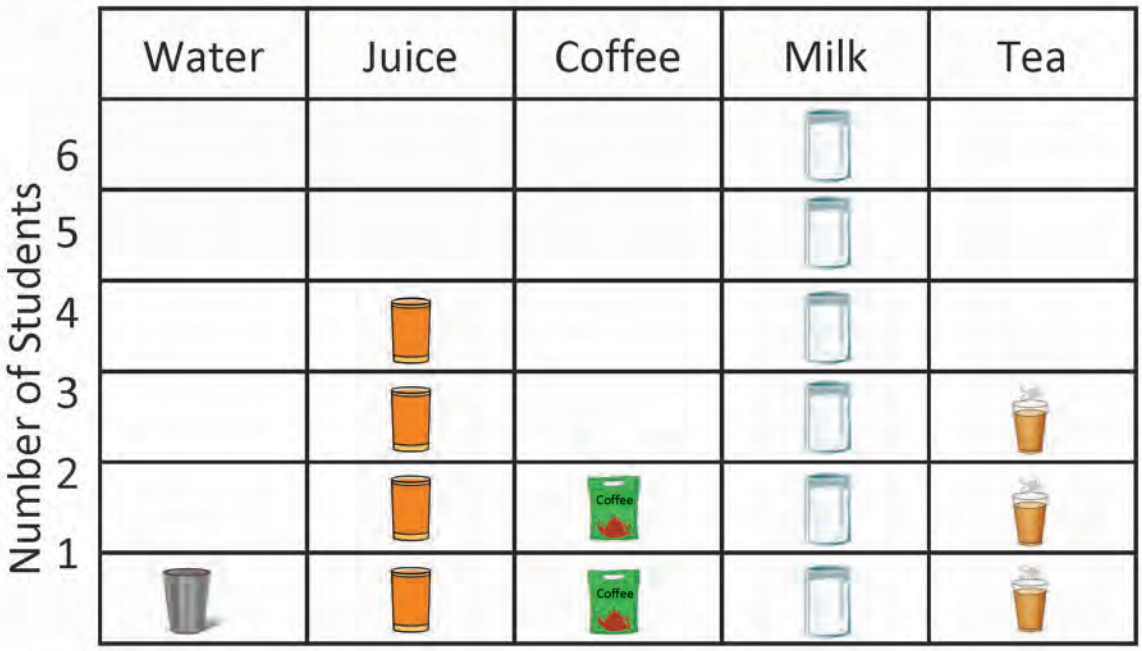
The details of the animal in Susmita's house are given in the pictograph below.



Observe the pictograph given above and present the information in table below.

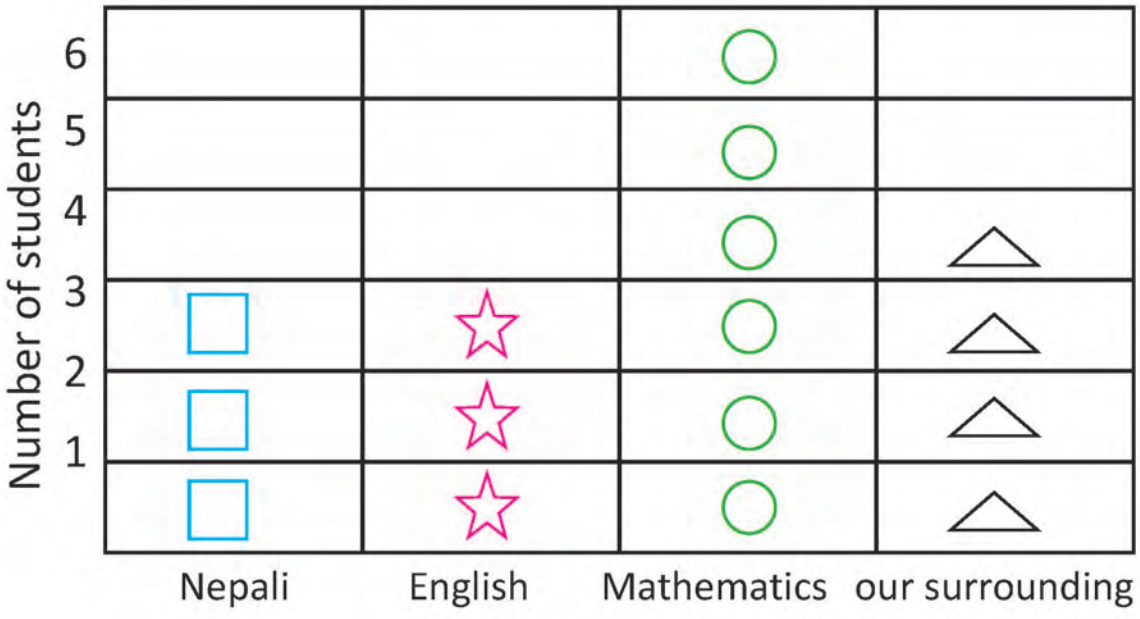
Animals in Susmita's house					
Animals	Dog	Chicken	Duck	Sheep	Cow
Number					

The students of grade 2 were asked which of the beverages (drinks) they like; water, juice, coffee, milk and tea. The answer to this question is presented in the pictograph below using the symbol.



Present the number of students who like water, juice, coffee, milk and tea by making table from the above pictograph.

As per the answers given to the questions by the students of grade 2 which subject they like, it is presented in the pictograph below using symbols.



From the above pictograph, present the number of students who like Nepali, English, Mathematics and Our Surrounding by making a table.

Lesson 15

Currency

Observe the notes and write.

Notes	Questions
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐

Notes	Questions
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐
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	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐
	(a) How much rupee note is this? ☐ (b) What is the picture of animal on this note? ☐

Look at the pictures of coins given below. Recognize and write the value of coins.

Rs. 1

☐

☐

☐

Look at the pictures of notes given below. Recognize and write the value of notes.

Rs. 5

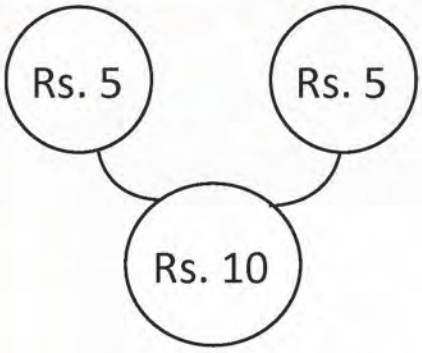
Look at the pictures of coins given below. Recognize and write how much money it is.

1 paisa

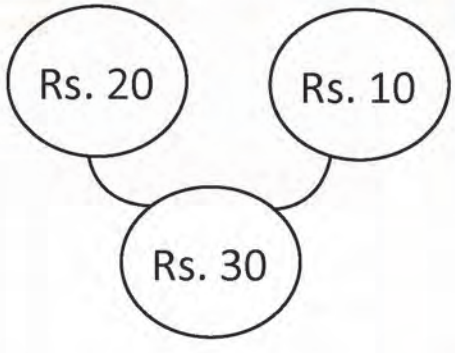
Observe the notes up to Rs. 1000 and fill in the blanks.

1. The note which indicates the lowest value is Rs. ____ .
2. The note which indicates the highest value is Rs. ____ .
3. A note with a picture of a tiger is of Rs. ____ .
4. A note with a picture of an elephant indicates Rs. ____ .

Add:

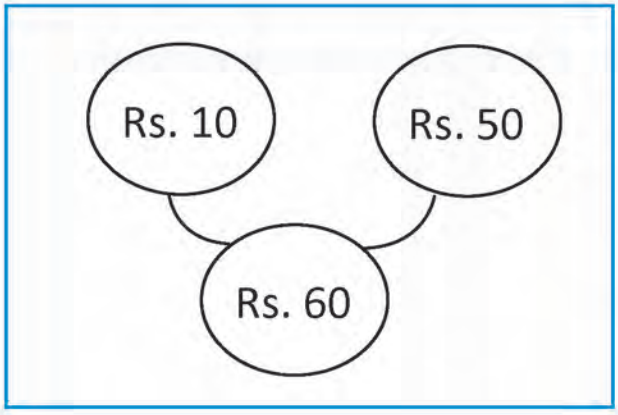


Rs. 5 + Rs. 5 = Rs. 10



Rs. 20 + Rs. 10 = Rs. 30

If Ram bought a pencil for Rs. 10 and an exercise book for Rs. 50, how much will the shopkeeper be paid in total?



Rs. 10 + Rs. 50
= Rs. 60

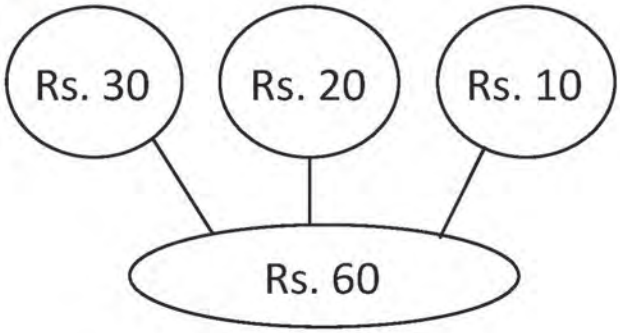
Total rupees paid to the shopkeeper = Rs. 60.

Addition related to Currency

Pemba bought an exercise book for Rs. 3o, pencil for Rs. 20 and eraser for Rs. 10. Now, how much money will he have to pay to the shopkeeper?

Rs. 30 + Rs. 20 + Rs. 10 = Rs. 60

	Rs. 30
+	Rs. 20
	Rs. 10
	Rs. 60



Fill in the blanks:

1. Rs.5 + Rs. 10 = Rs. 15	2. Rs.20 + Rs. 30 = Rs.
3. Rs. 30 + Rs. ____ = Rs. 50	4. Rs. ____ Rs. 20 = Rs. 30

Calculate:

1.

	Rs. 3
+	Rs. 10

2.

	Rs. 25
	Rs. 15
+	Rs. 10

3.

	20 paisas
+	10 paisas

4.

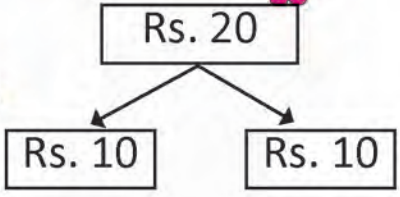
	40 paisas
+	25 paisas

If Rita bought a pen for Rs. 40 and an exercise book for Rs. 50 to gift on her friends birthday, how much money did she spend for the gifts?

Subtraction related to Currency

Shanti had Rs. 20. She bought a chocolate for Rs. 10. If she gave a Rs. 20 note to the shopkeeper, how much money would she get back?

Rs. 20 – Rs. 10 = Rs. 10



Shanti has Rs. 10 left in total.

Fill in the blanks:

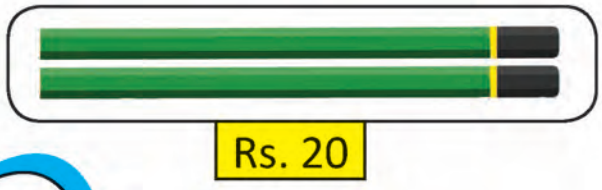
1. Rs. 120 – Rs. 12 = ☐	2. Rs. 45 – Rs. 35 = ☐
3. Rs. 90 – Rs. ☐ = Rs. 10	4. Rs. 75 – Rs. ☐ = Rs. 70
5. 25 paisas – 10 paisas = ☐ paisas	6. 50 paisas – 25 paisas = ☐
7. Rs. ☐ – Rs. 300 = Rs. 400	8. Rs. ☐ – Rs. 250 = Rs. 300

You have 4 notes of Rs. 10, 5 notes of Rs. 5 and 6 notes of Rs. 1. If you bought stationery materials for Rs. 45, how many ways can you pay the stationary bill using the above notes?

Subtraction related to Currency

Ishaan had Rs. 90. He bought two pencils for Rs. 20. How much money is left with Ishaan now?

	Rs. 90
–	Rs. 20
	Rs. 70

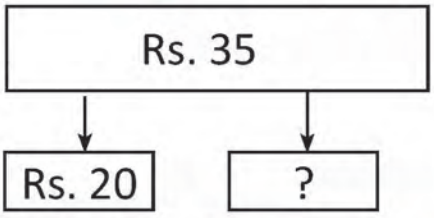


Ishaan has Rs. 70 left.

Prabha went to the market with Rs. 35. She spent Rs. 20 for buying Muna magazine. How much money does Prabha have now?

	Rs. 35
—	Rs. 20

Prabha has Rs. ☐ left.



Calculate:

1.

	Rs. 30
—	Rs. 10

2.

	Rs. 45
—	Rs. 22

3.

	Rs. 75
—	Rs. 35

Subtract:

1. Rs. 10 − Rs. 7 = Rs. 3	2. Rs. 15 − Rs. 3 =	3. Rs. 20 − Rs. 5 =	4. Rs. 95 − Rs. 65 =
5. Rs. 75 − Rs. 25 =	6. Rs. 30 − Rs. 20 =	7. 50 paisas − 15 paisas =	8. 90 paisas − 25 paisas =
9. 140 paisas − 50 paisas =	10. 50 paisas − 10 paisas =	11. 75 paisas − 40 paisas =	12. 90 paisas − 35 paisas =

Bishnu bought an exercise book for Rs. 40. If he gave a 100 rupees note to the shopkeeper, how many rupees will the shopkeeper have to return?

Write any two mathematical problems related to addition and subtraction of currency and solve.

Communication Technology and Market

Let's see, how much have I learnt?

1. Look at the pictures of notes given below. Recognize and write.

(a) 

Rs. ☐

(b) 

Rs. ☐

(c) 

Rs. ☐

2. Add:

(a) 

Rs. 5 + Rs. 20 = Rs. ☐

(b) 

Rs. 50 + Rs. 10 = Rs. ☐

(c) 

Rs. ☐ + Rs. ☐

= Rs. ☐

(d) 

Rs. ☐ + Rs. ☐

= Rs. ☐

3. Subtract:

(a)

	Rs. 100
−	Rs. 50

(b)

	Rs. 550
−	Rs. 320

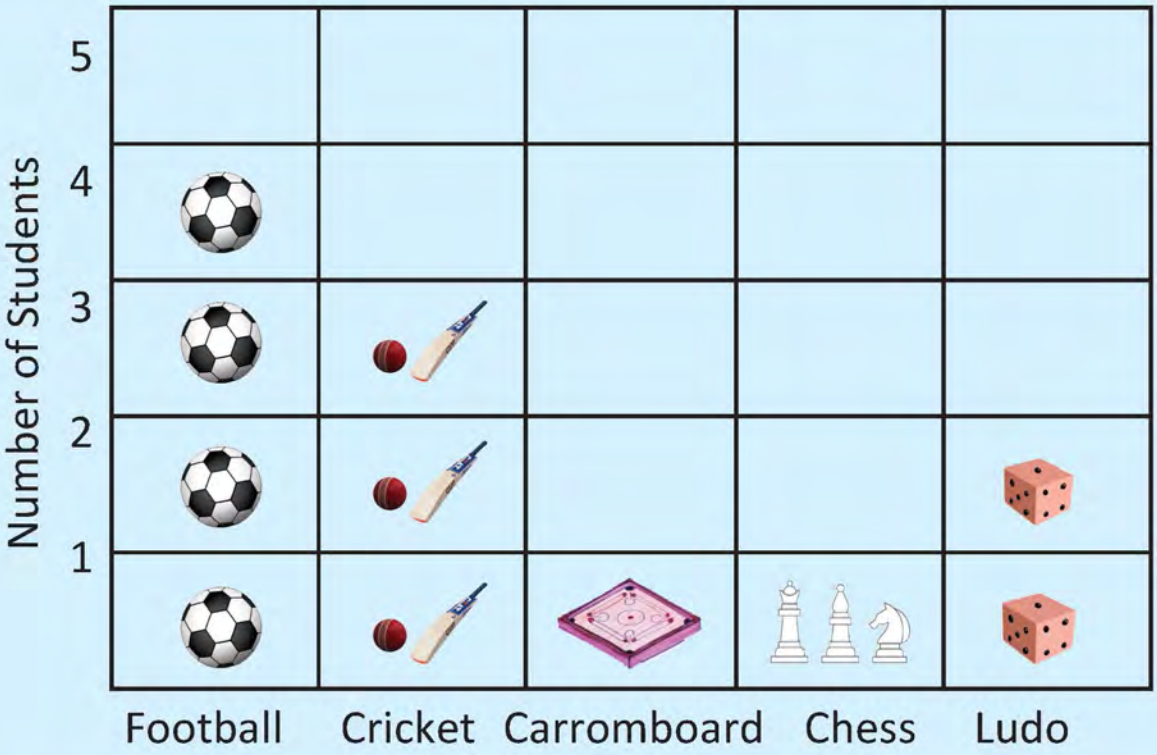
(c)

	50 paisas
−	10 paisas

(d)

	90 paisas
−	65 paisas

4. The Students of grade 2 were asked which of the sports they like; football, cricket, Carromboard, Chess and Ludo. The answers to this question are presented in the pictograph below:



Look at the pictograph above and write the number of students who like to play each game:

Football: ☐ Carromboard: ☐

Ludo: ☐ Cricket: ☐

Chess: ☐

Teacher's signature

Parent's signature

Lesson 16

Multiplication 2

Count the ears of rabbits:

2 one time = 2

2 × 1 = ☐

2 + 2 = ☐

2 two times = ☐

2 × 2 = ☐

2 + 2 + 2 = ☐

2 three times = ☐

2 × 3 = ☐

2 + 2 + 2 + 2 = ☐

2 four = ☐

2 × 4 = ☐

2 + 2 + 2 + 2 + 2 = ☐

2 five times = ☐

2 × 5 = ☐

2 + 2 + 2 + 2 + 2 + 2 = ☐

2 six times = ☐

2 × 6 = ☐

Count the ears of rabbits:

2 + 2 + 2 + 2 + 2 + 2 + 2 = ☐

2 seven times = ☐

2 × 7 = ☐

2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = ☐

2 eight times = ☐

2 × 8 = ☐

2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = ☐

2 nine times = ☐

2 × 9 = ☐

2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 = ☐

2 ten times = ☐

2 × 10 = ☐

2	×	1	= 2
2	×	2	= 4
2	×	3	=
2	×	4	=
2	×	5	=
2	×	6	=
2	×	7	=
2	×	8	=
2	×	9	=
2	×	10	=

Count the flowers:

3 one time = 3
3 × 1 = 3

3 + 3 = 6
3 two times = 6
3 × 2 = 6

3 + 3 + 3 = 9
3 three times = 9
3 × 3 = 9

3 + 3 + 3 + 3 = 12
3 four times = ...
3 × 4 = ...

3 + 3 + 3 + 3 + 3 = 15
3 five times = ...
3 × 5 = ...

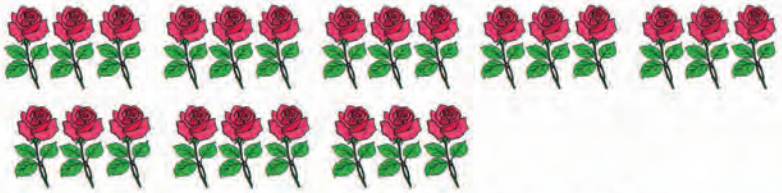
3 + 3 + 3 + 3 + 3 + 3 = 18
3 six times = ...
3 × 6 = ...

Count the flowers:

3 + 3 + 3 + 3 + 3 + 3 + 3 = 21

3 seven times = ...

3 × 7 = ...



3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 24

3 eight times = ...

3 × 8 = ...

3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 27

3 nine times = ...

3 × 9 = ...

3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3 = 30

3 ten times = ...

3 × 10 = ...

3	×	1	=	3
3	×	2	=	6
3	×	3	=	9
3	×	4	=	
3	×	5	=	
3	×	6	=	
3	×	7	=	
3	×	8	=	
3	×	9	=	
3	×	10	=	

Count the legs of the chairs:

4 one time = 4

4 × 1 = ☐

4 + 4 = ☐

4 two times = ☐

4 × 2 = ☐

4 + 4 + 4 = ☐

4 three times = ☐

4 × 3 = ☐

4 + 4 + 4 + 4 = ☐

4 four times = ☐

4 × 4 = ☐

4 + 4 + 4 + 4 + 4 = ☐

4 × 5 = ☐

4 five times = ☐

4 + 4 + 4 + 4 + 4 + 4 = ☐

4 × 6 = ☐

4 six times = ☐

Count the legs of the chairs:

4 + 4 + 4 + 4 + 4 + 4 + 4 = ☐

4 seven times = ☐ 4 × 7 = ☐

4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = ☐

4 eight times = ☐ 4 × 8 = ☐

4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = ☐

4 nine times = ☐ 4 × 9 = ☐

4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 = ☐

4 ten times = ☐ 4 × 10 = ☐

4	×	1	=
4	×	2	=
4	×	3	=
4	×	4	=
4	×	5	=
4	×	6	=
4	×	7	=
4	×	8	=
4	×	9	=
4	×	10	=

Count the fingers of the hands:

5 one time = ☐

5 × 1 = 5

5 + 5 = 10

5 two times = ☐

5 × 2 = ☐

5 + 5 + 5 = ☐

5 three times = ☐

5 × 3 = ☐

5 + 5 + 5 + 5 = ☐

5 four times = ☐

5 × 4 = ☐

5 + 5 + 5 + 5 + 5 = ☐

5 five times = ☐

5 × 5 = ☐

5 + 5 + 5 + 5 + 5 + 5 = ☐

5 six times = ☐

5 × 6 = ☐

Count the fingers of the hands:

5 + 5 + 5 + 5 + 5 + 5 + 5 = ☐

5 seven times = ☐

5 × 7 = ☐

5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = ☐

5 eight times = ☐

5 × 8 = ☐

5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = ☐

5 nine times = ☐

5 × 9 = ☐

5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 = ☐

5 ten times = ☐

5 × 10 = ☐

5	×	1	=	5
5	×	2	=	10
5	×	3	=	
5	×	4	=	
5	×	5	=	
5	×	6	=	
5	×	7	=	
5	×	8	=	
5	×	9	=	
5	×	10	=	

Count the corners of the figures:

6 one time = ☐

6 × 1 = ☐

6 + 6 = ☐

6 two times = ☐

6 × 2 = ☐

6 + 6 + 6 = ☐

6 × 3 = ☐

6 three times = ☐

6 + 6 + 6 + 6 = ☐

6 × 4 = ☐

6 four times = ☐

6 + 6 + 6 + 6 + 6 = ☐

6 × 5 = ☐

6 five times = ☐

6 + 6 + 6 + 6 + 6 + 6 = ☐

6 × 6 = ☐

6 six times = ☐

Count the corners of the figures:

6 + 6 + 6 + 6 + 6 + 6 + 6 = ☐

6 seven times = ☐

6 × 7 = ☐

6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = ☐

6 eight times = ☐

6 × 8 = ☐

6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = ☐

6 nine times = ☐

6 × 9 = ☐

6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 + 6 = ☐

6 ten times = ☐

6 × 10 = ☐

6	×	1	=	6
6	×	2	=	12
6	×	3	=	
6	×	4	=	
6	×	5	=	
6	×	6	=	
6	×	7	=	
6	×	8	=	
6	×	9	=	
6	×	10	=	

Count the figures on the cards:

7 one time = ☐

7 × 1 = 7

7 + 7 = ☐

7 two times = ☐

7 × 2 = ☐

7 + 7 + 7 = 21

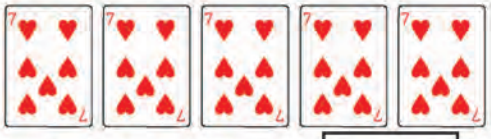
7 three times = ☐

7 × 3 = ☐

7 + 7 + 7 + 7 = ☐

7 four times = ☐

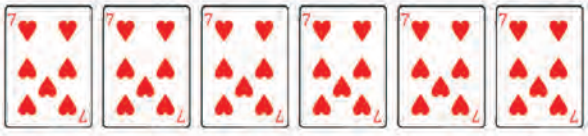
7 × 4 = ☐



7 + 7 + 7 + 7 + 7 = ☐

7 five times = ☐

7 × 5 = ☐



7 + 7 + 7 + 7 + 7 + 7 = ☐

7 six times = ☐

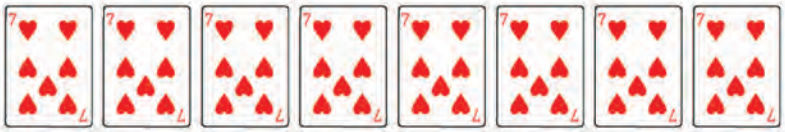
7 × 6 = ☐

Count the figures on the cards:

7 + 7 + 7 + 7 + 7 + 7 + 7 = ☐

7 sevent times = ☐

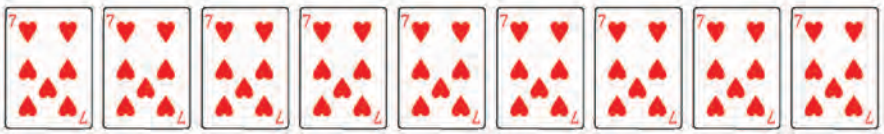
7 × 7 = ☐



7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = ☐

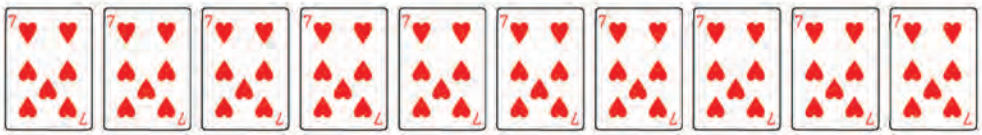
7 eight times = ☐

7 × 8 = ☐



7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = ☐

7 nine times = ☐ 7 × 9 = ☐



7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = ☐

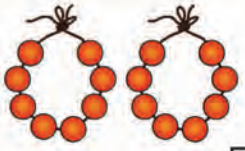
7 ten times = ☐ 7 × 10 = ☐

7	×	1	=
7	×	2	=
7	×	3	=
7	×	4	=
7	×	5	=
7	×	6	=
7	×	7	=
7	×	8	=
7	×	9	=
7	×	10	=

Count the beads of the garlands.

8 one time = ☐

8 × 1 = ☐



8 + 8 = ☐

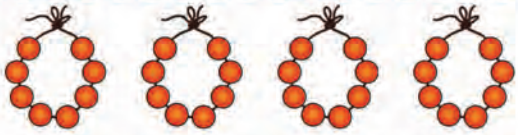
8 two tiems = ☐

8 × 2 = ☐

8 + 8 + 8 = 24

8 three times = ☐

8 × 3 = ☐



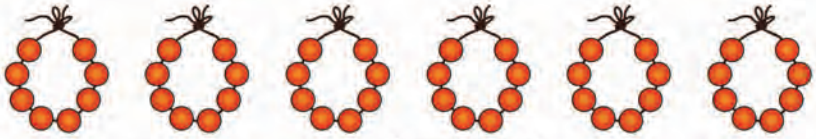
8 + 8 + 8 + 8 = ☐

8 four times = ☐

8 × 4 = ☐

8 + 8 + 8 + 8 + 8 = ☐

8 five times = ☐ 8 × 5 = ☐



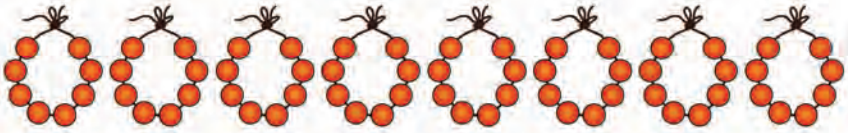
8 + 8 + 8 + 8 + 8 + 8 = ☐

8 six times = ☐ 8 × 6 = ☐

8 + 8 + 8 + 8 + 8 + 8 + 8 = ☐

8 seven times = ☐ 8 × 7 = ☐

Count the beads of the garlands.

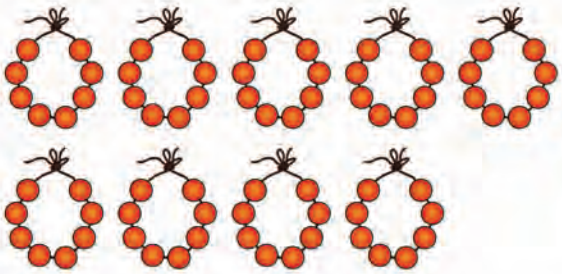


8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = ☐

8 eight times = ☐

8 × 8 = ☐

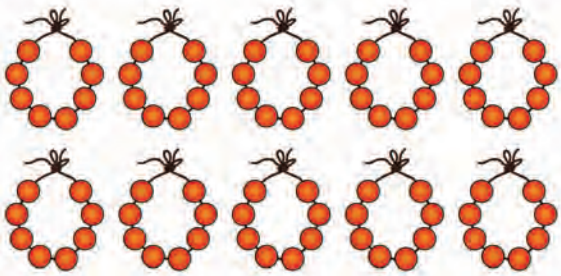
8	× 1	=	8
8	× 2	=	16
8	× 3	=	
8	× 4	=	
8	× 5	=	
8	× 6	=	
8	× 7	=	
8	× 8	=	
8	× 9	=	
8	× 10	=	



8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = ☐

8 nine times = ☐

8 × 9 = ☐



8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 = ☐

8 ten times = ☐

8 × 10 = ☐

Count the beads of the *Rudrakshas* of the garlands:

9 one time = 9

9 × 1 = 9

9 + 9 = 18

9 two times = 18

9 × 2 = 18

9 + 9 + 9 = ☐

9 three times = ☐

9 × 3 = ☐

9 + 9 + 9 +9 = ☐

9 four times = ☐

9 × 4 = ☐

9 + 9 + 9 + 9 + 9 = ☐

9 × 5 = ☐

9 five times = ☐

9 + 9 + 9 + 9 + 9 + 9 = ☐

9 × 6 = ☐

9 six times = ☐

9 + 9 + 9 + 9 + 9 + 9 + 9 = ☐

9 × 7 = ☐

9 seven times = ☐

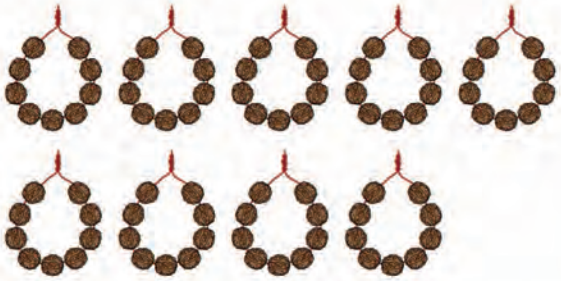
Count the beads of the *Rudrakshas* of the garlands:

$9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 =$ ☐

9 eight times $=$ ☐

$9 \times 8 =$ ☐

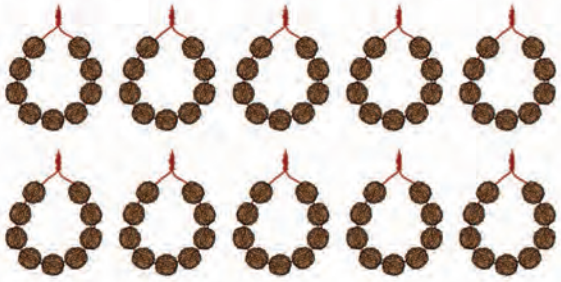
9	× 1	=	9
9	× 2	=	18
9	× 3	=	
9	× 4	=	
9	× 5	=	
9	× 6	=	
9	× 7	=	
9	× 8	=	
9	× 9	=	
9	× 10	=	



$9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 =$ ☐

9 nine times $=$ ☐

$9 \times 9 =$ ☐



$9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 =$ ☐

9 ten times $=$ ☐

$9 \times 10 =$ ☐

Count the tennis balls:

10 one time = ☐

10 × 1 = 10

10 + 10 = 20

10 two times = ☐

10 × 2 = 20

10 + 10 + 10 = ☐

10 × 3 = ☐

10 three times = ☐

10 + 10 + 10 + 10 = ☐

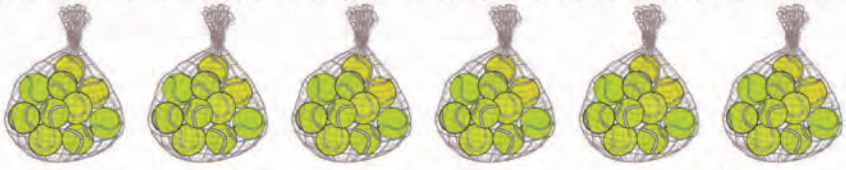
10 × 4 = ☐

10 four times = ☐

10 + 10 + 10 + 10 + 10 = ☐

10 × 5 = ☐

10 five times = ☐

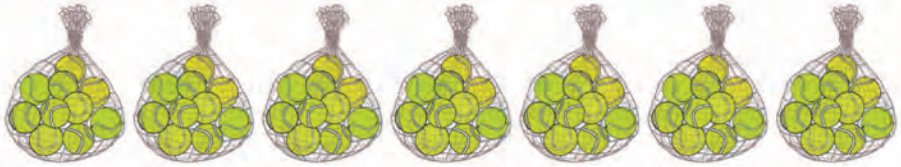


10 + 10 + 10 + 10 + 10 + 10 = ☐

10 × 6 = ☐

10 six times = ☐

Count the tennis balls:



10 + 10 + 10 + 10 + 10 + 10 + 10 = ☐

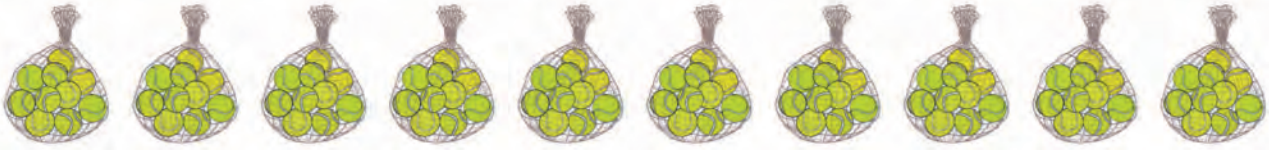
10 seven times = ☐ 10 × 7 = ☐

10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = ☐

10 eight times = ☐ 10 × 8 = ☐

10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = ☐

10 nine times = ☐ 10 × 9 = ☐



10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 + 10 = ☐

10 ten times = ☐ 10 × 10 = ☐

10	×	1	= 10
10	×	2	= 20
10	×	3	=
10	×	4	=
10	×	5	=
10	×	6	=
10	×	7	=
10	×	8	=
10	×	9	=
10	×	10	=

Complete the multiplication table and read:

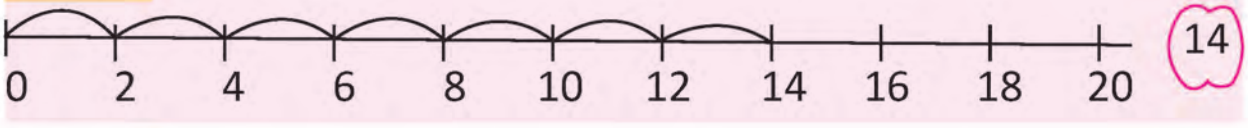
×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4						
2	2	4	6							
3	3	6								
4	4									
5										
6										
7										
8										
9										
10										

Multiply:

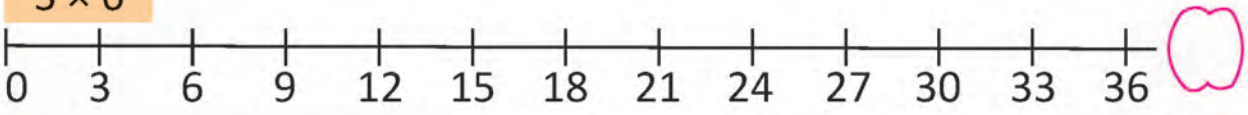
$2 \times 3 =$	$4 \times 5 =$	$3 \times 6 =$
$5 \times 7 =$	$5 \times 3 =$	$6 \times 2 =$
$7 \times 3 =$	$8 \times 9 =$	$10 \times 5 =$
$4 \times 7 =$	$3 \times 8 =$	$9 \times 6 =$

Skip count on the number line:

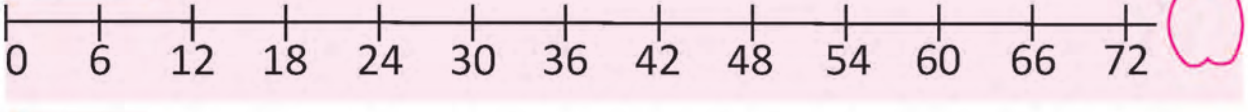
1. 2×7



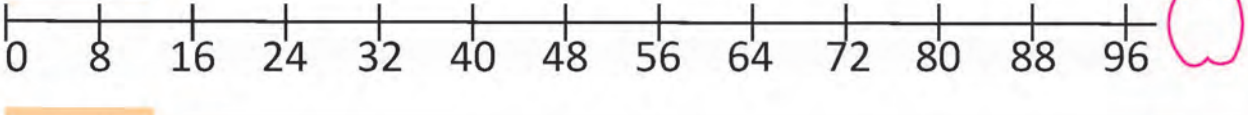
2. 3×6



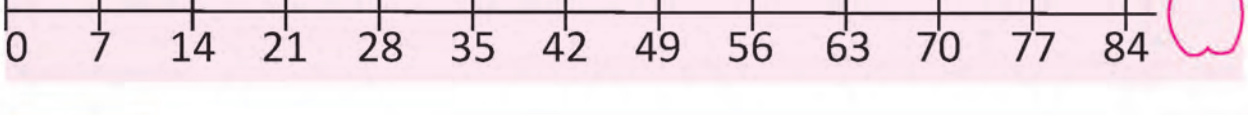
3. 6×9



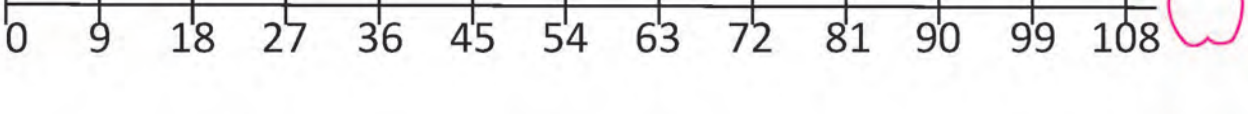
4. 8×5



5. 7×6



6. 9×8

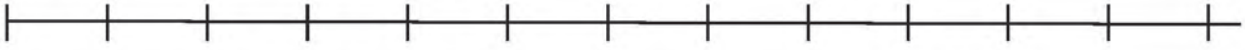


Show the mathematical sentences given below on the number line:

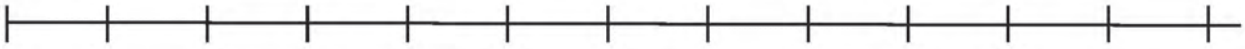
1. 3×5

2. 4×8

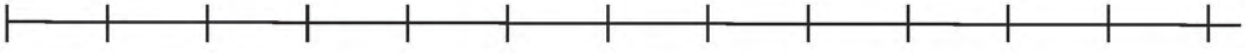
3. 6×6



4. 7×5

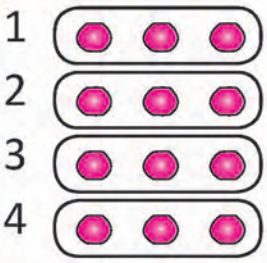


5. 9×4



Count and write:

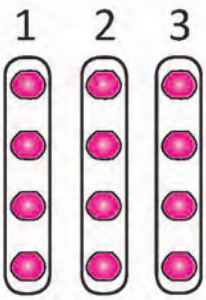
1.



3 four times
$3 \times 4 = 12$

4 three times
$4 \times 3 = 12$

$3 \times 4 = 4 \times 3 = 12$



2.

___, ___times

___ × ___

= ___

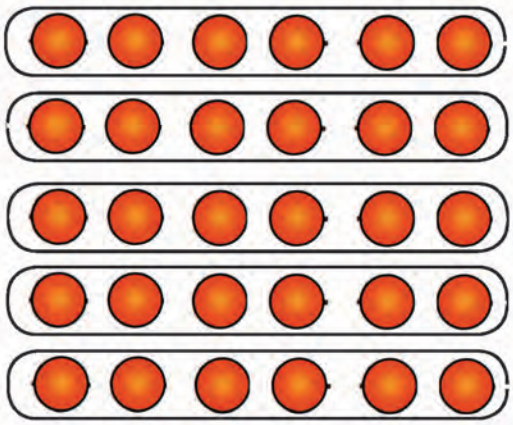
___, ___times

___ × ___

= ___

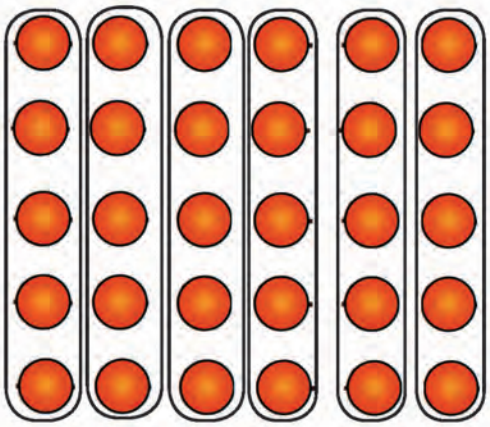
___ × ___ = ___ × ___ = ___

3.



___, ___ times

___ × ___ = ___



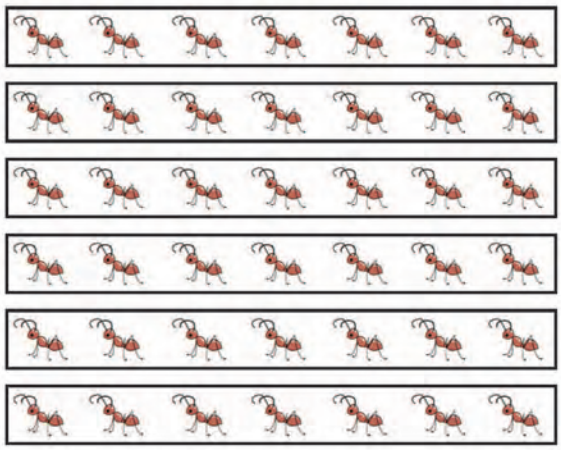
___, ___ times

___ × ___ = ___

___ × ___ = ___ × ___ = ___

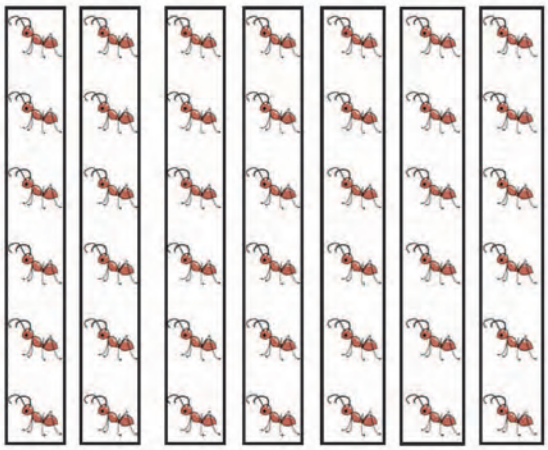
Count and write:

4.



___, ___ times

___ × ___ = ___

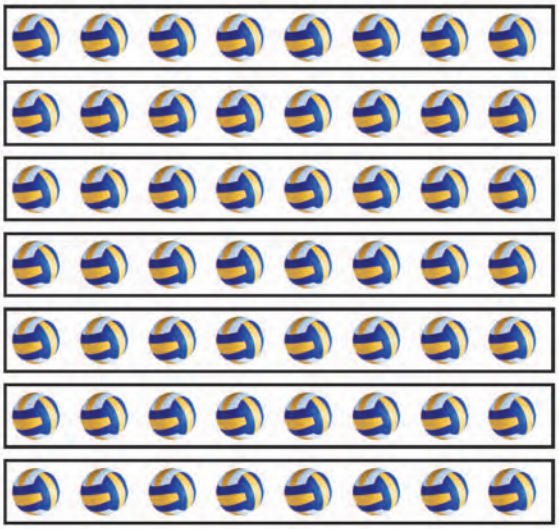


___, ___ times

___ × ___ = ___

___ × ___ = ___ × ___ = ___

5.



___, ___ times

___ × ___ = ___

___, ___ times

___ × ___ = ___

___ × ___ = ___ × ___ = ___

Calculate by using multiplication table:

1. There are four sides in a quadrilateral, if so, how many sides are there in five quadrilaterals?

   ☐ × ☐ = ☐ sides

2. If each student has 5 pencils, how many pencils are there with 6 students?

   ☐ × ☐ = ☐ pencils

3. If a basket can contain 5 oranges, how many oranges can contain the similar seven baskets?

   ☐ × ☐ = ☐ oranges

4. If 4 students can sit on a bench, how many students can sit on the similar 7 benches?

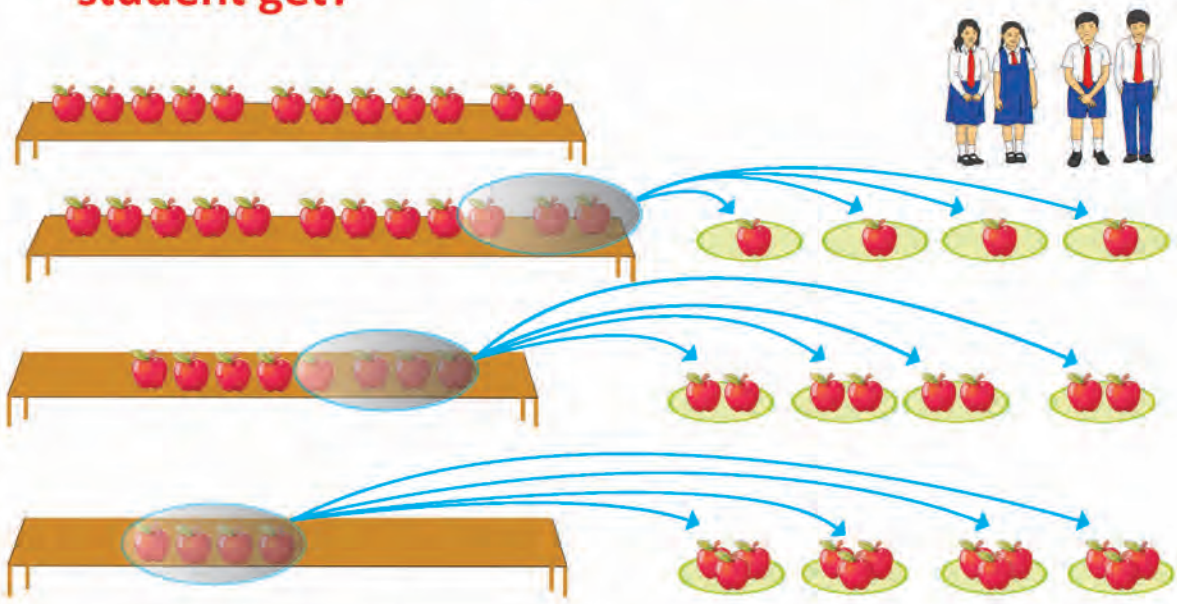
   ☐ × ☐ = ☐ students

5. If one student has 5 books, how many books are there with 8 students at the same rate?

   ☐ × ☐ = ☐ books

Division

Goma had 12 apples. She distributed 12 apples equally among 4 students. Now, how many apples did each student get?



When distributing 12 apples equally among 4 students, each student gets 3 apples. We can write this in mathematical sentence in this way:

12	÷	4	=	3
Total number of apples		Number of students		Number of apples

Each student gets 3 apples. $3 \times 4 = 12$

$$\begin{array}{r} 3 \\ 4\overline{)\,12} \\ -12 \\ \hline 0 \end{array}$$

We can write this mathematical sentence in this way also.

Grouping objects into groups with equal number of objects is called dividing.

If 15 pencils are distributed equally among 6 students, how many pencils will a student get?

In mathematical sentence: 15 ÷ 3

We can distribute by using picture or solid objects as given below:

If a student receives only one pencil,

$1 \times 3 = 3$

If a student receives only two pencils,

$2 \times 3 = 6$

If a student receives only three pencils,

$3 \times 3 = 9$

If a student receives only four pencils,

$4 \times 3 = 12$

If a student receives only five pencils,

$5 \times 3 = 15$

Number of pencils with each student

Number of students

Number of students

It is written in mathematical sentence as $15 \div 3 = 5$

Each student gets 5 pencils.

To find 15 ÷ 3, $\square \times 3 = 15$ can be calculated. For this we can see the multiplication table to find which number multiplying 3 gives 15.

Number of pencils with each student	×	Number of students	=	Total number			
Number of pencils with each student			=	Total number	÷	Number of students	

If 24 chololates are distributed equally among eight students, how many chocolates will each student get?

Divide by using the multiplication table:

1. $18 \div 6 = \square$ $\square \times 6 = 18$

2. $14 \div 2 = \square$ $\square \times 2 = 14$

3. $24 \div 4 = \square$ $\square \times 4 = 24$

4. $48 \div 6 = \square$ $\square \times 6 = 48$

5. $28 \div 7 = \square$ $\square \times 7 = 28$

Divide by using the multiplication table:

1. $21 \div 7 = \square$

2. $32 \div 8 = \square$

3. $36 \div 4 = \square$

4. $25 \div 5 = \square$

5. $24 \div 4 = \square$

6. $27 \div 3 = \square$

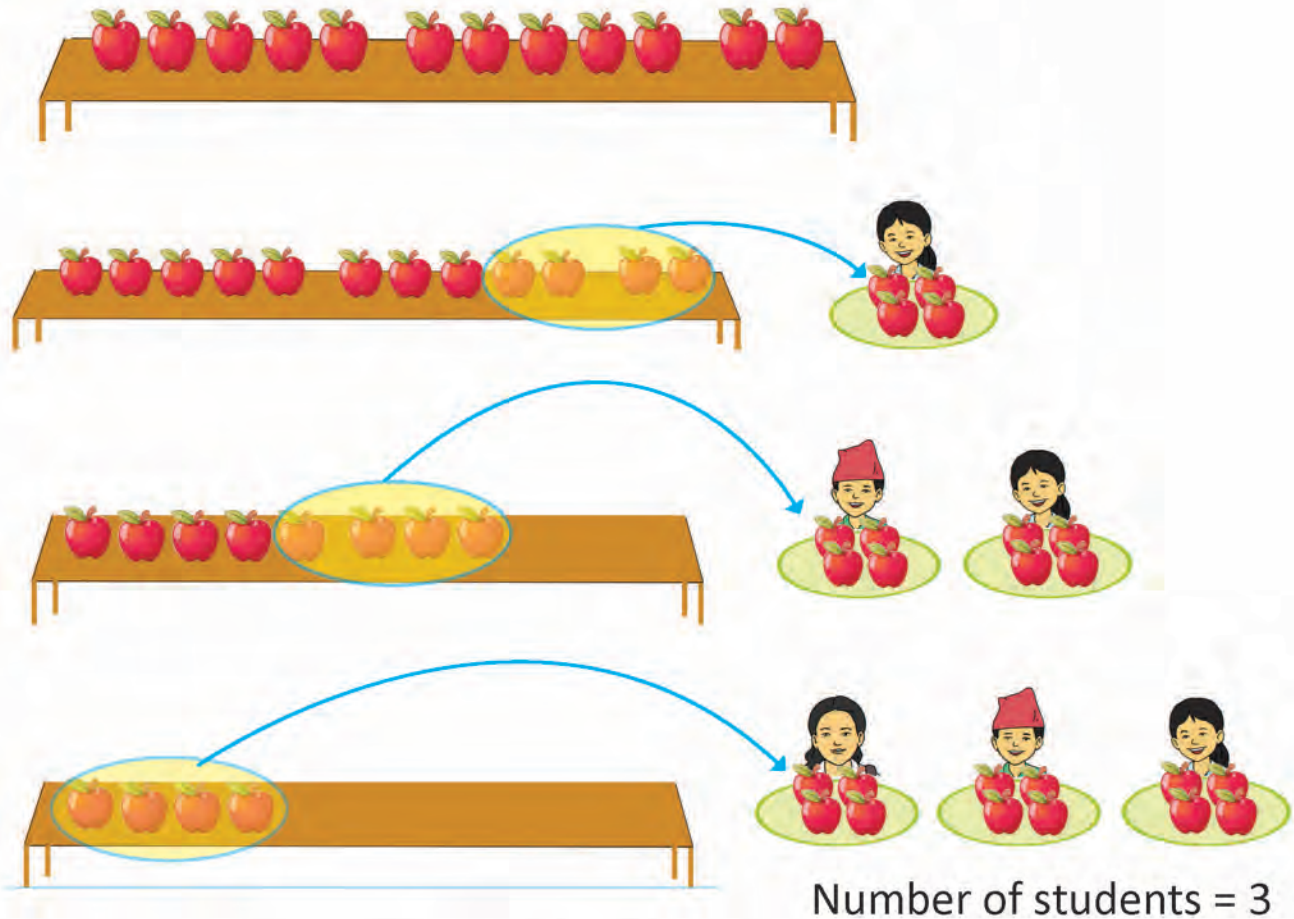
7. $7\overline{)42}$

8. $9\overline{)54}$

9. $8\overline{)56}$

10. $10\overline{)70}$

The picture below shows a total of 12 apples on a bench. If four apples are provided to one student, how many students will be distributed?



Number of students = 3

We can distribute 12 apples for 3 students giving 4 apples each. It can be written in mathematical sentence as given below:

12	÷	4	=	3
Total number of apples		Number of apples received by each student		Number of students

There are 15 pencils. Distributing three pencils to each student, how many students can be distributed?

In Mathematical sentence:

$\square \div \square$

To one student		$3 \times \boxed{3} = 3$
To two students		$3 \times \boxed{2} = 6$
To three students		$3 \times \boxed{3} = 9$
To four students		$3 \times \boxed{4} = 12$
To five students		$3 \times \boxed{5} = 15$

Number of pencils received by each student

Number of students

Total number of pencils

When 15 pencils are distributed 3 pencils for each students, 5 groups are formed.

To find the value of $15 \div 3$, we can calculate $3 \times \square = 15$. For this, we have to look at the multiplication table for how many times 15.

It is written in mathematical sentence as $15 \div 3 = 5$

Number of pencils received by each student × Number of students = Total number of pencils

Number of students = Total number of pencils ÷ Number of pencils received by each student

There are 18 chocolates in total. Distributing two chocolates for each student, how many students can be distributed?

How many rows are needed when 48 students are to be kept as 6 students per row?

The doctor gave 32 tablets medicine for Hari's father. If Hari's father has to take 4 tablets per day, how many days does the medicine last?

In Mathematical sentence,

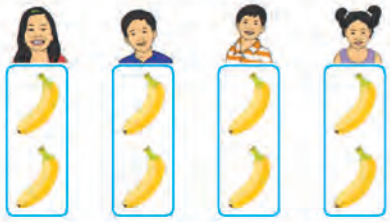
□ ÷ □ = □

□ × □ = □

Number of days to take medicine □

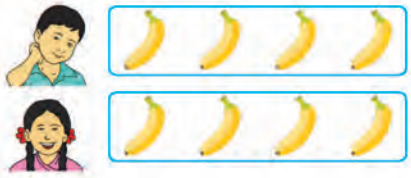
There are eight bananas in the picture. Solve 8 ÷ 4 from this.

8 ÷ 4



When eight bananas are distributed equally among the ☐ students, each student receives ☐ bananas.

8 ÷ 4



Eight bananas are given. If one student gets ☐ bananas, we can equally divide the bananas ☐ students.

The following mathematical sentence can be used to find the answer.

☐ × 2 = 8

Total ☐ bananas

The following mathematical sentence can be used to find the answer.

2 × ☐ = 8

Total ☐ bananas

Both of the above answers can be seen from the multiplication table of 4.

4 one time = 4 and 4 two times = 8

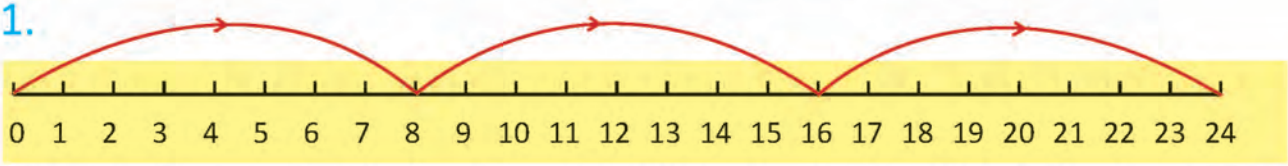
Divide:

Which digit's multiplication table is used to do the following division? Discuss.

16 ÷ 8 = ☐ 27 ÷ 9 = ☐ 35 ÷ 5 = ☐

Fill the numbers in the boxes as shown below:

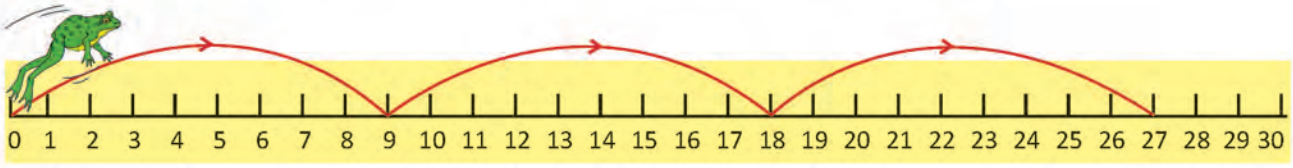
1.



The number to be reached = 24, Jumped time = 3, The number of times should be jumped = 8

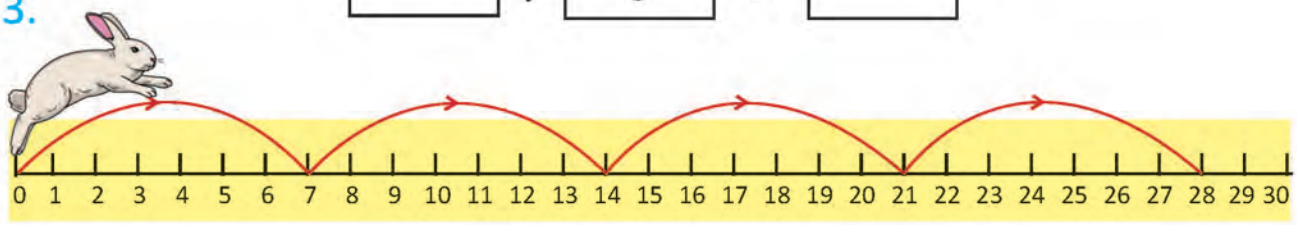
24 ÷ 3 = 8

2.



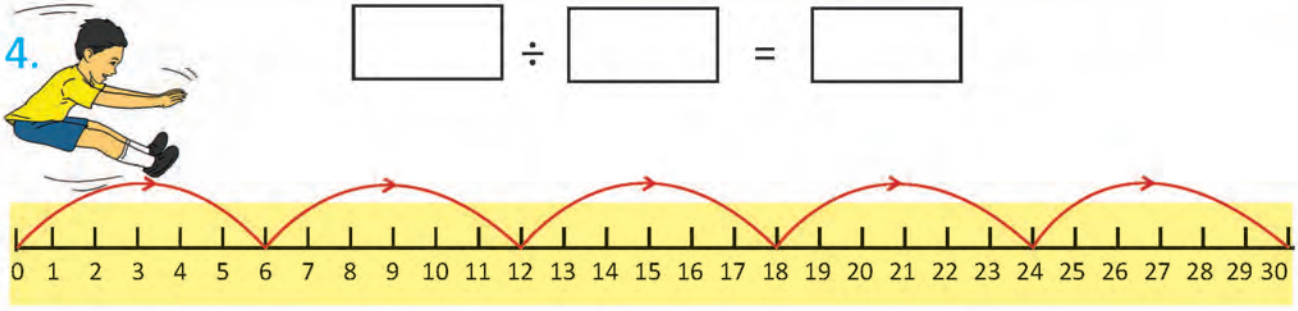
☐ ÷ 3 = ☐

3.



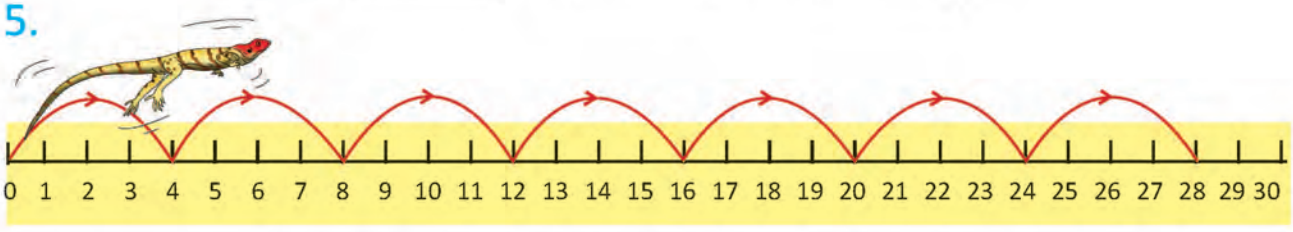
☐ ÷ ☐ = ☐

4.



☐ ÷ ☐ = ☐

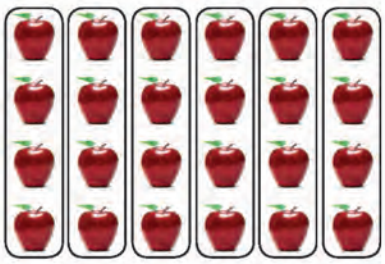
5.



☐ ÷ ☐ = ☐

Fill in the blanks as shown below:

1.



Making groups of 4 apples,

$24 \div 4 = 6$

There was 6 apples in one group.

2.

Making groups of 6 balls,

$\square \div \square \neq \square$

There was $\square$ balls in one group.

3.

Making group of 3 oranges,

$\square \div \square = \square$

There was $\square$ Orange in one group.

4.

Making groups of 7 lemons,

$\square \div \square = \square$

There was $\square$ lemons in one group.

5.

Making groups of 4 cauliflowers,

$\square \div \square = \square$

There was $\square$ cauliflowers in one group.

6.

Making groups of 8 tomatoes,

$\square \div \square = \square$

There was $\square$ tomatoes in one group.

Fill the numbers in the boxes as shown below:

1.	$2 \times 5 = \boxed{10}$	$\boxed{10} \div \boxed{2} = \boxed{5}$	$\boxed{10} \div \boxed{5} = \boxed{2}$
2.	$2 \times 8 = \boxed{}$	$\boxed{} \div \boxed{2} = \boxed{}$	$\boxed{} \div \boxed{8} = \boxed{}$
3.	$3 \times 9 = \boxed{}$	$\boxed{} \div \boxed{3} = \boxed{}$	$\boxed{} \div \boxed{9} = \boxed{}$
4.	$4 \times 5 = \boxed{}$	$\boxed{} \div \boxed{4} = \boxed{}$	$\boxed{} \div \boxed{5} = \boxed{}$
5.	$5 \times 7 = \boxed{}$	$\boxed{} \div \boxed{5} = \boxed{}$	$\boxed{} \div \boxed{7} = \boxed{}$
6.	$7 \times 6 = \boxed{}$	$\boxed{} \div \boxed{6} = \boxed{}$	$\boxed{} \div \boxed{7} = \boxed{}$
7.	$10 \times 6 = \boxed{}$	$\boxed{} \div \boxed{6} = \boxed{}$	$\boxed{} \div \boxed{10} = \boxed{}$

Calculate:

1. Ashira, who is studying in grade two, bought 18 chocolates to distribute to her friends on her birthday. If she gave 3 chocolates to each friend, how many of her friends can receive the chocolates?

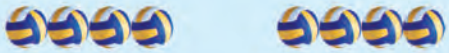
2. The Charity has brought a total of 56 pencils to distribute to the brilliant students of basic schools. If there were 8 brilliant students in that school, how many pencils would one student get?

3. Bishnu has divided 42 students of grade 10 of Janata Secondary School into volleyball teams. If a volleyball team consists of 6 players, how many teams are formed?

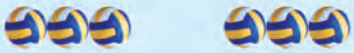
Basic Operations of Mathematics 2

Let's see, how much have I learnt?

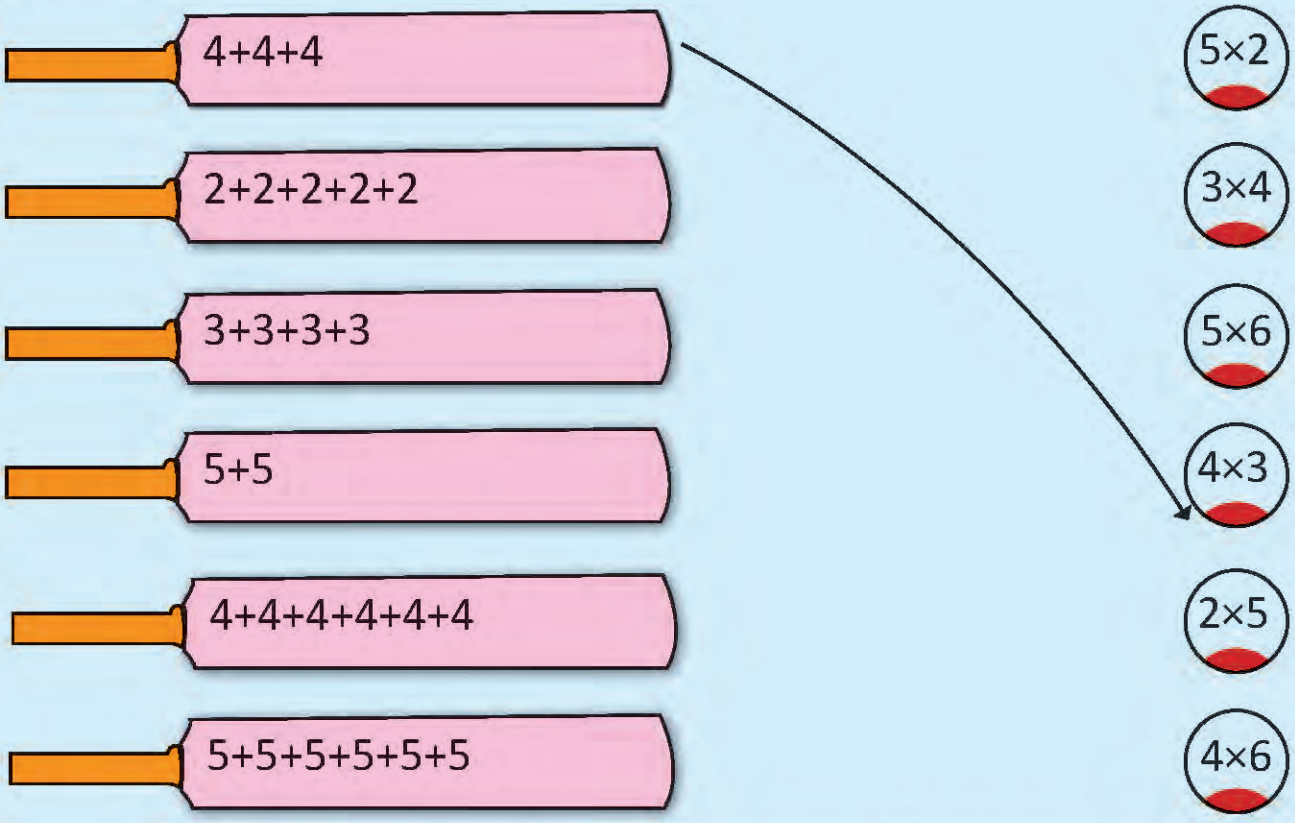
1. See example and fill in the blanks:

	Grouping form	Adding form	Multiplying form
(a)		2+2+2 = 6	2 × 3 = 6
(b)		3+3+3+3 = ...	.....
(c)		4+4 = ...	.....
(d)		.....	.....
(e)		.....	.....

2. Complete as given in the example:

	Adding form	Multiplying form	Grouping form
(a)	3+3 = 6	3 × 2 = 6	
(b)	4+4+4 = 12		
(c)	5+5+5 = 15		
(d)	4+4 = 8		

3. Match:



4. See the example and fill in the numbers in the boxes:

(a) 10 ÷ 5 = 2

(b) 35 ÷ 5 = ☐

(c) 24 ÷ 6 = ☐

(d) 28 ÷ 7 = ☐

(e) 24 ÷ 8 = ☐

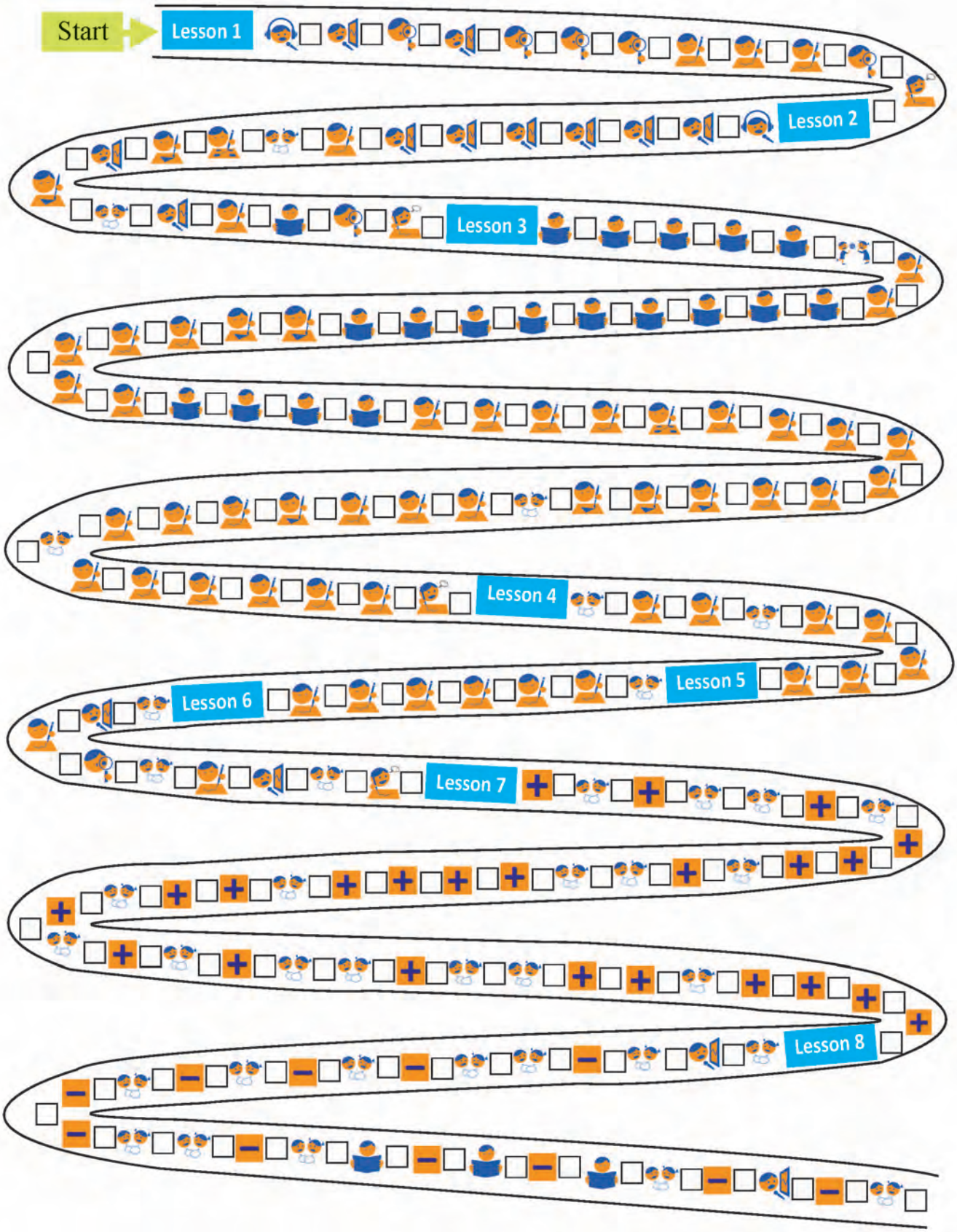
(f) 54 ÷ 9 = ☐

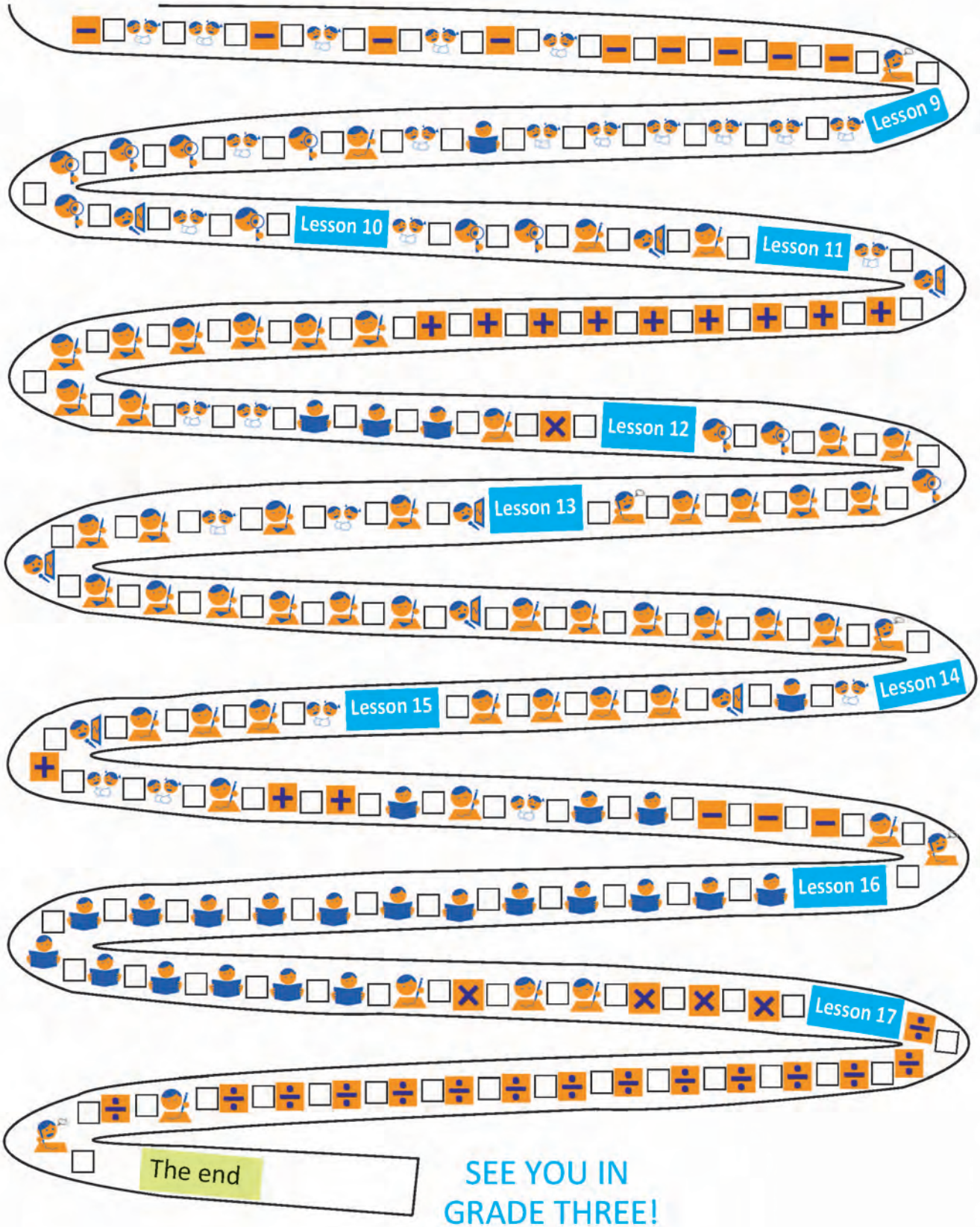
Teacher's signature

Parent's signature

Learning Progression Chart

Tick (√) the box on the day you complete the task.





SEE YOU IN GRADE THREE!