

# Our Devanagari Numerals

## Introduction and Exercises



# Our Numerals

Pihu's grandmother was doing some calculations on the table. Pihu looked her calculation but couldn't understand it, they seem to be some new digit to Pihu. She asked her grandmother about them.

१.	Sugar	१ Kg.	३५ Rupees
२.	Potato	३ Kg.	६० Rupees
३.	Onion	२ Kg.	२४ Rupees
४.	Soap	१ Pieces	१८ Rupees
५.	Oil	१ Litter	८५ Rupees
६.	Dal/ Pulses	१/ २ Kg.	३८ Rupees
७.	Salt	२ Packet	२० Rupees
Total :			२८० Rupees

Grandmother said that these are also numerals, we learnt mathematics with these numerals. Grandmother also showed Pihu a calendar with these numerals.

Pihu wanted to ask more about the numerals, but grandmother was busy for her work. So, she told Pihu to asked more about them from her teacher.

Next day Pihu asked more about the numerals to her teacher in the class. Teacher said –

“These are the numerals of Devanagari script.” These numerals are also used to write numbers.

These digits are like 0, 1, 2, 3, 4, 5, 6, 7, 8, & 9 which are just as to write numbers. In Devanagari digits these are written as ०, १, २, ३, ४, ५, ६, ७ ८ & ९

## Numbers

In order to write numbers we make use of numerals such as 0, 1, 2, 3,..... These are known as international numerals . We can also write numbers in the Devanagari numerals. Let us see the numerals as they are written in both the scripts :

International numerals	0	1	2	3	4	5	6	7	8	9
Devanagari numerals	०	१	२	३	४	५	६	७	८	९

The following table has numbers written in figures and in words. Learn to identify each number and read its name :

1	१	एक	26	२६	छब्बीस	51	५१	इक्यावन	76	७६	छिहत्तर
2	२	दो	27	२७	सत्ताईस	52	५२	बावन	77	७७	सतहत्तर
3	३	तीन	28	२८	अट्ठाईस	53	५३	तिरपन	78	७८	अठहत्तर
4	४	चार	29	२९	उनतीस	54	५४	चौवन	79	७९	उन्यासी
5	५	पाँच	30	३०	तीस	55	५५	पचपन	80	८०	अस्सी
6	६	छः	31	३१	इकतीस	56	५६	छप्पन	81	८१	इक्यासी
7	७	सात	32	३२	बत्तीस	57	५७	सत्तावन	82	८२	बयासी
8	८	आठ	33	३३	तैंतीस	58	५८	अट्ठावन	83	८३	तिरासी
9	९	नौ	34	३४	चौँतीस	59	५९	उनसठ	84	८४	चौरासी
10	१०	दस	35	३५	पैंतीस	60	६०	साठ	85	८५	पच्चासी
11	११	ग्यारह	36	३६	छत्तीस	61	६१	इकसठ	86	८६	छियासी
12	१२	बारह	37	३७	सैंतीस	62	६२	बासठ	87	८७	सत्तासी
13	१३	तेरह	38	३८	अड़तीस	63	६३	तिरसठ	88	८८	अठासी
14	१४	चौदह	39	३९	उनचालीस	64	६४	चौंसठ	89	८९	नवासी
15	१५	पंद्रह	40	४०	चालीस	65	६५	पैंसठ	90	९०	नब्बे
16	१६	सोलह	41	४१	इकतालीस	66	६६	छियासठ	91	९१	इक्यानवे
17	१७	सत्रह	42	४२	बयालीस	67	६७	सड़सठ	92	९२	बानवे
18	१८	अठारह	43	४३	तैंतालीस	68	६८	अड़सठ	93	९३	तिरानवे
19	१९	उन्नीस	44	४४	चौवालीस	69	६९	उनहत्तर	94	९४	चौरानवे
20	२०	बीस	45	४५	पैंतालीस	70	७०	सत्तर	95	९५	पंचानवे
21	२१	इक्कीस	46	४६	छियालीस	71	७१	इकहत्तर	96	९६	छियानवे
22	२२	बाईस	47	४७	सैंतालीस	72	७२	बहत्तर	97	९७	सत्तानवे
23	२३	तेईस	48	४८	अड़तालीस	73	७३	तिहत्तर	98	९८	अट्ठानवे
24	२४	चौबीस	49	४९	उनचास	74	७४	चौहत्तर	99	९९	निन्यानवे
25	२५	पच्चीस	50	५०	पचास	75	७५	पचहत्तर	100	१००	सौ

### Fill in the blanks

२ hundreds, ५ tens, ३ Ones

२५३

५ hundreds, ३ tens, १ Ones

१ hundreds, ० tens, ६ Ones

६ hundreds, ३ tens,, ४ Ones

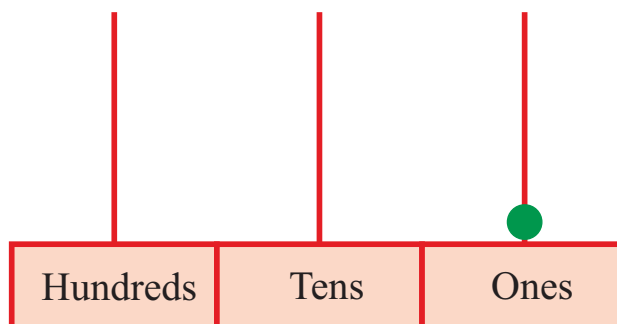
४ hundreds, ४ tens, ७ Ones

६ hundreds, ६ tens, ६ Ones

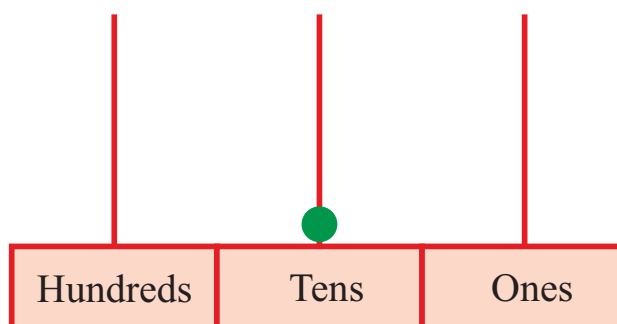


### Read and Understand

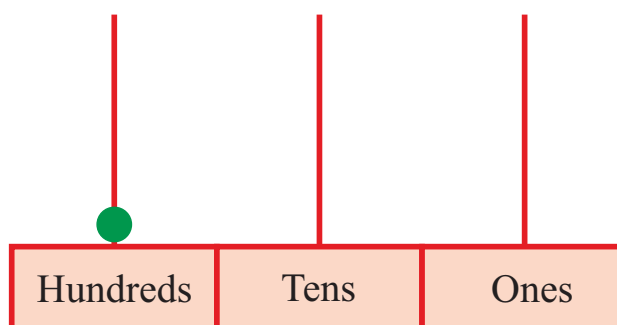
One Ones



One Tens



One Hundreds



Write the following numbers in words

੨੨੧	Two hundred and twenty one
੬੧੮	
੭੬੮	
੬੬੬	
੮੧੦	
੩੦੦	
੧੨੦	
੮੬	
੬੧੮	



Encircle ○ the mentioned digit

Hundred's digit	○ ੧ ੧	Ten's digit	੪ ੩ ੧
One's digit	੨ ੦ ੧	One's digit	੮ ੦ ੮
Ten's digit	੫ ੫ ੫	Hundred's digit	੨ ੫ ੬
One's digit	੭ ੬ ੬	Ten's digit	੭ ੫ ੫
Hundred's digit	੧ ੬ ੦	Hundred's digit	੬ ੮ ੬
Ten's digit	੧ ੨ ੧	One's digit	੫ ੬ ੧

### Write the expanded forms of the given numbers

$$353 = 300 + 50 + 3$$

$$630 = \dots + \dots + \dots$$

$$828 = \dots + \dots + \dots$$

$$335 = \dots + \dots + \dots$$

$$505 = \dots + \dots + \dots$$

$$880 = \dots + \dots + \dots$$

$$966 = \dots + \dots + \dots$$

$$385 = \dots + \dots + \dots$$

$$555 = \dots + \dots + \dots$$

$$579 = \dots + \dots + \dots$$

2. The expanded forms of some numbers are given. Write the number that you get by adding them:

$$500 + 90 + 7 = 597$$

$$900 + 50 + 9 = \dots$$

$$500 + 50 + 8 = \dots$$

$$200 + 60 = \dots$$

$$500 + 90 + 6 = \dots$$

$$600 + 50 + 3 = \dots$$

$$900 + 20 + 2 = \dots$$

$$500 + 9 = \dots$$

$$300 + 60 + 5 = \dots$$

$$800 + 30 + 6 = \dots$$

3. The teacher had written the place values of the digits in the given numbers on cards and placed them next to the number, but some naughty children changed the positions of some cards and erased some of the written place values.

Fill in the erased place values and then rearrange, write the proper expanded form :

$$569 = \boxed{\phantom{00}} + \boxed{500} + \boxed{9} = \dots + \dots + \dots$$

$$675 = \boxed{5} + \boxed{\phantom{00}} + \boxed{600} = \dots + \dots + \dots$$



$$५६६ = \boxed{६} + \boxed{\phantom{00}} + \boxed{६०} = \dots\dots\dots + \dots\dots\dots + \dots\dots\dots$$

$$८६० = \boxed{०} + \boxed{६०} + \boxed{\phantom{00}} = \dots\dots\dots + \dots\dots\dots + \dots\dots\dots$$

$$३०५ = \boxed{३००} + \boxed{\phantom{00}} + \boxed{०} = \dots\dots\dots + \dots\dots\dots + \dots\dots\dots$$

### Let us compare



Rani



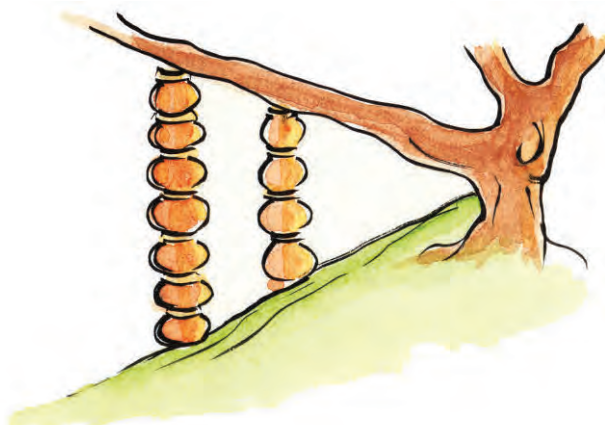
Mangal



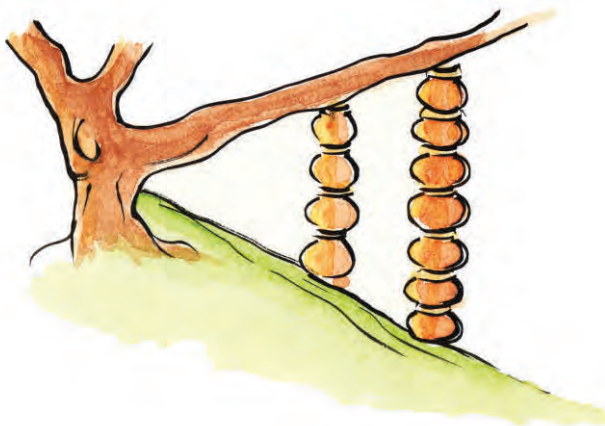
Rani is taller than Mangal



Mangal is smaller than Rani



In case of numbers, we say  
7 is greater than 4- Written as  $7 > 4$



4 is less than 7 Written as  $4 < 7$

## Consider another situation



In numbers 2 equals 2 which is written as  $2 = 2$



Raju is as tall as Rani

## Read

$$92 > 3$$

92 is greater than 3

$$96 < 209$$

One hundred ninety six is less than two hundred one

$$996 > 990$$

One hundred sixteen is greater than one hundred ten

$$980 < 999$$

Nine hundred eighty is less than nine hundred ninety nine

< Less than  
> Greater than  
= Equals to

## Exercise

9. Compare the numbers and put the appropriate sign  $<$ ,  $>$  or  $=$  in the given boxes.

5	<input type="text"/>	3	80	<input type="text"/>	20	35	<input type="text"/>	53
39	<input type="text"/>	29	69	<input type="text"/>	60	66	<input type="text"/>	900
952	<input type="text"/>	252	309	<input type="text"/>	309	853	<input type="text"/>	853
666	<input type="text"/>	666	966	<input type="text"/>	900	606	<input type="text"/>	606
666	<input type="text"/>	666	850	<input type="text"/>	580	66	<input type="text"/>	66



૨. Write the given numbers in a decreasing (descending) order .

૮,	૩૪,	૨૬	૩૪,	૨૬,	૮
૫૦,	૧૦,	૪૦	.....,	.....,	.....
૧૨૧,	૧૩૬,	૬૧	.....,	.....,	.....
૧૦૦,	૨૦૬,	૫૧૨	.....,	.....,	.....
૭૦૦,	૨૦૦,	૪૦૦	.....,	.....,	.....

૩. Arrange the given numbers in an increasing (ascending) order.

૭,	૪૫,	૨૧	૭,	૨૧,	૪૫
૪૬૬,	૨૬૬,	૬૬૬	.....,	.....,	.....
૨૧૫,	૩૫૧,	૧૫૧	.....,	.....,	.....
૬૦૧,	૩૦૬,	૭૦૦	.....,	.....,	.....
૧૦૦,	૬૦૦,	૩૦૦	.....,	.....,	.....

૪. Write the next three numbers as shown.

૧૨૭	૧૨૮	૧૨૯	૧૩૦
૪૧૮			
૬૬૭			
૫૭૩			
૮૮૮			



૫. Write the preceding three numbers to the given number as shown.

૧૦૫	૧૦૪	૧૦૩	૧૦૨
૩૬૫			
૨૦૧			
૬૬૭			
૫૦૦			

## Let us make numbers

૧. If we are given two digits ૭ and ૩, we could make two numbers using these :

૭૩ and ૩૭

૨. From ૧ and ૫, the numbers we get are :

૧૫ and ૫૧

૩. Similarly, if ૨, ૮ and ૬ are given, we could get ૬ numbers

૨૮૬, ૨૬૮, ૬૨૮, ૬૮૨, ૮૬૨, ૮૨૬

Now take nine cards with digits ૧ to ૯ written on them.

Pick any two cards and make the possible two digit numbers (you would get only two). Let your friends try too.

Now take ૩ cards at a time and make the different numbers using these. See who made the maximum numbers?

## Learn by doing

૧. Make numbers using the given digits.

(૧) ૨, ૭ \_\_\_\_\_, \_\_\_\_\_

(૨) ૫, ૨ \_\_\_\_\_, \_\_\_\_\_

(૩) ૮, ૩ \_\_\_\_\_, \_\_\_\_\_

(૪) ૩, ૧ \_\_\_\_\_, \_\_\_\_\_

In each pair that you have formed, encircle the number which is greater.

૨. Make numbers using the three given digits

(૧) ૩, ૪, ૧, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(૨) ૧, ૨, ૬ \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(૩) ૩, ૭, ૮ \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(૪) ૦, ૫, ૬ \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

(૫) ૪, ૧, ૦ \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

From the numbers which you formed, encircle the smallest number.

## How to Add?

(१) Addition of १५ and ७

$$\begin{array}{r}
 \begin{array}{c} \text{1 bundle of 10 sticks} \\ \text{5 single sticks} \end{array} + \begin{array}{c} \text{7 single sticks} \end{array} \\
 १५ + ७ \\
 = \begin{array}{c} \text{1 bundle of 10 sticks} \\ \text{10 single sticks} \end{array} \\
 १० + १० \\
 = \begin{array}{c} \text{2 bundles of 10 sticks} \\ \text{2 single sticks} \end{array} \\
 २० + २ = २२
 \end{array}$$

(२) Addition of २५ and १८

$$\begin{array}{r}
 \begin{array}{c} \text{2 bundles of 10 sticks} \\ \text{5 single sticks} \end{array} + \begin{array}{c} \text{1 bundle of 10 sticks} \\ \text{8 single sticks} \end{array} \\
 २५ + १८ \\
 = \begin{array}{c} \text{3 bundles of 10 sticks} \\ \text{13 single sticks} \end{array} \\
 ३० + १३ \\
 = \begin{array}{c} \text{4 bundles of 10 sticks} \\ \text{3 single sticks} \end{array} \\
 ४० + ३ = ४३
 \end{array}$$

## Add the bundles and the match sticks

$$\begin{array}{r}
 (१) \quad \begin{array}{c} \text{1 bundle of 10 sticks} \\ \text{5 single sticks} \end{array} + \begin{array}{c} \text{2 bundles of 10 sticks} \\ \text{5 single sticks} \end{array} = \begin{array}{c} \text{3 bundles of 10 sticks} \\ \text{10 single sticks} \end{array} \\
 \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}} + \boxed{\phantom{00}}
 \end{array}$$

$$\begin{array}{r}
 = \begin{array}{c} \text{3 bundles of 10 sticks} \\ \text{5 single sticks} \end{array} + \begin{array}{c} \text{5 single sticks} \end{array} \\
 = \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}
 \end{array}$$

$$\begin{array}{r}
 (२) \quad \begin{array}{c} \text{2 bundles of 10 sticks} \\ \text{5 single sticks} \end{array} + \begin{array}{c} \text{2 bundles of 10 sticks} \\ \text{8 single sticks} \end{array} \\
 \boxed{\phantom{00}} + \boxed{\phantom{00}}
 \end{array}$$

$$\begin{array}{r}
 = \begin{array}{c} \text{4 bundles of 10 sticks} \\ \text{13 single sticks} \end{array} \\
 = \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}} + \boxed{\phantom{00}} = \boxed{\phantom{00}}
 \end{array}$$

# How many are left?

On subtracting 25 from 82

$$\begin{array}{r} 82 \\ - 25 \\ \hline \hline \end{array}$$

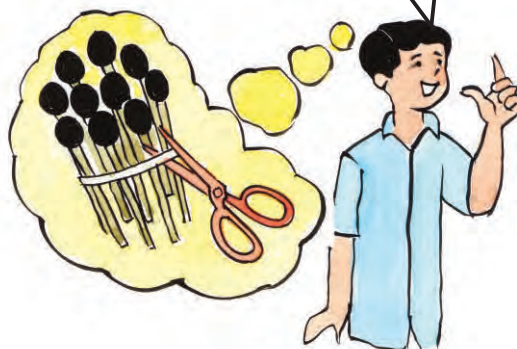


How do I take away 5 from 2



Oh, ho! I can open one bundle

$$\begin{array}{r} 3 \quad 92 \\ 82 \\ - 25 \\ \hline 90 \end{array}$$



## Solve these

$$\begin{array}{r} (9) \quad 89 \\ - 25 \\ \hline \hline \end{array}$$

$$\begin{array}{r} (2) \quad 55 \\ - 36 \\ \hline \hline \end{array}$$

$$\begin{array}{r} (3) \quad 56 \\ - 32 \\ \hline \hline \end{array}$$

$$\begin{array}{r} (8) \quad 50 \\ + 28 \\ \hline \hline \end{array}$$

$$\begin{array}{r} (5) \quad 97 \\ + 6 \\ \hline \hline \end{array}$$

$$\begin{array}{r} (6) \quad 78 \\ + 95 \\ \hline \hline \end{array}$$

You can use bundles and match sticks to solve the given sums.

## Fill in the blanks

$$(9) \quad 96 + 25 = \dots\dots\dots$$

$$(2) \quad 37 - 37 = \dots\dots\dots$$

$$(3) \quad \dots\dots\dots - 50 = 38$$

$$(8) \quad \dots\dots\dots + 38 = 66$$

$$(5) \quad 68 + \dots\dots\dots = 76$$

$$(6) \quad 88 + 28 = \dots\dots\dots$$

$$(9) \quad 52 - \dots\dots\dots = 50$$

$$(7) \quad 95 - \dots\dots\dots = 0$$

# Addition and Subtraction

You have solved the sums of addition and subtraction in your book. Now you know that we can use Devnagari script also to write the numbers. It is interesting that the process of solving these question not change when we use these numerals.

## Read and Understand

Subtract २१७ from ८४६

$$\begin{array}{r} ८४६ \\ - २१७ \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} ८४६ \\ - २१७ \\ \hline २ \\ \hline \end{array}$$

$$\begin{array}{r} ८४६ \\ - २१७ \\ \hline ३२ \\ \hline \end{array}$$

$$\begin{array}{r} ८४६ \\ - २१७ \\ \hline ६३२ \\ \hline \end{array}$$

Hence, ८४६ - २१७ = ६३२

## Now Subtract

१. २४४ from ३७५	२. २१५ from ६२५
३. ३०३ from ६३८	४. ६०४ from ६२५
५. ५५६ from ८७६	६. ५ from १६८



# Exercise

## Solve

(૧)

$$\begin{array}{r} ૩ ૧ ૮ \\ + ૨ ૩ ૪ \\ \hline \end{array}$$

(૨)

$$\begin{array}{r} ૨ ૨ ૭ \\ + ૪ ૩ ૪ \\ \hline \end{array}$$

(૩)

$$\begin{array}{r} ૩ ૦ ૬ \\ + ૨ ૬ ૬ \\ \hline \end{array}$$

(૪)

$$\begin{array}{r} ૧ ૬ ૨ \\ + ૨ ૨ ૩ \\ \hline \end{array}$$

(૫)

$$\begin{array}{r} ૩ ૮ ૧ \\ + ૨ ૪ ૪ \\ \hline \end{array}$$

(૬)

$$\begin{array}{r} ૩ ૮ ૦ \\ + ૨ ૬ ૬ \\ \hline \end{array}$$

(૭)

$$\begin{array}{r} ૪ ૬ ૭ \\ + ૩ ૩ ૪ \\ \hline \end{array}$$

(૮)

$$\begin{array}{r} ૩ ૫ ૭ \\ + ૭ ૭ \\ \hline \end{array}$$

(૯)

$$\begin{array}{r} ૫ ૮ \\ + ૨ ૬ ૬ \\ \hline \end{array}$$

## Add the given numbers

(૧) ૪૪૬ and ૧૩૬

(૨) ૨૦૭ and ૫૦૫

(૩) ૩૭૩ and ૧૬૩

(૪) ૬૫૭ and ૨૪૩

(૫) ૩૦૪ and ૨૧૭

(૬) ૭૩ and ૫૬૬

### Let us Subtract some more

908 from 800	36 from 905	305 from 600
90 from 803	958 from 253	336 from 408
340 from 900	295 from 890	 
266 from 405	899 from 400	

Take any 3 digits and make two numbers. Subtract the smaller from the greater number and show to your friends.

### Addition –

१. In a cricket match Basant made ५४ runs, Rahul made ३८ runs and Sunil made ४४ runs. How many total runs were made in all?
२. A backyard has १२० roses, १०० mogra and १६० jasmine. How many flowers are there in the backyard.
३. A bus has ५० seats. ६३ people travelled in the bus. How many travelers didn't got the seat?
४. Government Primary School Bhursapar has ३४० students. If १६६ of them are girls. Then calculate the number of boys in the school.
५. Pinky, Tinku and Jagat were playing a throwing game of the ball without dropping it. Pinky throws ४८ times, Tinku throws ६६ times and Jagat throws २४ times without dropping it . How many times they all together throw the ball without dropping it.

### Subtraction

६. Harish took ७७५ rupees to market. He bought glasses for ८२ rupees. How much money does he have now?
७. Sunil took ७६६ custard apple to the market. He sold २३६ custard apple. How many custard apple were left with him?
८. Arthi's story book has १३५ pages. She has read ४२ pages. How many more pages she has to read to finish the book?
९. ८० passengers travelled in the bus. ५२ passengers got the seats. Tell how many passengers didn't got the seat?
१०. Anita's father gave ३३७ rupees to Anita. He still has २२४ rupees with him. How much money her father had in the beginning.

# Multiplication

Hina and Pakhi were playing. Some hens were playing nearby. Some hens come near verandah. Both of them started counting one, two, three ..... seven. Hina shouted loudly – “Seven hens”. Hina's uncle were listening to them and he asked Hina and Pakhi – “Tell now many legs the hens have in total?” Pakhi replied instantly – “fourteen”. Hina asked “how? Let me know”. She counted and said fourteen.

Hina's uncle asked them to tell the way they calculated the legs. Hina told she added two seven times. This way she got 98 legs of 9 hens.

Then, Pakhi told she multiplied  $2 \times 9$  and got 98 legs.

Pakhi's way :  $2 \times 9 = 98$

Hina's way :  $2 + 2 + 2 + 2 + 2 + 2 + 2 = 98$

Both of them had their own way and both of them got 98 legs we can say  $2 + 2 + 2 + 2 + 2 + 2 + 2 = 2 \times 9 = 98$

2 added seven times =  $2 \times 9$

Now tell :

$$5 + 5 + 5 = 5 \times \dots\dots\dots = \dots\dots\dots$$

This way we can say that

multiplication is repeated addition of numbers.

Understand the table given below and write the tables of ୪, ୫, ୬ and ୭

Table of ୨   Add   Table of ୩   Table of ୪   Table of ୫   Table of ୬   Table of ୭

$$୨ + ୨ \longrightarrow ୪ \quad ୨ + ୨ \longrightarrow$$

$$୪ + ୨ \longrightarrow ୬ \quad ୪ + ୨ \longrightarrow$$

$$୬ + ୨ \longrightarrow ୮ \quad ୬ + ୨ \longrightarrow$$

$$୮ + ୨ \longrightarrow ୧୦ \quad ୮ + ୨ \longrightarrow$$

$$୧୦ + ୨ \longrightarrow ୧୨ \quad ୧୦ + ୨ \longrightarrow$$

$$୧୨ + ୨ \longrightarrow ୧୪ \quad ୧୨ + ୨ \longrightarrow$$

$$୧୪ + ୨ \longrightarrow ୧୬ \quad ୧୪ + ୨ \longrightarrow$$

$$୧୬ + ୨ \longrightarrow ୧୮ \quad ୧୬ + ୨ \longrightarrow$$

$$୧୮ + ୨ \longrightarrow ୨୦ \quad ୧୮ + ୨ \longrightarrow$$

$$୨୦ + ୨ \longrightarrow ୨୨ \quad ୨୦ + ୨ \longrightarrow$$

Make the tables of ୩ and above in your copy. After that complete the multiplication list made below.

### Complete the Table

X	୨	୩	୪	୫	୬
୨					
୩					
୪					
୫					
୬					

X	୨	୩	୪	୫	୬
୬					
୭					
୮					
୯					
୧୦					

X	୬	୭	୮	୯	୧୦
୬					
୭					
୮					
୯					
୧୦					

X	୭	୮	୯	୧୦	୧୧
୮					
୯					
୧୦					
୧୧					
୧୨					



### Exercise

9. Some numbers are written below in the form of being added again and again. Write it in the form of multiplication of two numbers.

$$(9) \ 3 + 3 + 3 + 3 = 3 \times 4 \quad (2) \ 6 + 6 + 6 + 6 = \dots\dots\dots$$

$$(3) \ 5 + 5 + 5 + 5 + 5 = \dots\dots\dots (8) \ 8 + 8 + 8 + 8 + 8 + 8 + 8 = \dots\dots\dots$$

$$(4) \ 4 = \dots\dots\dots (6) \ 0 + 0 + 0 = \dots\dots\dots$$

2. Write the multiplication given below in the form of repeated addition of a number.

$$(9) \ 5 \times 8 = 5 + 5 + 5 + 5 \quad (2) \ 90 \times 9 =$$

$$(3) \ 9 \times 4 = \quad (8) \ 92 \times 4 =$$

$$(4) \ 94 \times 9 = \quad (6) \ 0 \times 3 =$$

### Let's Make a Table

In the table given below, some numbers are filled. Fill the remaining places:

2	$2 \times 9 = 2$
$2 + 2$	$2 \times 2 =$
$2 + 2 + 2$	$2 \times 3 =$
$2 + 2 + 2 + 2$	$2 \times 4 =$
$2 + 2 + 2 + 2 + 2$	$=$
$2 + 2 + 2 + 2 + 2 + 2$	$=$
$2 + 2 + 2 + 2 + 2 + 2 + 2$	$=$
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$=$
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$=$
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$2 \times 5 =$
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 + 2$	$2 \times 90 = 20$

## What are Multiplicand, Multiplier and Product?

### Let us understand-

A carpenter makes ३ cots in one day.

In ७ days, he can make २१ cots.

You know that we can write this as

$$३ \times ७ = २१$$

When we write an example related to multiplication in such a manner, it is called a **multiplication fact**.

Thus  $३ \times ७ = २१$  is a multiplication fact

Here ३ is called a multiplicand

७ is called a multiplier and

२१ is called as their product

Now write the multiplicand, multiplier and product in each of these multiplication facts.

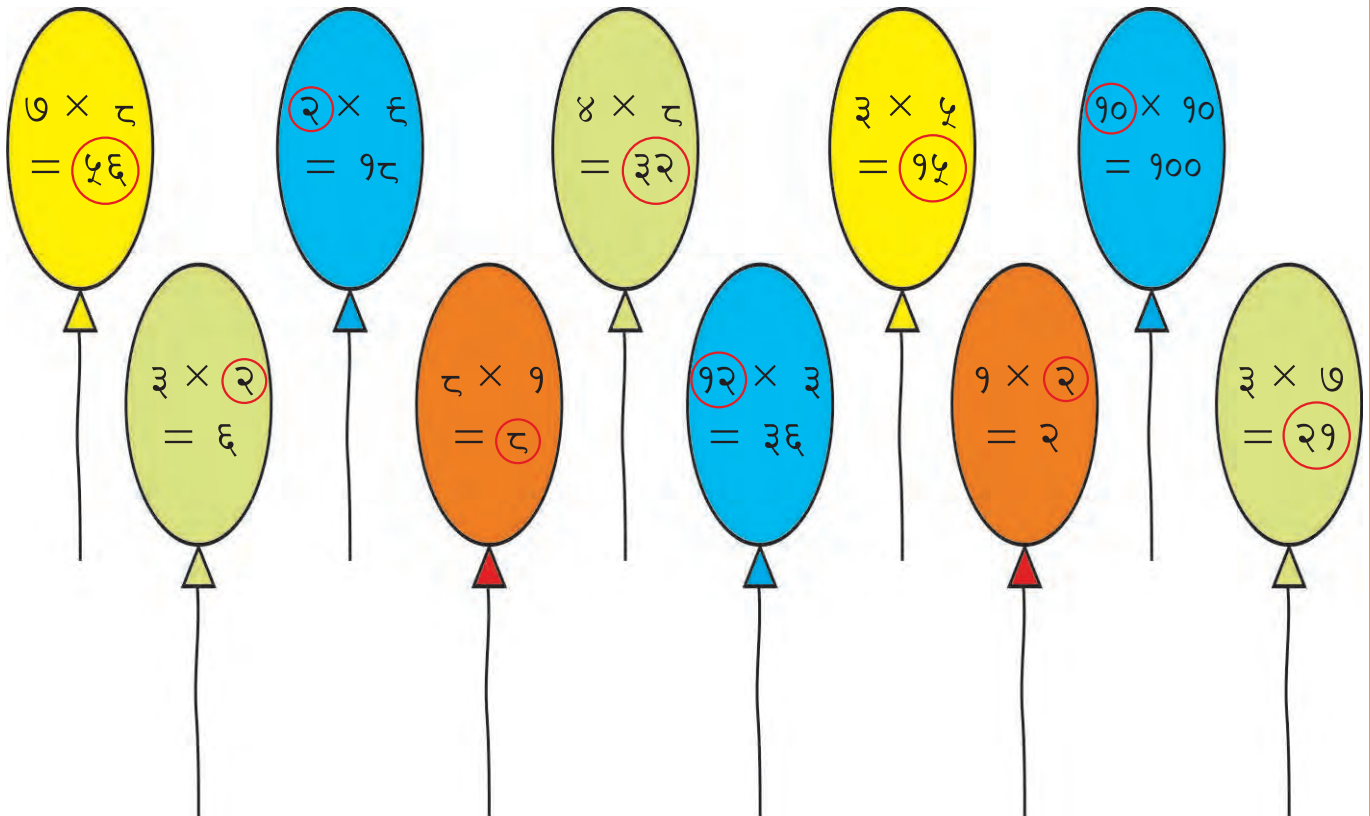
$२ \times ५ = १०$	Multiplicand.....	Multiplier.....	Product.....
$६ \times ६ = ५४$	Multiplicand.....	Product.....	Multiplier.....
$८ \times ८ = ६४$	Multiplier.....	Multiplicand.....	Product.....

In the following multiplication facts, write what the encircled number is a multiplicand or a multiplier or a product.

In $५ \times ४ = २०$	४	is a multiplier
In $६ \times १२ = १०८$	.....	is a _____
In $८ \times ३ = २४$	.....	is a _____
In $३ \times ८ = २४$	.....	is a _____
In $४ \times २ = ८$	.....	is a _____

## Who was holding which of these balloons?

Match with a line



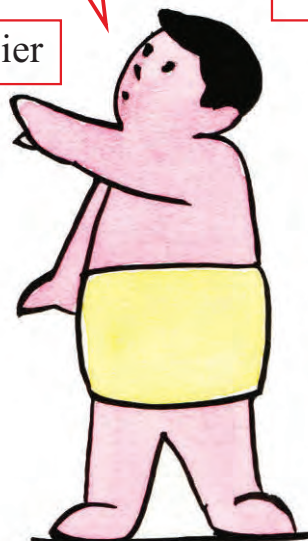
I have encircled the multiplicand

Multiplicand



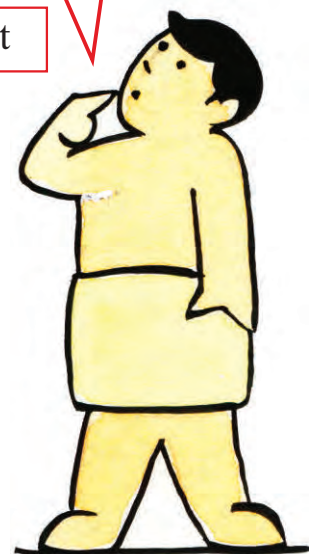
I have encircled the multiplier

Multiplier



I have encircled the product

Product



## Let us do some more sums

$$\begin{array}{r} 9. \quad 84 \\ \times 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 2. \quad 58 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3. \quad 39 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 8. \quad 65 \\ \times 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4. \quad 73 \\ \times 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 6. \quad 49 \\ \times 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9. \quad 30 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 7. \quad 92 \\ \times 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 5. \quad 45 \\ \times 6 \\ \hline \\ \hline \end{array}$$

Till now you have done multiplication of a two digit, number by a single digit number. Let us do a multiplication involving a three digit number and a single digit number

Let us understand this by an example - Multiply 289 by 2

$$\begin{array}{r} 289 \\ \times 2 \\ \hline 2 \\ \hline \end{array}$$

Multiply 9 in the units place with 2

$$9 \times 2 = 2 \text{ units}$$

Write 2 in the unit's place.

$$\begin{array}{r} 289 \\ \times 2 \\ \hline 82 \\ \hline \end{array}$$

Multiply 8 in the ten's place with 2

$$8 \times 2 = 16 \text{ tens}$$

write 16 in the ten's place.

$$\begin{array}{r} 289 \\ \times 2 \\ \hline 818 \\ \hline \end{array}$$

Now Multiply 2 of the hundred's place with 2

$$2 \times 2 = 4 \text{ hundreds}$$

Write this in the hundred's place.

Thus, we get  $289 \times 2 = 578$

Now try some more such sums

$$\begin{array}{r} 992 \\ \times 2 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 290 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 999 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 909 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 209 \\ \times 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 390 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 899 \\ \times 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 902 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 999 \\ \times 6 \\ \hline \\ \hline \end{array}$$

### Number Game

Think of any one number ६

Now double it.  $६ \times २ = १२$

Now multiply this by five  $१२ \times ५ = ६०$

What you got the number.

Divide it by १०  $६० \div १० = ६$

Think of any one number \_\_\_\_\_

Now double it. \_\_\_\_\_

Now multiply this by five \_\_\_\_\_

What you got the number.

Divide it by १० \_\_\_\_\_



**Was the number you got the same as the number,  
you had initially thought of?  
Now take more numbers and do the same.**



**Exercise**

૧. If a Kabaddi team has ૭ players, then ૧૨ such teams will have how many players?
૨. A house has ૨૪ goats. How many legs they have in all?
૩. A prayer is going in a school. If one row has ૧૦ kids. Then how many kids are there in ૫ rows.
૪. If a acre of the farm produces ૩૫ bags of wheat. Then how many bags of wheat will ૭ acres of the farm produces?
૫. ૩ Vehicles went to the barat, if each vehicle has ૨૫ barati. Then how many people went to the barat?

# Division

Varsha saw some flowers in her backyard and thought of making bouquet. She picked some flowers from backyard. She placed the flowers in three glasses filled with water. Varsha had 12 flowers. She equally distributed flowers in all the glasses. She placed one flower in each glass and was left with few flowers. She again placed one more flower in each glass. She again placed the remaining flowers one by one in each glass. This way she made the bouquet.

Now you tell how many flowers are there in each glass?

**Let's see**

$$12 \div 4 = ?$$

We have to divide 12 pabbles into four groups. For this take twelve pabbles. Make four circles on the ground. Place one pebble in each circle.



This means we have divided four pabbles and 8 pabbles are remaining. Now place one more pebble in each circle.



We have four more pabbles. Place again one by one pebbles in each circle.



This way we divided 12 into 4 equal parts and each part had 3 pabbles. Therefore,  $12 \div 4 = 3$ . Its read "Twelve divided by four equals three."

Now you too make circles, collect stones and do the following divisions.

૧.  $૬ \div ૩ =$

૩.  $૧૦ \div ૨ =$

૫.  $૧૫ \div ૫ =$

૭.  $૧૮ \div ૬ =$

૯.  $૨૫ \div ૫ =$



૨.  $૧૮ \div ૩ =$

૪.  $૧૨ \div ૪ =$

૬.  $૧૬ \div ૨ =$

૮.  $૧૨ \div ૬ =$

૧૦.  $૨૧ \div ૭ =$

Which of these questions took a longer time for you to solve? You saw that we can divide things by making circles or drawings. But it takes a longer time.

### Now Practise

૧.  $૨૮ \div ૭$

**Solution:**

$$\begin{array}{r} 4 \\ 7 \overline{) 28} \\ \underline{- 28} \\ 0 \end{array}$$

Dividend = ૨૮

Divisor = ૭

Quotient = ૪

૨.  $૨૭ \div ૩$

Dividend = .....

Divisor = .....

Quotient = .....

૩.  $૩૬ \div ૬$

Dividend = .....

Divisor = .....

Divisor = .....

૪.  $૫૬ \div ૭$

૫.  $૪૦ \div ૫$

૬.  $૧૬ \div ૨$

૭.  $૬૪ \div ૮$

૮.  $૩૨ \div ૪$

૯.  $૩૬ \div ૬$

You have seen how to divide by saying tables. Can you do all divisions using this method? Let us divide  $28 \times 9$  and see.

Let us say the table of 9

Seven ones are seven

$$9 \overline{) 28}$$

Seven twos are -----

Seven threes are -----

-----

-----

Seven tens are seventy.

We have not managed to reach 84 at all and we don't know the tables beyond tens.

**Solve and write the dividend, divisor and quotient.**

$$3 \overline{) 30}$$

$$2 \overline{) 88}$$

$$9 \overline{) 99}$$

$$8 \overline{) 28}$$

$$3 \overline{) 84}$$

$$2 \overline{) 88}$$

$$2 \overline{) 68}$$

$$3 \overline{) 29}$$

$$8 \overline{) 68}$$

$$8 \overline{) 42}$$

$$7 \overline{) 42}$$

$$9 \overline{) 29}$$

## Let us see

$$638 \div 3 = ?$$

$$\begin{array}{r} 2 \\ 3 \overline{) 638} \\ \underline{- 6} \phantom{0} \\ 0 \phantom{0} \end{array}$$

First we divide the hundred's digit.

3 twos are 6.

In the quotient we write 2

Write 6 below 6 and subtract.

$$\begin{array}{r} 29 \\ 3 \overline{) 638} \\ \underline{- 6} \phantom{0} \\ 03 \phantom{0} \\ \underline{- 3} \phantom{0} \\ 0 \phantom{0} \end{array}$$

Now, we take down 3 of the ten's place,

So we write 9 in the quotient

Write 3 below 3 and subtract.

Even now we have 8 left with us.

$$\begin{array}{r} 293 \\ 3 \overline{) 638} \\ \underline{- 6} \phantom{0} \\ 03 \phantom{0} \\ \underline{- 3} \phantom{0} \\ 08 \phantom{0} \\ \underline{- 6} \phantom{0} \\ 0 \phantom{0} \end{array}$$

So we take down 8

3 threes are 9

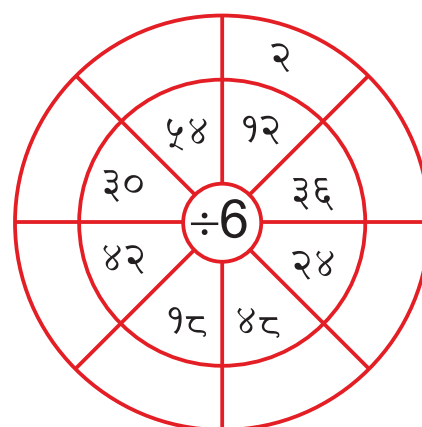
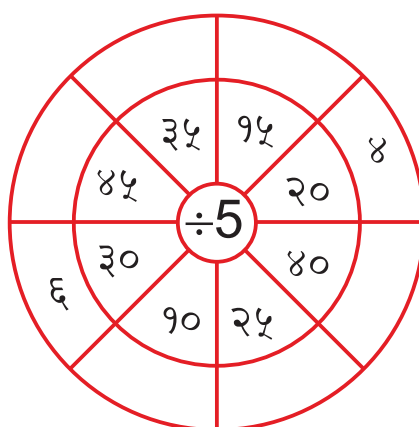
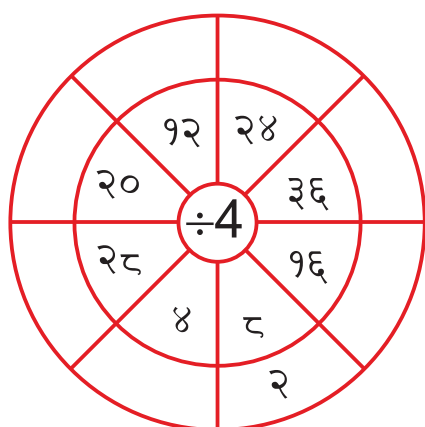
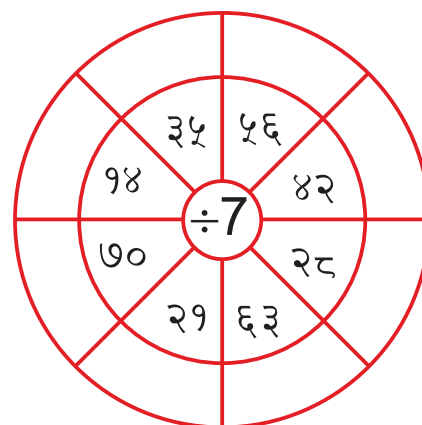
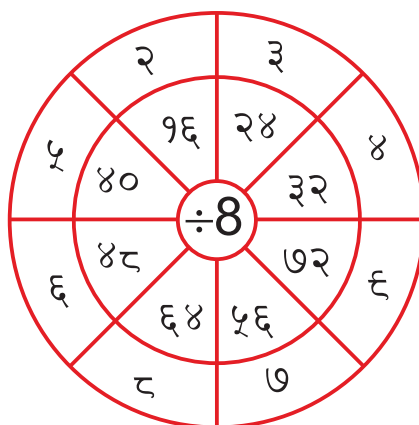
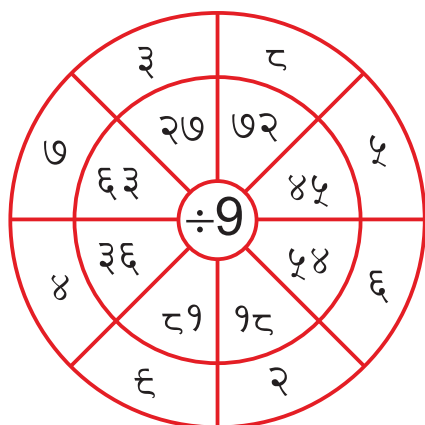
Write 3 in the quotient

Write 8 below 8 and subtract

Thus we get 213 as the quotient.



## Complete these



## Fill in the blanks

9.	36	÷	4	=	9
		×	4	=	36

2.	6	×	7	=	
	42	÷		=	7

3.		×	6	=	48
	48	÷		=	

4.	4	×		=	44
	44	÷		=	

१. A tractor has ६८ bags of urea. If ४ labourers helped to unload equal number of bags. How many bags did each labour unload?
२. Today is sonam's birthday. She brought २४२ chocolate to distribute. If each child get २ chocolate. How many children are there in sonam's school.
३. If one person wants to divide ५२८ rupees equally among his ४ daughters. How much will one daughter get?
४. Naina read a book of ८० pages in १० days. How many pages she read in one day?
५. In a farm ६ flower bed are made. If ६०० plants are to be planted. How many plant will be there in each flower bed.



## **If there are mentally challenged students in your class:**

1. Break the lesson into small portions. Explain difficult concepts with examples and in simple language. Try and relate difficult concepts with experiences from daily life.
2. Pay constant attention to these students while teaching so that they do not lose their focus. Encourage them to answer questions in class and reward them when they answer properly.
3. Encourage the other students to be friendly and helpful towards their mentally challenged classmates.





***If there are visually-impaired students  
in your class, extend your help:***

- 1. Always address visually-impaired students by their names and speak out whatever is written on the blackboard.*
- 2. Familiarize these students with the way to the classroom, staircases, Principal's room, drinking water facility, toilet, playground and library. This will enable them to go about their tasks independently.*
- 3. Visually-impaired students use the Braille script. If your school does not have sufficient resources, contact the nearest DIET office and agencies that provide Braille and audio books, cassettes and CDs.*



**If there are physically challenged students in your class, extend your help:**

1. Familiarize these students with the way to the classroom, staircases, Principal's room, drinking water facility, toilet, playground and library. This will enable them to go about their tasks independently.
2. Keep the classroom and nearby areas obstacle free. The drinking water tap should be reachable. The toilet should have commodes and a rod for support that they might need in sitting or standing up.
3. Encourage the other students to be friendly and helpful towards their classmates