This book has been selected by National Curriculum Council,
Ministry of Federal Education & Professional Training, Government of Pakistan,
as the textbook for academic year 2020-21 and is being distributed free of cost in
schools under the Federal Directorate of Education, Islamabad.

Mathematics

Based on 2017 Curriculum

7

Not for Sale

Not for Sale

National Curriculum Council,

Textbook of Mathematics Grade 3

Approved by

Ministry of Federal Education and Professional Training
&
Federal Directorate of Education(FDE) Capital Administration and Development Division Government of Pakistan

Preface

Primary Mathematics (1 – 5) has been developed according to the Curriculum 2017. This series is aimed at efficiently facilitating the process of teaching and learning. It encourages reflective thinking and cultivates problem-solving ability among young learners. These textbooks provide real-life learning situations, which are thought-provoking and exciting for students.

The present series of textbooks has been developed in collaboration between the Ministry of Federal Education and Professional Training and Federal Directorate of Education, Capital Administration and Development Division (CADD). The main aim is to provide quality textbooks as per vision of the government to make Islamabad Capital Territory (ICT) a model education city. It is the result of detailed deliberations between the curriculum developers and the authors who worked in close collaboration to translate the soul of the curriculum into the textbooks.

These books are geared to making students competent and proficient young mathematicians right from their juniour grades.

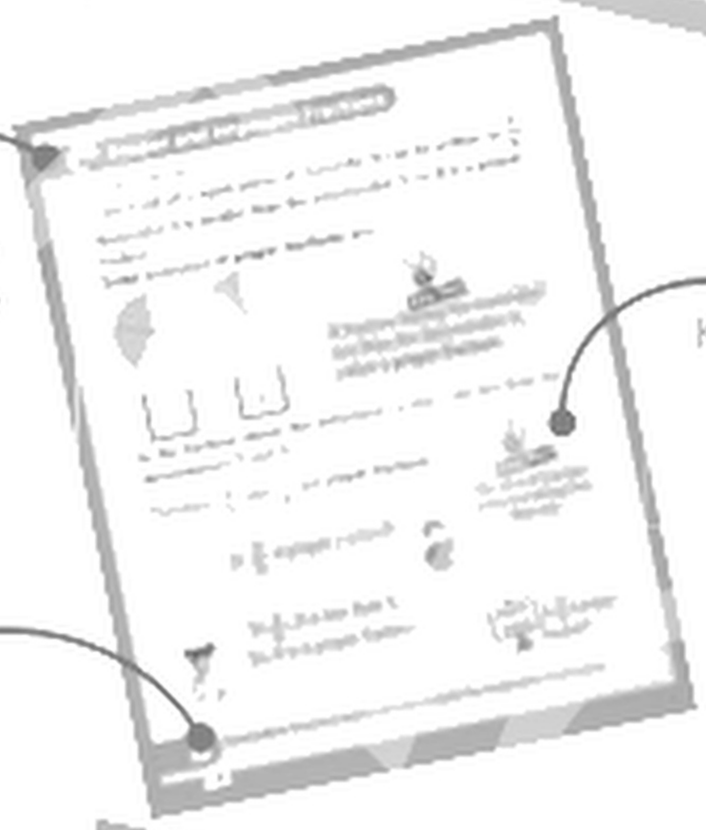
This series focuses on five core areas of Mathematics: numbers and their operations, measurement, geometry, algebraic concepts and data handling. These books include an exciting and pleasant layout, eye-catching graphics and progression-controlled text, which is organised in a logical way.

We will appreciate your valuable feedback and suggestions to make these books more useful for young learners.
May Allah guide and help us (Ameen)!

About the Book

Learning Outcomes: Each unit starts with the target outcomes to be achieved in that specific unit.

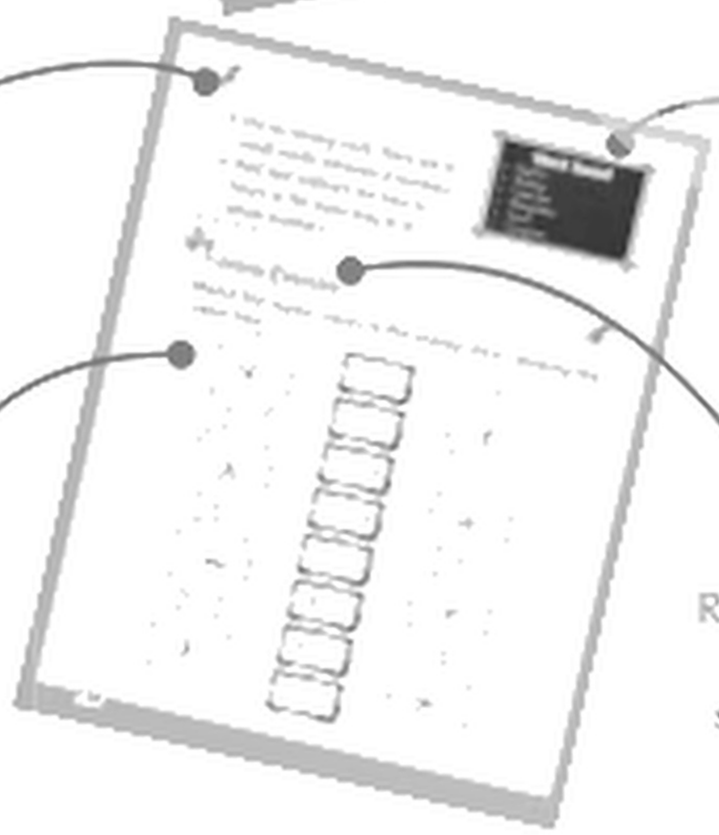
Unit Opener: A full page picture with intriguing question is given at the beginning of a unit to bridge the prior knowledge of the student with the upcoming new concepts.



Concept Building: A step-by-step procedure is provided to introduce each new concept. To facilitate independent working, solved examples and guided practice is added after each new concept.

Chunks: Each unit includes Key facts, Hints and Check Points to highlight terminologies or facts relevant to the topic.

Teaching Points: Clear instructions have been given to the teacher about how to deliver each lesson.



I Have Learnt: It sums up the key points learnt in the unit.

Word Board: Vocabulary words consisting of mathematical terms are given at the end of each unit.

A variety of activities have been used for clear understanding.

Review exercise: It comprises questions that prompt students to recap the whole lesson.

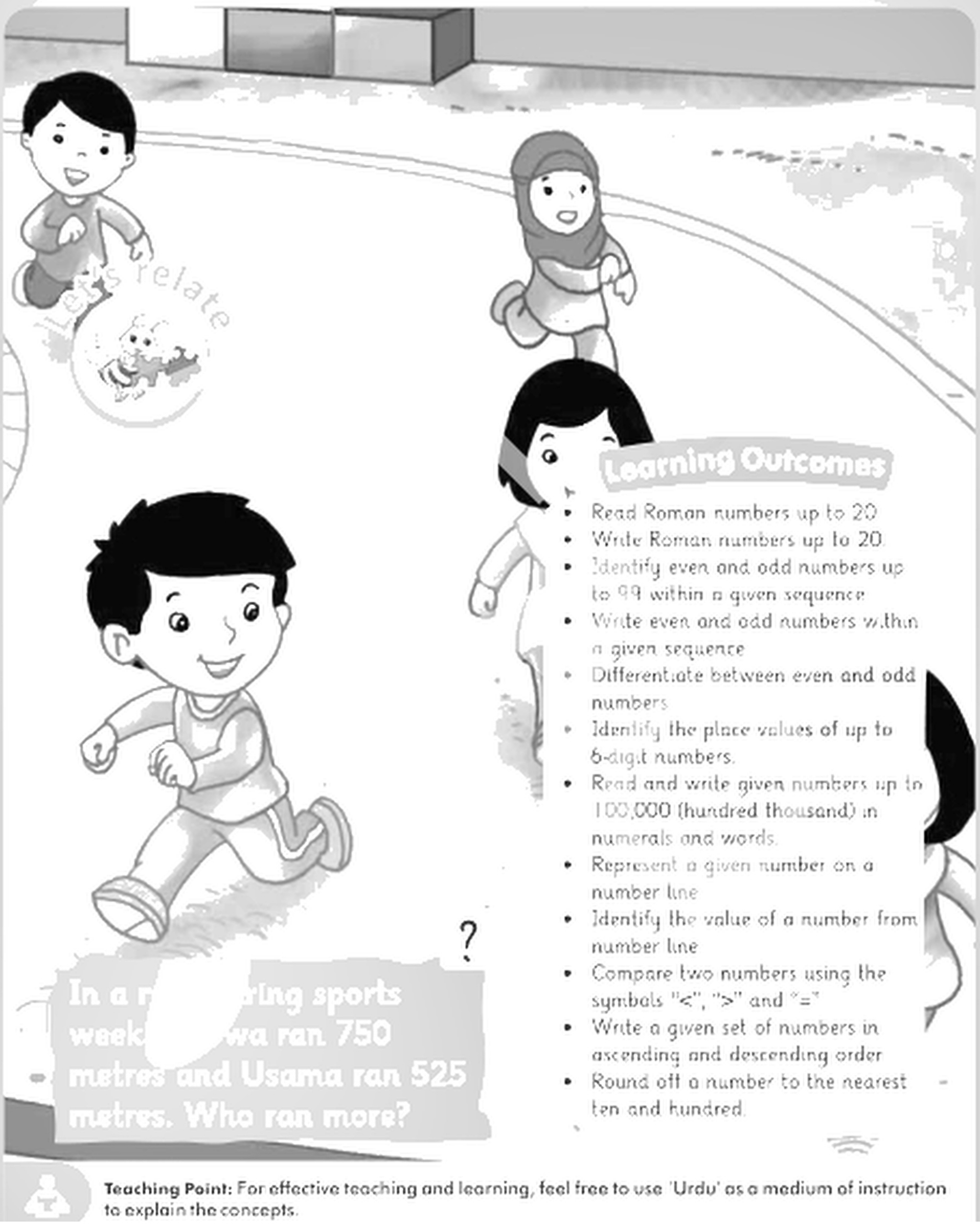
بِسۡمِ اللّٰہِ الرَّحۡمٰنِ الرَّحِیۡمِ

Contents

1	Whole Numbers	1
2	Addition	27
3	Subtraction	37
4	[illegible]	49
5	[illegible]	63
6	Fractions	71
7		93
8	Time	115
9	[illegible]	129
10	Graphs	155
	Answers	169
	Glossary	175

Whole Numbers

Unit 1



Learning Outcomes

- Read Roman numbers up to 20
- Write Roman numbers up to 20
- Identify even and odd numbers up to 99 within a given sequence
- Write even and odd numbers within a given sequence
- Differentiate between even and odd numbers
- Identify the place values of up to 6-digit numbers.
- Read and write given numbers up to 100,000 (hundred thousand) in numerals and words.
- Represent a given number on a number line
- Identify the value of a number from number line
- Compare two numbers using the symbols "<", ">" and "="
- Write a given set of numbers in ascending and descending order
- Round off a number to the nearest ten and hundred.

Teaching Point: For effective teaching and learning, feel free to use 'Urdu' as a medium of instruction to explain the concepts.

Roman Numbers

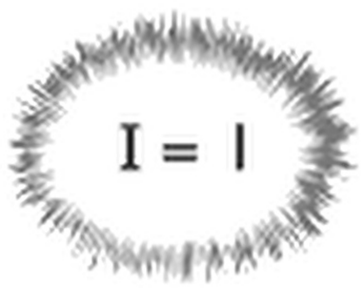
I can read and write numbers up to 999.

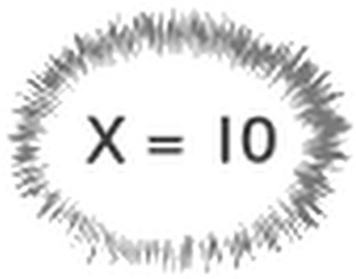
Do you know in how many ways can we write numbers?

We write numbers in words (one, two, ...) or in Arabic numerals (1, 2, ...)

There is another way to write numbers. We can write them as Roman numerals.

To write Roman numerals from 1 to 20, we use Roman digits I, V and X having the following values.





The Romans introduced Roman numerals.

Teaching Point: Give number cards of I, V and X to students and help them to make different Roman numerals. Tell them the difference between Roman and Arabic numerals.

How do we write
Roman numerals?

There are some rules to write
Roman numbers.

Rule 1

When numerals repeat next to each other,
we add up their values.

For example: II = 1+1 = 2 XX = 10 + 10 =20

Rule 2

When a smaller numeral is written before a bigger numeral, we subtract their values.

For example: IV = 5 – 1 = 4 IX = 10 – 1 = 9

Rule 3

When a smaller numeral is written after a bigger numeral, we add up their values.

For example: VI = 5 + 1 = 6 XI = 10 + 1 + =11

Repeating the numerals means adding the values of both numbers.

In VII, the two smaller numerals are after the greater numeral.
What number is it?

Teaching Point: Tell students about the rules to write Roman numerals and help them to write them.

Arabic Numerals	Number Names	Roman Numerals	Arabic Numerals	Number Names	Roman Numerals
1	One	I	11	Eleven	XI
2	Two	II	12	Twelve	XII
3	Three	III	13	Thirteen	XIII
4	Four	IV	14	Fourteen	XIV
5	Five	V	15	Fifteen	XV
6	Six	VI	16	Sixteen	XVI
7	Seven	VII	17	Seventeen	XVII
8	Eight	VIII	18	Eighteen	XVIII
9	Nine	IX	19	Nineteen	XIX
10	Ten	X	20	Twenty	XX

Exercise 1

1. Write the Roman numerals for the following.

a) 14 = ___ b) 8 = ___ c) 18 = ___ d) 4 = ___

e) 10 = ___ f) 19 = ___ g) 2 = ___ h) 20 = ___

2. Write the Arabic numerals for the following.

a) IX = ___ b) XV = ___ c) XIV = ___ d) XVIII = ___

e) XX = ___ f) III = ___ g) VII = ___ h) X = ___

3. Choose the correct option.

a) The _____ introduced Romans numerals.

i) Romans ii) Arabs iii) Indians iv) Russians

b) The Arabic numeral for XX is _____.

i) 10 ii) 20 iii) 11 iv) 15

c) The Roman numeral for 6 is _____.

i) XI ii) IV iii) VI iv) V

4. Match Roman numerals to their values.

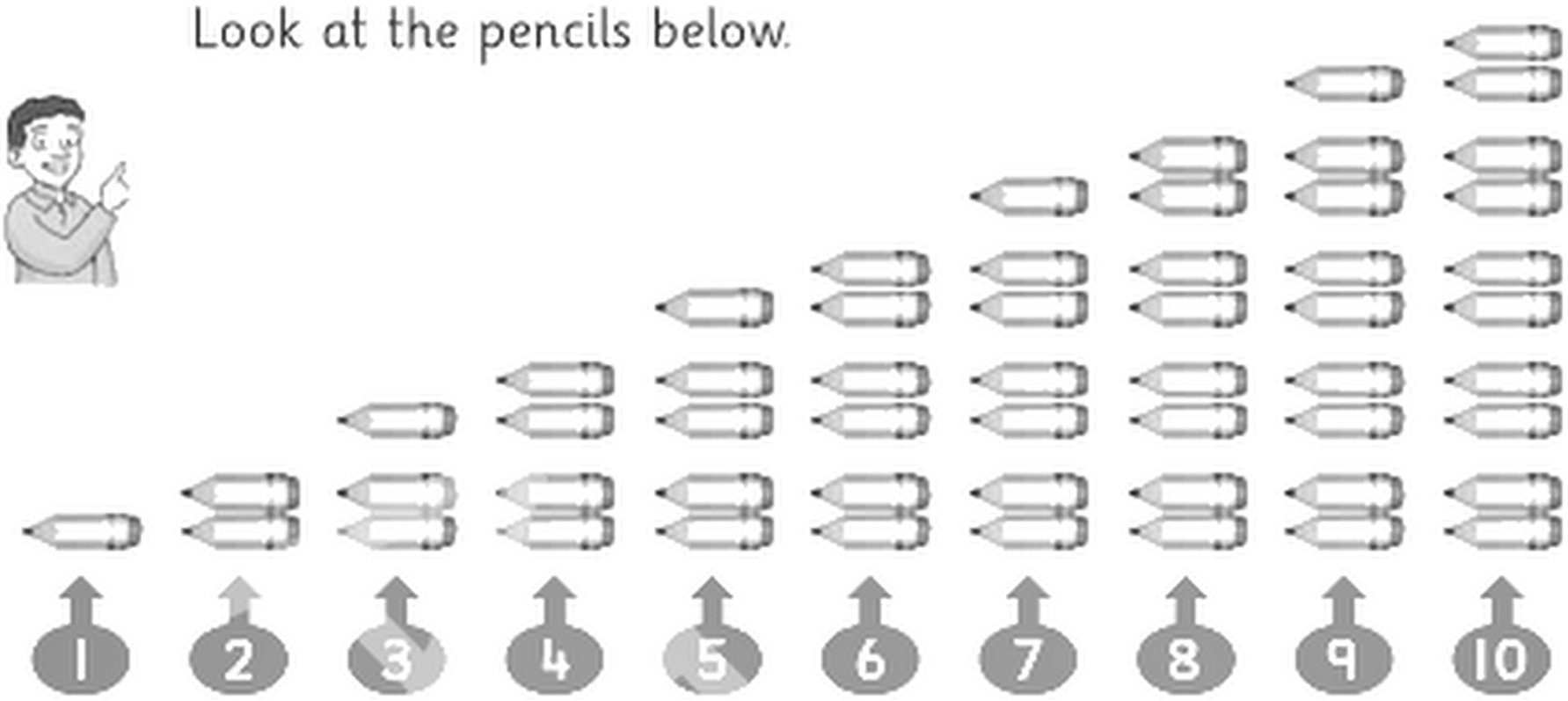
XVIII	5
IX	20
XI	9
V	18
XX	11

Hint

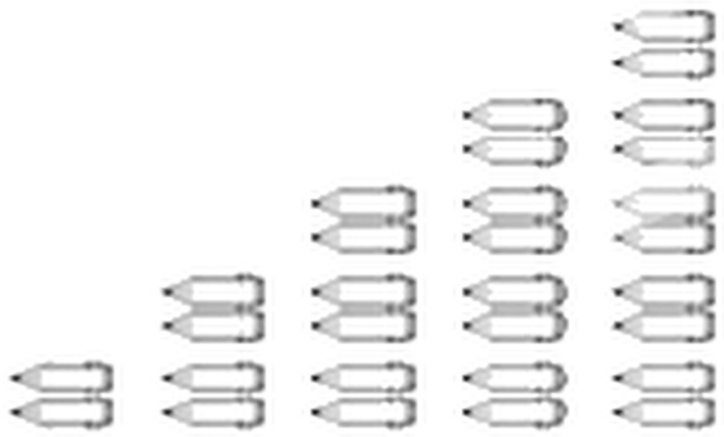
Use the rules to write Roman numerals to match the numbers

Even and Odd Numbers

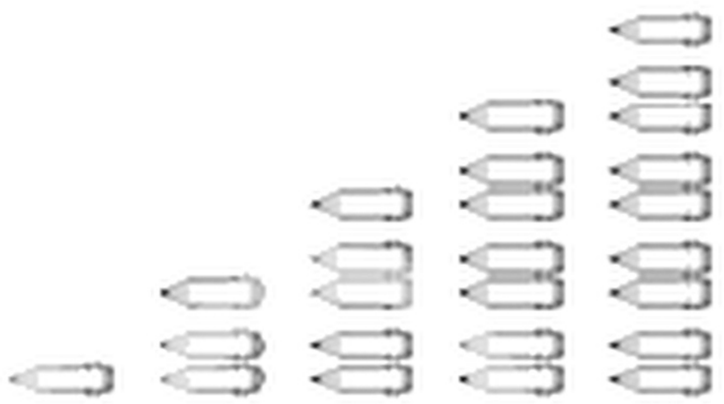
Look at the pencils below.



Even numbers



Odd numbers



The numbers that can be grouped into 2s without any leftover are called even numbers.

The numbers that can be grouped into 2s with 1 leftover are called odd numbers.

Teaching Point: Make two number lines on the board and ask students to make a path starting from 0 and the other from 1 by skipping one number to show even and odd numbers.

The numbers that can be grouped in pairs are called even numbers.

The numbers that cannot be grouped in pairs are called odd numbers.

Now count these:

12 even

17 odd

24 even

33 odd

All even numbers end in 0,2,4,6 or 8.

All odd numbers end in 1,3,5,7 or 9.

Teaching Point: Give number cards to students and ask them to separate all even and odd numbers.

Exercise 2

1. Identify even and odd numbers and write them in the boxes given below.

7	63	80	11	99
15	36	51	62	35
8	94	42	76	26
1	90	33	72	71

Even	Odd
____ ____ ____	____ ____ ____
____ ____ ____	____ ____ ____
____ ____ ____	____ ____ ____
____	____

2. Circle the odd numbers.

22 23 24 25 26 27 28 29 30 31 32

3. Write all the even numbers between 41 and 67.

Numbers up to 100,000

What is the greatest 3-digit number?

The greatest 3-digit number is 999.

What comes after 999?

When we add 1 more to 999, we get 1000.

10 hundreds make 1 thousand.

Let us represent it in a place value chart.

Thousands	Hundreds	Tens	Ones
1	0	0	0

9999 is the greatest 4-digit number

Thousands	Hundreds	Tens	Ones
9	9	9	9

We read it as: nine thousand nine hundred and ninety-nine.

What comes after 9999?

10,000

10 one thousands make 1 ten thousand.

Ten thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0

We read it as 'ten thousand'.

10,000 is the smallest 5-digit number.

What is the greatest 5-digit number?

99,999 is the greatest 5-digit number.

Ten thousands	Thousands	Hundreds	Tens	Ones
9	9	9	9	9

We read it as: ninety-nine thousand, nine hundred and ninety-nine.

Add 1 more to 99,999 we get 100,000.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
1	0	0	0	0	0

We read it as hundred thousand.

We place commas after every three digits from the right.

How many ten thousands are there in a hundred thousand?

Read the number below.

Thousands	Hundreds	Tens	Ones
9	6	3	3

We read it as: nine thousand, six hundred and thirty-three.

Look at the number below.

Ten thousands	Thousands	Hundreds	Tens	Ones
4	5	7	8	4

We read it as. forty-five thousand, seven hundred and eighty-four.

Look at the number below.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
4	1	0	9	3	8

We read it as: four hundred and ten thousand, nine hundred and thirty-eight.

Teaching Point: Give flash cards to students and ask them to make 4, 5 and 6-digit numbers and help them to write the place value of each digit of a number and write the numbers in words.

We can also show numbers on a number line.

Look at this number line. Here each number is at a distance of 1 step from the other.

Now observe the following number line. Here each number is at a distance of 10 steps from the other.

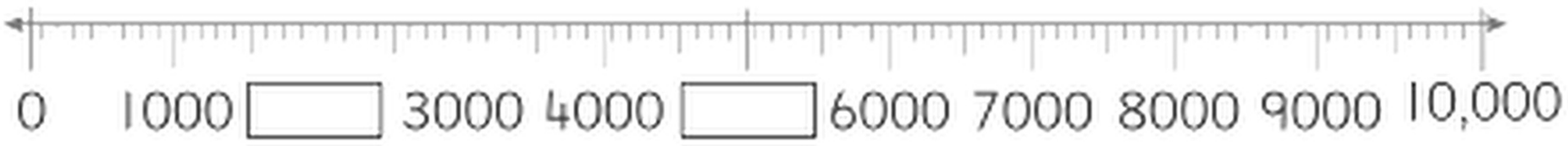
In the following number line, each number is at a distance of 100 steps from the other.

Can you find the missing numbers?

As the numbers are in steps of 100, so after 200 the missing number is 300. Also, after 800, the next missing number is 900.

Teaching Point: Help students to draw a number line, represent numbers on it and identify a specific number on it.

In the following number line, each number is at a distance of 1000 steps from the other.



As the numbers are in steps of 1000, so after 1000 the missing number is 2000. Also, after 4000, the next missing number is 5000.

Place Value of up to 6-digit Numbers

How can we find the place value of each digit in a number?

The place value of each digit is decided by its position in the number.

There are 2391 books in the library. Let us find the place value of each digit in 2391.

Thousands	Hundreds	Tens	Ones
2	3	9	1
2000	300	90	1

2000 + 300 + 90 + 1

So, we write it as 2391.

The digit 2 is in the thousands place. So, its value is 2000.

The digit 3 is in the hundreds place. So, its value is 300.

The digit 9 is in the tens place. So, its value is 90.

The digit 1 is in the ones place. So, its value is 1.

10,000 is the smallest 5-digit number.

Let us find the place value of a 5-digit number.

Ten thousands	Thousands	Hundreds	Tens	Ones
9	5	2	3	7
90,000	5000	200	30	7

The digit 9 is in the ten thousands place. So, its value is 90,000.

The digit 5 is in the thousands place. So, its value is 5000.

The digit 2 is in the hundreds place. So, its value is 200.

The digit 3 is in the tens place. So, its value is 30.

The digit 7 is in the ones place. So, its value is 7.

90,000 + 5000 + 200 + 30 + 7

We read it as 95,237 or ninety-five thousand, 2 hundred and thirty-seven.

Teaching Point: Label 3 baskets as 'ones', 'tens', 'hundreds', 'thousands', 'ten-thousands' and 'hundred-thousands'. Give 0-9 number cards to students. Write any 3-digit number on the board. Ask students to put each number card in the correct basket.

Let us find the place value of a 6-digit number.

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
4	1	0	9	3	8
400,000	10,000	0000	900	30	8

400,000 + 10,000 + 0000 + 900 + 30 + 8

Place value of zero
is important as in
410938, zero represents
zero thousands.

The digit 4 is in the hundreds thousands place. So, its value is 400,000.

The digit 1 is in the ten thousands place. So, its value is 10,000.

The digit 0 is in the thousands place. Its value is 0000.

The digit 9 is in the hundreds place. So, its value is 900.

The digit 3 is in the tens place. So, its value is 30.

The digit 8 is in the ones place. So, its value is 8.

We can read it as: 410,938 or four hundred and ten thousand, nine hundred and thirty-eight.

What is the place value of each digit in 752,004?

Exercise 3

1. Write the numbers in words.

a) 6455 ► b) 46,312 ► c) 312,786 ►

d) 24,311 ► e) 124,609 ► f) 789,548 ►

g) 12,524 ► h) 630,459 ► i) 999,999 ►

j) 888,888 ► k) 22,356 ► l) 100,000 ►

2. Write the following words in numerals.

a) One thousand, one hundred and eleven. _____

b) Three thousand, eight hundred and two. _____

c) Eight thousand and twenty-three. _____

d) Fifteen thousand, five hundred and five. _____

e) Thirty thousand, six hundred and ninety-three. _____

f) Eighty-one thousand and thirty-seven. _____

g) Two hundred and eighty-four thousand, six hundred and thirty. _____

h) Seven hundred and nine thousand, one hundred and four.

_____

i) Five hundred thousand, three hundred and twelve.

_____

3. Fill in the missing numbers in the following number lines.

a)

b)

4. Write the place value of the coloured digit in each number.

a) 82,590 _____

b) 500,384 _____

c) 2412 _____

d) 4948 _____

e) 642,003 _____

f) 223,123 _____

g) 37,333 _____

Hint

Use the place value table to find the place value of the coloured digits

5. Write the following numerals in expanded form.

a) 101,066 = _____ + _____ + _____ + _____ + _____ + _____

b) 520,504= _____ + _____ + _____ + _____ + _____ + _____

c) 916,780 = _____ + _____ + _____ + _____ + _____ + _____

d) 555,555= _____ + _____ + _____ + _____ + _____ + _____

Comparing and Ordering Numbers

Comparing numbers

Sania collected 2113 coins. Talha collected 4999 coins. Who collected more coins?

How can we compare these numbers?

We can compare easily by using a place value chart.

Thousands	Hundreds	Tens	Ones
2	1	1	3
4	9	9	9

First we compare the thousands.

4 thousands is greater than 2 thousands.

So, 2113 is smaller than 4999.

Or 4999 is greater than 2113.

We can write it as:

4999 > 2113

We use these sign to compare the numbers.

Greater than

Equal to

Less than

Teaching Point: Give number cards to students and ask them to make two 4-digit numbers and help them to compare the numbers using place values.

Let us compare the numbers 44,249 and 43,192.

Let us write the numbers in the place value chart.

Ten thousands	Thousands	Hundreds	Tens	Ones
4	4	2	4	9
4	3	1	9	2

First compare the digits in ten thousands place.

First compare the digits in the ten thousands place. Both numbers have 4 ten thousands.

Hint

Compare the corresponding digits of both numbers from left to right.

3 thousands is smaller than 4 thousands.

So, 43192 is smaller than 44,249

or 43,192 < 44,249.

Now compare the digits in the thousands place.

Key fact

To compare two 5-digit numbers, we compare the digits in the ten thousands place. If they are the same, then we compare the digits in the thousands place and so on.

Teaching Point: Give number cards to students and ask them to make two 6-digit numbers and help them to compare the numbers using place values.

Let us compare the numbers 674,123 and 674,192.

First compare the digits in the hundred thousands place. They are the same. Now compare the digits in the next places.

The ten thousands, thousands and hundreds place digits are the same.

Next compare the digits in the tens place

674,123 and 674,192

9 is greater than 2. So, 674,192 is greater than 674,123.
We can write it as:

674,123 < 675,192 or 675,192 > 674,123

Ordering numbers

Compare and order 42424, 8100 and 35262.

Let us compare the numbers using the place value table.

Ten thousands	Thousands	Hundreds	Tens	Ones
4	2	4	2	4
	8	1	0	0
3	5	2	6	2

First compare the digits in the ten thousands place.

Teaching Point: Give number cards to students and ask them to make two 6-digit numbers and help them to compare the place values of numbers.

8100 is a 4-digit number so it is the smallest.

Which number is the greatest in the ten thousands place.

The number 4 in the ten thousands place is greater than 3.

So, 42,424 is greater than 35,262.

Arranging the numbers from the smallest to the greatest, we have:

8100; 35,262; 42,424

The arrangement of numbers from the smallest to greatest is called ascending order.

Arranging the numbers from the greatest to the smallest, we have:

42,424; 35,262; 8100

The arrangement of numbers from the greatest to the smallest is called descending order.

Teaching Point: Give different number cards to students and ask them to arrange the numbers in ascending and descending order with the help of the place value table.

Exercise 4

1. Write <, > and = in the given boxes.

a) 4567 ☐ 9812

b) 52,836 ☐ 19,845

c) 78,666 ☐ 78,666

d) 83,500 ☐ 83,005

e) 768,145 ☐ 123,768

2. Arrange the numbers in ascending order.

a) 60, 292; 60, 299; 60, 219; 60, 009

b) 84, 076; 84, 192; 88, 300; 80, 808

c) 456,004; 321,789; 789,300; 756,900

3. Arrange the numbers in descending order.

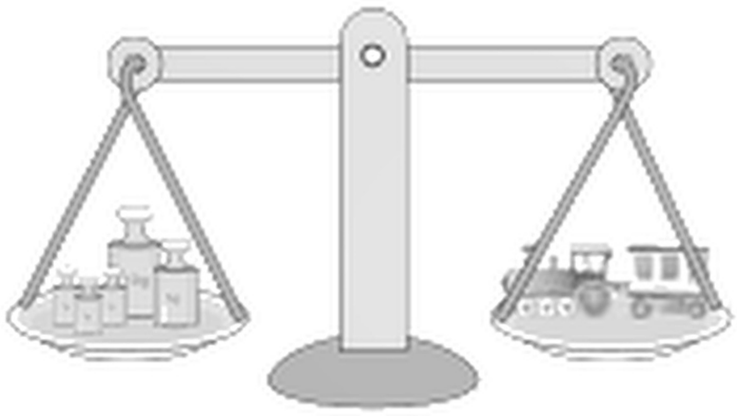
a) 10,568; 10,088; 10,658; 10,900

b) 15,623; 15,629; 15,620; 15,526

c) 143,899; 143,998; 143,908; 142,899

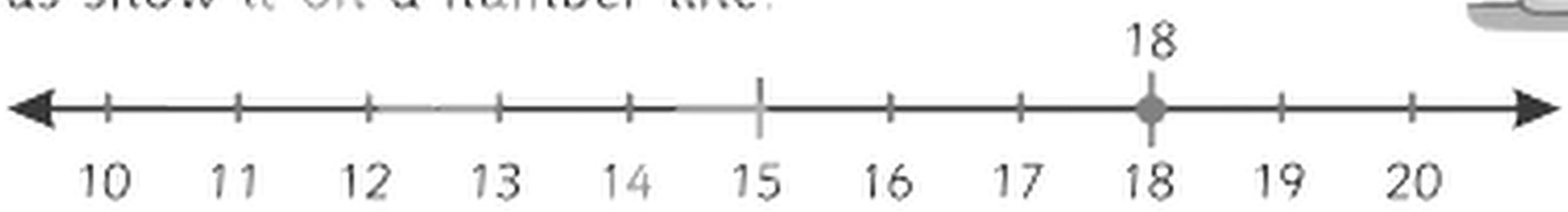
Rounding off Numbers

Look at the scale. The toy car has a mass of 18 grams. Round it off to the nearest ten.



Rounding off means to change the value of a number to the one that is easier to work with.

Let us show it on a number line.



18 is between 10 and 20. It is nearer to 20 than to 10. So, if we round off 18 to the nearest ten, we can write it as 20.
In short, we write it as:

$18 \approx 20$.

≈ means approximately equal to.

So, 18 is approximately equal to 20.

Round off 75 to the nearest ten.

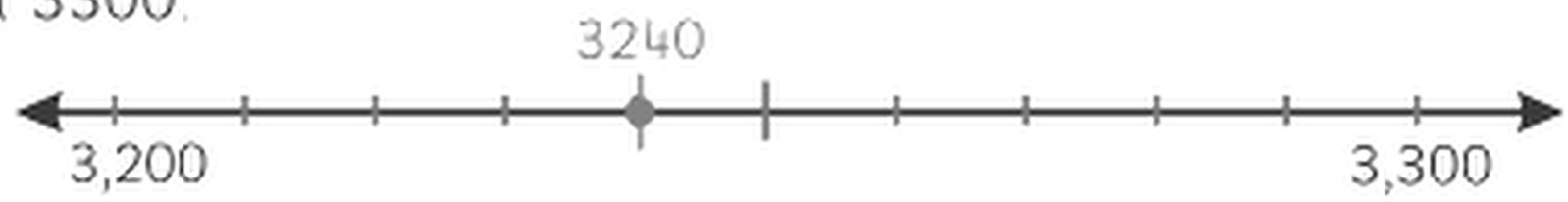
75 is between 70 and 80. It is exactly half way between 70 and 80.

So, 75 is 80 when we round it off to the nearest ten. We write it as:

When a number is halfway between two tens, we round it off to the greater ten.

$75 \approx 80$

Round off 3240 to the nearest hundred. 3240 is between 3200 and 3300.

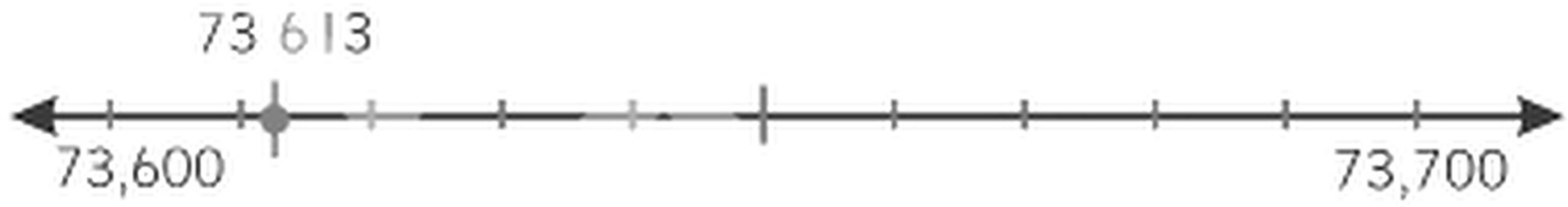


3240 is nearer to 3200 than to 3,300.

So, 3240 is 3200 when rounded off to the nearest hundred.

$$3240 \approx 3200$$

Round off 73,613 to the nearest hundred. 73,613 is between 73,600 and 73,700.



73,613 is nearer to 73,600 than to 73,700. So, 73,613 is 73,600 when rounded off to the nearest hundred.

$$73,613 \approx 73,600$$

Exercise 5

1. Round off the given numbers in the table below to the nearest ten and hundred.

No.	Number	Nearest ten	Nearest hundred
a	552		
b	809		
c	320		
d	563		
e	2438		

I have learnt

Word Board
- Ordinal
- Compare
- Arrange
- Decreasing order
- Increasing order
- Ones, tens, hundreds

- The numbers that can be grouped in pairs are called even numbers.
- The numbers that cannot be grouped in pairs are called odd numbers.
- The place value of each digit is decided by its position in the number.
- To compare two 5-digit numbers, compare the digits in the ten thousands place. If they are the same, then compare the digits in the thousands place and so on.
- The numbers arranged from the smallest to the greatest are in ascending order.
- The numbers arranged from the greatest to the smallest are in descending order.

Review Exercise

1. Match the Roman numerals with the Arabic numerals.

Roman	Arabic
XIV	3
VIII	20
XX	9
IX	14
III	8

2. Write all the even numbers between 27 and 39.

3. Write all the odd numbers between 50 and 98.

4. Write the following numerals in words.

   a) 106,578 _____

   b) 436,209 _____

5. Write the following words in numerals.

   a) Two hundred eighty-four thousand, six hundred and thirty.

   _____

   b) Seven hundred nine thousand, one hundred and four.

   _____

6. Circle the greatest number and tick the smallest number.

   a) 240,001 ; 36,539 ; 128,100 ; 99,009

   b) 88,888 ; 888,888 ; 888 ; 80,888

   c) 505,634 ; 49,638 ; 55,436 ; 49,639

   d) 31,111 ; 13,111 ; 31,131 ; 13,311

   e) 1000 ; 100,000 ; 10,000 ; 10,001

7. Arrange the following numbers in ascending and descending order.

   a) 10,820 ; 1820 ; 35,236 ; 66,102 ; 90,526

   b) 264,666 ; 264,023 ; 82,023 ; 31,666 ; 81,023

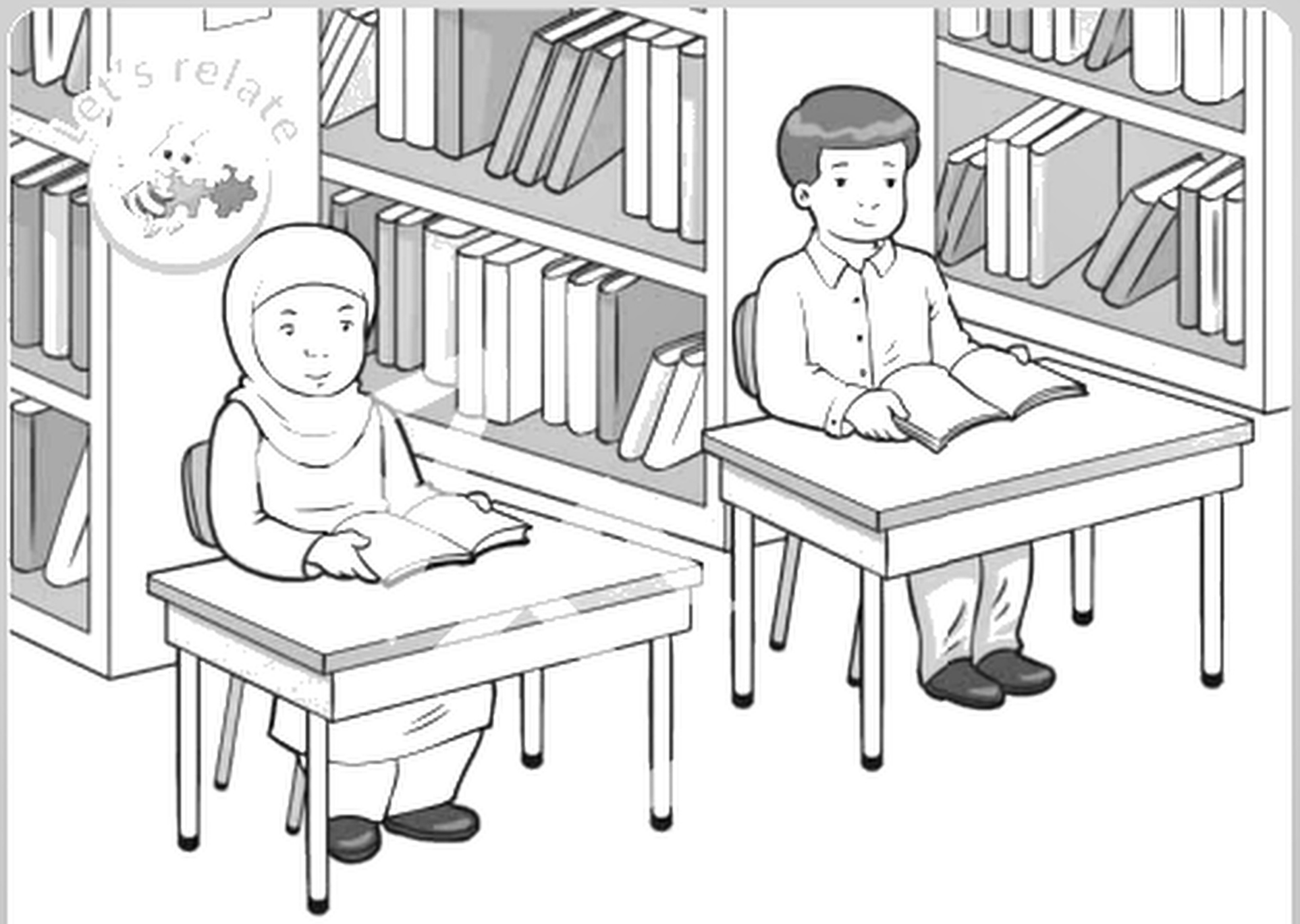
   c) 9002 ; 10,364 ; 8305 ; 19,364 ; 20,465

8. Round off the following numbers to the nearest ten and hundred.

   a) 652 b) 2761 c) 5247 d) 92,653

Unit 2

Addition



In a library, 425 books were read in August and 328 books were read in September. What is the total number of books read in these two months?

Learning Outcomes

- Add numbers up to four-digits with and without carrying vertically and horizontally
- Add numbers up to 100 using mental calculation strategies
- Solve number stories involving addition

Teaching Point: For effective teaching and learning, feel free to use 'Urdu' as a medium of instruction to explain the concepts

Addition

What is addition?

Key fact

Addition is bringing two or more numbers or things together to find the total. We use the "+" sign for addition.

When we add 2 numbers, their result is called the sum.

$$8 + 3 = 11$$

Sum or Total

Adding Numbers (without carrying)

We can add numbers in **vertical** and **horizontal** ways.

Vertical Addition

In this method, first we arrange numbers in **columns** according to their place values and then add digits in the same place.

There are 5681 mango trees and 4118 apple trees in a farm. Find the total number of trees?

Thousands	Hundreds	Tens	Ones
5	6	8	1
4	1	1	8

	Th	H	T	O
Mango trees =	5	6	8	1
Apple trees = +	4	1	1	8
Total trees =	9	7	9	9

Step I: 1 one + 8 ones = 9 ones

Step II: 8 tens + 1 ten = 9 tens

Step III:6 hundreds + 1 hundred = 7 hundreds

Step IV:5 thousands + 4 thousands = 9 thousands

So, the total number of trees is 9799.

Horizontal Addition

In this method, we arrange numbers in rows according to their place values and then add digits in the same place.

Add 1358 and 4531.

Th	H	T	O		Th	H	T	O		Th	H	T	O
1	3	5	8	+	4	5	3	1	=	5	8	8	9

When zero is added to any number, the sum is the number itself.

Are 3681+5999 and 5999+3681 the same?

Teaching Point: Explain the importance of correct placement of numbers according to their place

Adding Numbers (with carrying)

Vertical Method

Ahmad has Rs 4059 in savings and Madiha has Rs 2694 in savings. What amount have they saved altogether?

	Th	H	T	O
Saving of Ahmad =	4	0	5	9
Saving of Madiha = +	2	6	9	4
Total saving =	6	7	5	3

Step 1

9 ones + 4 ones = 13 ones
Write 3 in the ones place and carry ① to the tens place.

Step 2

1 ten + 5 tens + 9 tens = 15 tens
Write 5 in the tens place and carry ① to the hundreds place.

Step 3

1 hundred + 0 hundreds + 6 hundreds = 7 hundreds

Step 4

4 thousands + 2 thousands = 6 thousands

So, they saved Rs 6753 altogether.

Horizontal Addition

Add 4563 and 3649.

Th	H	T	O		Th	H	T	O		Th	H	T	O
(1)	(1)	(1)											
4	5	6	3	+	3	6	4	9	=	8	2	1	2

So, 4563 + 3649 = 8212.

Exercise 1

1. Add the following.

a)

Th	H	T	O
2	3	4	4
+ 4	5	4	5

b)

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

c)

Th	H	T	O
8	9	0	4
+ 1	0	9	5

d)

Th	H	T	O
7	3	1	5
+ 2	6	1	3

e)

Th	H	T	O
8	0	0	0
+ 1	7	8	9

f)

Th	H	T	O
7	8	7	8
+ 2	1	1	1

2. Add the following.

a) 4432 + 4432 =

b) 1283 + 2514 =

c) 3057 + 3832 =

d) 8191 + 1308 =

e) 1023 + 1564 =

f) 3194 + 1504 =

g) 4439 + 4430 =

h) 6154 + 2432 =

i) 2746 + 1564 =

j) 1253 + 4736 =

3. Write in horizontal form and add.

a) 2064, 5413	b) 4587, 1302	c) 7516, 1382
d) 1974, 8013	e) 6531, 3256	f) 7165, 1000

4. Add the following.

a) Th H T O
3 8 4 3
+ 3 6 2 5

b) Th H T O
4 6 2 8
+ 4 8 3 2

c) Th H T O
2 5 3 9
+ 2 8 3 8

d) Th H T O
3 8 2 6
+ 4 3 8 9

e) Th H T O
1 7 0 9
+ 3 8 2 3

f) Th H T O
1 2 8 7
+ 4 8 8 8

5. Add the following.

a) 3987 + 4096 =

b) 1657 + 4638 =

c) 5666+ 3444 =

d) 4631 + 2469 =

e) 6028 + 1308 =

f) 7563 + 1568 =

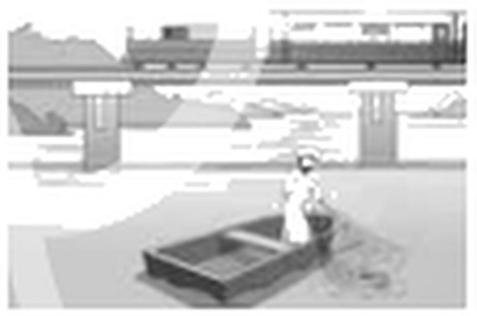
6. There are 1259 trees along one section of a highway and 1498 trees along another section. How many trees are there in all?

7. There are 2634 young employees and 1988 elderly employees working in a factory. Find the total number of employees.

8. Ahmad donates Rs 3585 to the fund for earthquake victims and Rs 5625 to the Kashmir Fund. Find the total donation.

9. In a library, there are 2683 books in the English language and 6644 books in the Urdu language. How many books are there altogether?

10. There are 4056 small fish and 1034 big fish in a pond. What is the total number of fish in the pond?



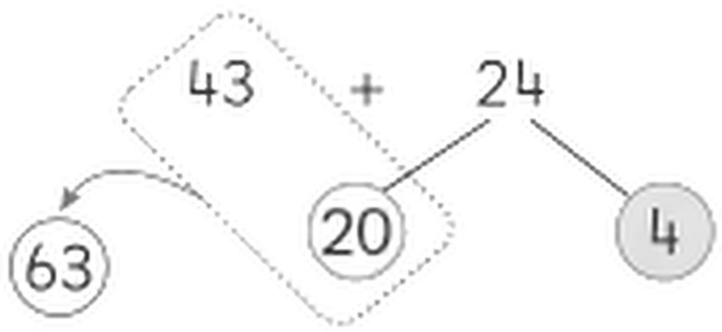
11. Make an addition story using these words and numbers.

A factory 4200 plastic toys 3850 soft toys

How many toys altogether

Mental Addition

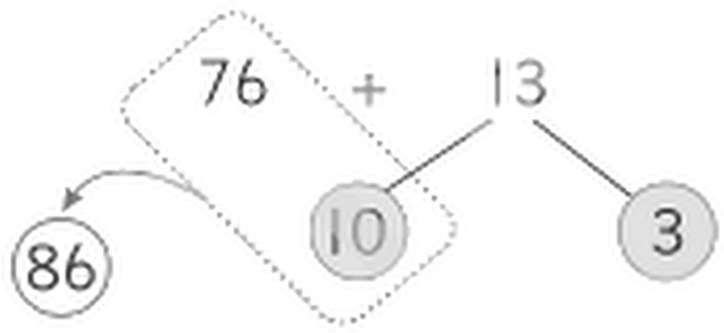
Maha saw 43 cars and 24 bikes on her way to school. How can she find the total number of vehicles using mental calculation?



43 + 24 is the same as 43 + 20 + 4 or 63 + 4.

So, 43 + 24 = 67.

Let us add 76 + 13.



76 + 13 = 76 + 10 + 3.

= 86 + 3

= 89

Exercise 3

1. Add the following numbers mentally.

a) 20 + 34 = ☐ b) 70 + 18 = ☐ c) 11 + 44 = ☐

d) 50 + 27 = ☐ e) 34 + 25 = ☐ f) 66 + 23 = ☐

Teaching Point: Explain to students that in mental addition, the basic idea is to add in parts, such as tens and ones separately. First, have them practice separate a 2-digit number as tens and ones

I have learnt

- Addition is bringing two or more numbers or things together to find the total.
- In vertical addition, first arrange numbers in columns according to their place values and then add digits in the same place.
- In horizontal addition, first arrange numbers in rows and then add digits in the same place.
- To add 4-digit numbers, add ones to ones, tens to tens, hundreds to hundreds and thousands to thousands.
- When zero is added to any number, the sum is the number itself.

Review Exercise

1. Choose the correct option.

a) The _____ symbol is used for addition.

i) + ii) − iii) × iv) ÷

b) The result of addition is called _____ .

i) difference ii) product

iii) sum iv) remainder

c) In _____ addition, first we arrange the numbers in rows.

i) vertical ii) horizontal

iii) straight iv) cross

d) The sum of 2634 and 1234 is _____ .

i) 3886 ii) 3688 iii) 3868 iv) 3888

e) In addition first we add the _____.

i) ones ii) tens

iii) hundreds iv) thousands

2. Add the following.

a)
Th	H	T	O
4	5	3	7
+	2	3	7	0

b)
Th	H	T	O
7	1	4	8
+	2	5	2	1

c)
Th	H	T	O
3	8	6	3
+	3	7	1	2

3. Add the following.

a) 2341 + 1730 =

b) 3221 + 2317 =

c) 2461 + 2653 =

d) 6181 + 2413 =

4. Add the following mentally.

a) 70 + 24 =

b) 45 + 33 =

5. Write in vertical form and add.

a) 3175, 6524 b) 5698, 2413 c) 7824, 1286

6. Kiran buys some books for Rs 2172 and a bag for Rs 1611. Find the total amount she spends.

7. There are 4277 houses in town A and 3075 houses in town B. How many houses are there altogether?

Unit 3

Subtraction

Let's relate

Adeela goes to a toy shop. She wants to buy a teddy bear that costs Rs 410. She has only Rs 245. How much more money does she need to buy the teddy bear?

Learning Outcomes

- Subtract up to four-digit numbers with and without borrowing
- Subtract numbers up to 100 using mental calculation strategies.
- Solve real-life situations involving subtraction.

Teaching Point: For effective teaching and learning, feel free to use 'Urdu' as a medium of instruction to explain the concepts.

Subtraction

Subtraction is taking away one or more parts or objects from something.

The result of subtraction is called difference.

First subtract the ones, then the tens, next the hundreds and finally subtract the thousands.

Always subtract the smaller number from the greater number.

144 – 12 = 132

difference

Subtracting Numbers (without borrowing)

- To subtract two numbers, first line up the numbers.
- Write the greater number above the smaller number.
- Write ones under ones, tens under tens, hundreds under hundreds and thousands under thousands.
- First subtract the ones, then the tens, next the hundreds and finally subtract the thousands.

There are 5769 trees in a forest. 628 trees were cut. How many trees are left?

	Th	H	T	O
Total number of trees =	5	7	6	9
Number of trees cut = −		6	3	8
Trees left =	5	1	3	1

Step I: Subtract the ones.

Step II: Subtract the tens.

Step III: Subtract the hundreds.

Step IV: Subtract the thousands.

5769 - 638 = 5131.

So, 5131 trees are left.

Can you find the difference between 389 and 210?

Find the difference of 9389 and 4207.

	Th	H	T	O
	9	3	8	9
−	4	2	0	7
	5	1	8	2

Step I: Subtract the ones.

Step II: Subtract the tens.

Step III: Subtract the hundreds.

Step IV: Subtract the thousands

So, the difference of 9389 and 4207 is 5182.

Find the difference between the smallest 4-digit number and the greatest 4-digit number.

When 0 is subtracted from any number, the difference is the same number.

Teaching Point: Explain that the steps of subtraction must be in the correct order from right to left or the greater to the smaller number). Make a large-sized place value chart on chart paper.

Subtracting Numbers (with borrowing)

Do you remember what regrouping means in subtraction?

Regrouping in subtraction means borrowing.

Madiha collected 4135 coins from different countries. Her brother Asim collected 2824 coins. How many less coins did Asim collect than Madiha?

Clue word is: how many less. So, we need to subtract 2824 from 4135.

	Th	H	T	O
Coins collected by Madiha =	③4	①1	3	5
Coins collected by Asim = −	2	8	2	4
Difference =	1	3	1	1

Step I: Subtract the ones
5 ones − 4 ones = 1 one.

Step II: Subtract the tens
3 tens − 2 tens = 1 ten.

Step III: Subtract the hundreds
8 hundreds cannot be subtracted from 1 hundred. So, we regroup and borrow 1 thousand as 10 hundreds. So, there are 11 hundreds and 3 thousands now.
11 hundreds − 8 hundreds = 3 hundreds.

Step IV: Subtract the thousands
3 thousands − 2 thousands = 1 thousand.

So, Asim collected 1311 less coins than Madiha.

Teaching Point: Before having them practise in notebooks, ask them randomly to tell the steps verbally. Invite other students to correct them if need be.

Find the difference of 6240 and 2576.

	Th	H	T	O
	~~6~~	~~2~~	~~4~~	0
−	2	5	7	6
	3	6	6	4

Step I: Subtract the ones.
6 ones cannot be subtracted from 0 ones. So, we regroup and borrow 1 ten as 10 ones
So, there are 10 ones and 3 tens now.
10 ones − 6 ones = 4 ones.

Step II: Subtract the tens.
7 tens cannot be subtracted from 3 tens. So, we regroup and borrow 1 hundred as 10 tens. So, there are 13 tens and 1 hundred now.
13 tens − 7 tens = 6 tens.

Step III: Subtract the hundreds.
5 hundreds cannot be subtracted from 1 hundred. So, we regroup and borrow 1 thousand as 10 hundreds. So, there are 11 hundreds and 5 thousands now.
11 hundreds − 5 hundreds = 6 hundreds.

Step IV: Subtract the thousands.
5 thousands − 2 thousands = 3 thousands.

So, the difference of 6240 and 2576 is 3664.

Subtract the greatest 3-digit number from the smallest 4 digit number.

Teaching Point: Emphasise the concept of borrowing/regrouping. Have students practise exchanging 1 ten as 10 ones, 1 hundred as 10 tens and so on. Ask them questions like "how many

Exercise 1

1. Subtract the following.

a)

Th	H	T	O
8	8	8	5
−6	0	0	0

b)

Th	H	T	O
3	8	6	8
−2	2	2	7

c)

Th	H	T	O
8	5	5	9
−5	0	4	9

d)

Th	H	T	O
7	8	6	7
−1	1	4	3

e)

Th	H	T	O
6	2	9	2
−3	2	7	2

Hint

Subtract from right to left (start from ones)

f)

Th	H	T	O
2	6	6	5
−1	0	2	2

g)

Th	H	T	O
6	2	9	7
−2	0	6	4

h)

Th	H	T	O
3	4	6	5
−2	2	2	3

i)

Th	H	T	O
9	3	8	6
−7	3	5	1

j)

Th	H	T	O
7	8	5	2
−4	0	1	1

k)

Th	H	T	O
9	6	9	9
−4	5	1	0

l)

Th	H	T	O
5	6	9	3
−2	1	4	0

m)

Th	H	T	O
6	3	4	4
−2	1	1	1

n)

Th	H	T	O
9	9	9	9
−8	8	8	8

2. Subtract the following to find the difference.

Th	H	T	O
a)	6	2	1	9
−	4	5	2	7

Th	H	T	O
b)	7	9	2	4
−		6	8	7

Th	H	T	O
c)	3	6	4	8
−	1	9	7	2

Th	H	T	O
d)	5	0	3	4
−	2	4	6	3

Th	H	T	O
e)	6	0	4	2
−	3	5	2	9

Hint

Subtract from right to left (start from ones).

Th	H	T	O
f)	5	9	4	1
−	2	5	8	6

Th	H	T	O
g)	7	0	2	3
−	4	6	3	7

Th	H	T	O
h)	6	8	3	4
−		7	1	5

Th	H	T	O
i)	8	3	5	7
−	4	1	7	7

Th	H	T	O
j)	9	2	0	4
−		8	5	6

Th	H	T	O
k)	6	4	7	1
−	4	9	5	3

Th	H	T	O
l)	6	0	0	3
−	4	6	7	5

Th	H	T	O
m)	7	1	3	4
−	2	9	6	8

Th	H	T	O
n)	8	5	2	1
−	6	7	8	8

Th	H	T	O
o)	7	2	0	1
−	3	5	2	2

Th	H	T	O
p)	6	2	0	0
−	2	0	5	8

Th	H	T	O
q)	4	3	2	1
−	2	9	8	9

3. There are 6236 verses in the Holy Quran. Aiza has learnt 4309 verses by heart. How many verses does she still need to learn?

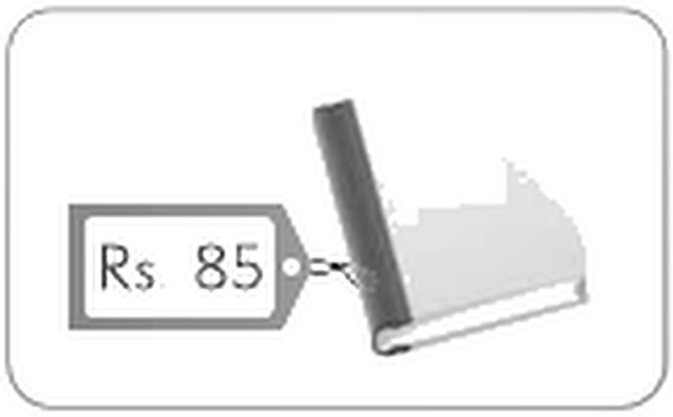
4. Mr Ahmad had Rs. 9890 in his bank account. He donated Rs. 3575 to the Kashmir Fund. How much money is left in his account?

5. The total population of a village is 8923. The number of men and children is 5698. Find the number of women in this village.

6. The total number of cows and horses on a farm is 5638. If there are 3896 horses, find the number of cows.

7. For an event, 7345 chairs were arranged. 6223 chairs were occupied. How many chairs were left empty?

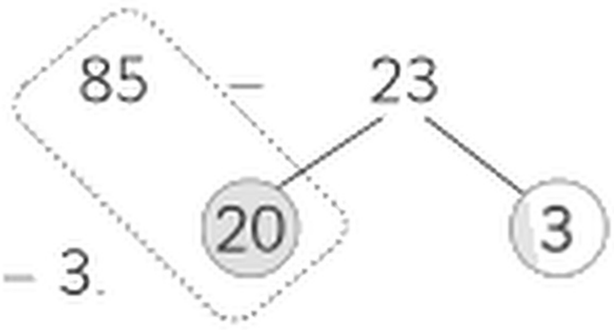
Mental Subtraction



We can easily subtract numbers by mental calculations.

Huma wants to buy a book. Its price is Rs 85, but she has Rs 23 only. How much more money does she need?

Here we need to find the difference of 85 and 23. Let us find the answer using mental calculation.



85 – 23 is the same as 85 – 20 – 3 or 65 – 3.

65 – 3 = 62.

85 – 23 = 62.

So, she needs Rs 62 more to buy the book.

Exercise 2

1. Add the following numbers mentally.

a) 42 – 31 = _____

b) 98 – 22 = _____

c) 66 – 18 = _____

d) 72 – 51 = _____

e) 89 – 76 = _____

f) 32 – 12 = _____

Teaching Point: Explain to students that in mental subtraction, the basic idea is to subtract in parts, such as tens and ones separately. First, have them practise separate a 2-digit number as

I have learnt

- Subtraction is taking away one or more parts or objects from something
- The number from which another number is to be subtracted is called the minuend.
- The second number that is to be subtracted is called the subtrahend and the result of subtraction is called the difference.
- To subtract two numbers, first line up the numbers and write the greater number above the smaller number.
- Write ones under ones, tens under tens, hundreds under hundreds and thousands under thousands.
- First subtract the ones, then the tens, next the hundreds and finally subtract the thousands.
- Always subtract the smaller number from the greater number.
- When 0 is subtracted from any number, the difference is the same number.
- Regrouping in subtraction means borrowing.
- We regroup and borrow if the minuend digit is smaller than the subtrahend digit.

Word Board

- Minuend
- Subtrahend
- Difference
- Borrow
- Regroup
- Mental calculation

Review Exercise

1. **Choose the correct option.**

a) The difference of 6325 and 1895 is _____.

(i) 4340 (ii) 3440 (iii) 4430 (iv) 4030

b) The result of subtraction is called the _____.

(i) sum (ii) difference (iii) product (iv) remainder

c) The difference of the greatest 4-digit number and the greatest 3-digit number is _____.

(i) 9999 (ii) 1000 (iii) 1111 (iv) 9000

d) 6789 – 1234 = _____.

(i) 5555 (ii) 1255 (iii) 5255 (iv) 6555

e) 2156 less than 6272 is _____.

(i) 4616 (ii) 4161 (iii) 4116 (iv) 4666

2. **Subtract the following to find the difference.**

a)

Th	H	T	O
6	9	9	4
−4	5	4	2

b)

Th	H	T	O
6	9	4	8
−3	5	2	1

c)

Th	H	T	O
8	9	0	6
−1	0	0	5

d)

Th	H	T	O
7	9	1	5
−2	6	1	4

e)

Th	H	T	O
8	9	9	9
−1	7	8	9

f)

Th	H	T	O
4	2	7	8
−2	1	1	1

3. Subtract the following.

a)
Th	H	T	O
3	8	4	3
−3	6	2	5

b)
Th	H	T	O
4	9	2	8
−4	8	3	2

c)
Th	H	T	O
7	5	3	7
−2	8	3	8

d)
Th	H	T	O
3	3	8	3
−1	8	3	8

e)
Th	H	T	O
9	8	2	6
−4	3	8	9

f)
Th	H	T	O
9	7	0	1
−3	8	2	3

g)
Th	H	T	O
8	2	8	7
−4	8	8	8

h)
Th	H	T	O
4	9	9	0
−4	0	0	1

4. Find the difference by using mental calculations.

a) 35 − 25 = ☐

b) 48 − 32 = ☐

c) 28 − 10 = ☐

d) 60 − 40 = ☐

e) 28 − 20 = ☐

f) 59 − 23 = ☐

5. Mr Zaeem sold his old printer for Rs 3658 and bought a new one for Rs 6750. Find the difference in the prices of the old and new printers.

6. A factory manufactured 7235 toys in 2016 and 9240 toys in 2017. How many more toys were manufactured in 2017 than in 2016?

Unit 4

Multiplication

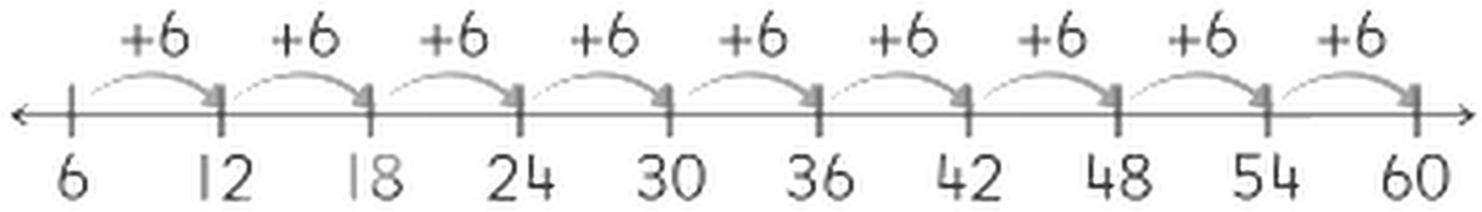
Learning Outcomes

- Develop multiplication tables for 6, 7, 8, and 9
- Multiply 2-digit numbers by 1-digit numbers
- Multiply a number by zero
- Apply mental mathematical strategies to multiply numbers up to the table of 10.
- Solve real life situations involving multiplication of 2-digit numbers by 1-digit numbers

Teaching Point: For effective teaching and learning, feel free to use 'Urdu' as a medium of instruction to explain the concepts.

6 Times Table

By counting on in sixes, we get the multiplication table of 6.



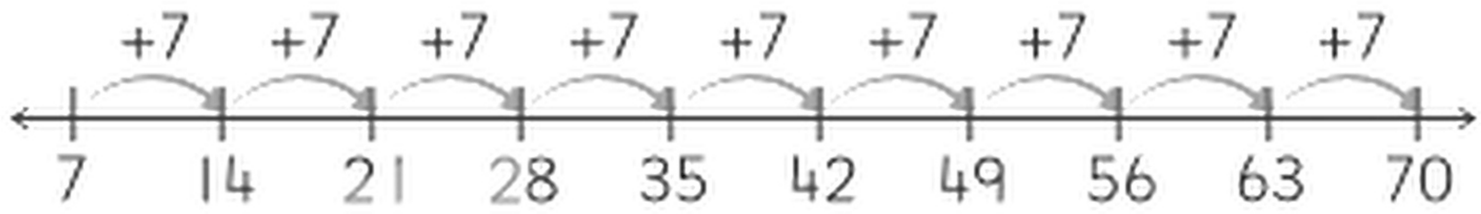
1	×	6	=	6
2	×	6	=	12
3	×	6	=	18
4	×	6	=	24
5	×	6	=	30
6	×	6	=	36
7	×	6	=	42
8	×	6	=	48
9	×	6	=	54
10	×	6	=	60

When we multiply an even number by 6, the answer will have the same digit in the ones place.

Teaching Point: Help students to learn the 6 times table using repeated addition of concrete materials. Emphasize oral learning of 6 times table.

7 Times Table

By counting on in sevens, we get the multiplication table of 7.



1	×	7	=	7
2	×	7	=	14
3	×	7	=	21
4	×	7	=	28
5	×	7	=	35
6	×	7	=	42
7	×	7	=	49
8	×	7	=	56
9	×	7	=	63
10	×	7	=	70

To mentally multiply numbers within a multiplication table, try recalling the easier one. For example, to find 4×7, recall the 4 times table till 7.

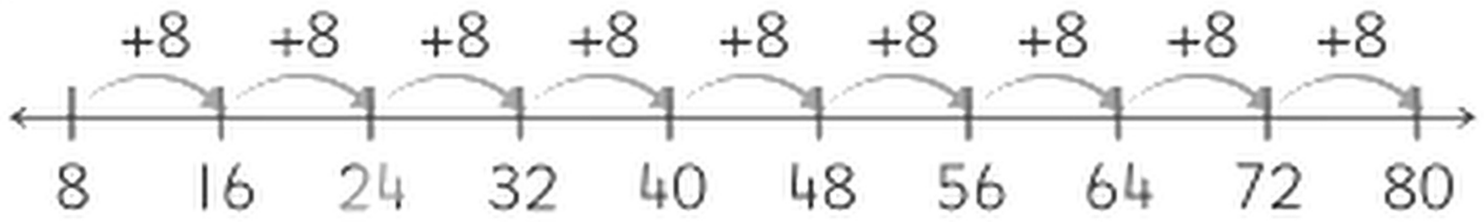
$7 \times 4 = 28$.

So, $7 \times 4 = 4 \times 7 = 28$.

Teaching Point: : Help students to learn the 7 times table using repeated addition of concrete materials. Emphasize oral learning of times tables

8 Times Table

By counting on in eights, we get the multiplication table of 8.



1	×	8	=	8
2	×	8	=	16
3	×	8	=	24
4	×	8	=	32
5	×	8	=	40
6	×	8	=	48
7	×	8	=	56
8	×	8	=	64
9	×	8	=	72
10	×	8	=	80

To mentally multiply numbers within a multiplication table, try recalling the easier one. For example, to find 5×8, recall the 5 times table till 8.

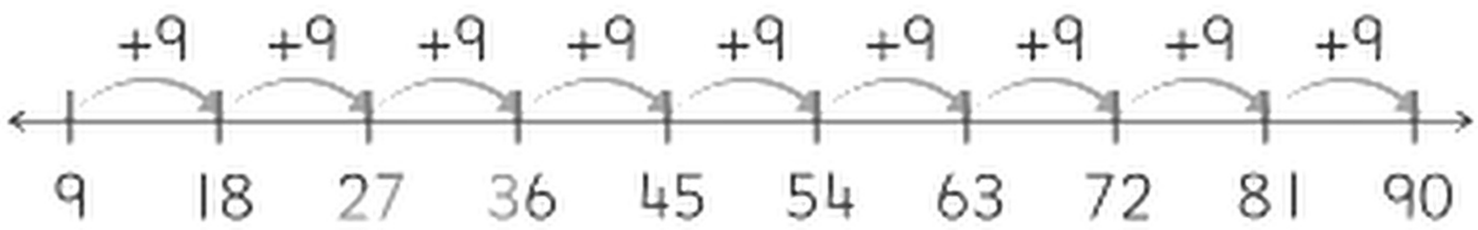
$8 \times 5 = 40$.

So, $5 \times 8 = 8 \times 5 = 40$.

Teaching Point: Help students to learn the 8 times table using repeated addition of concrete materials. Emphasize oral learning of times tables.

9 Times Table

By counting on in nines, we get the multiplication table of 9.

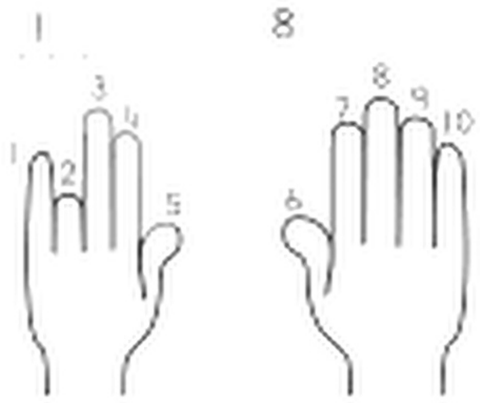


1	×	9	=	9
2	×	9	=	18
3	×	9	=	27
4	×	9	=	36
5	×	9	=	45
6	×	9	=	54
7	×	9	=	63
8	×	9	=	72
9	×	9	=	81
10	×	9	=	90

Open your hands.

Bend finger 2 (for 2 × 9).

Count the figures on both sides of the bent finger. 1 finger is to the left. 8 fingers are to the right.

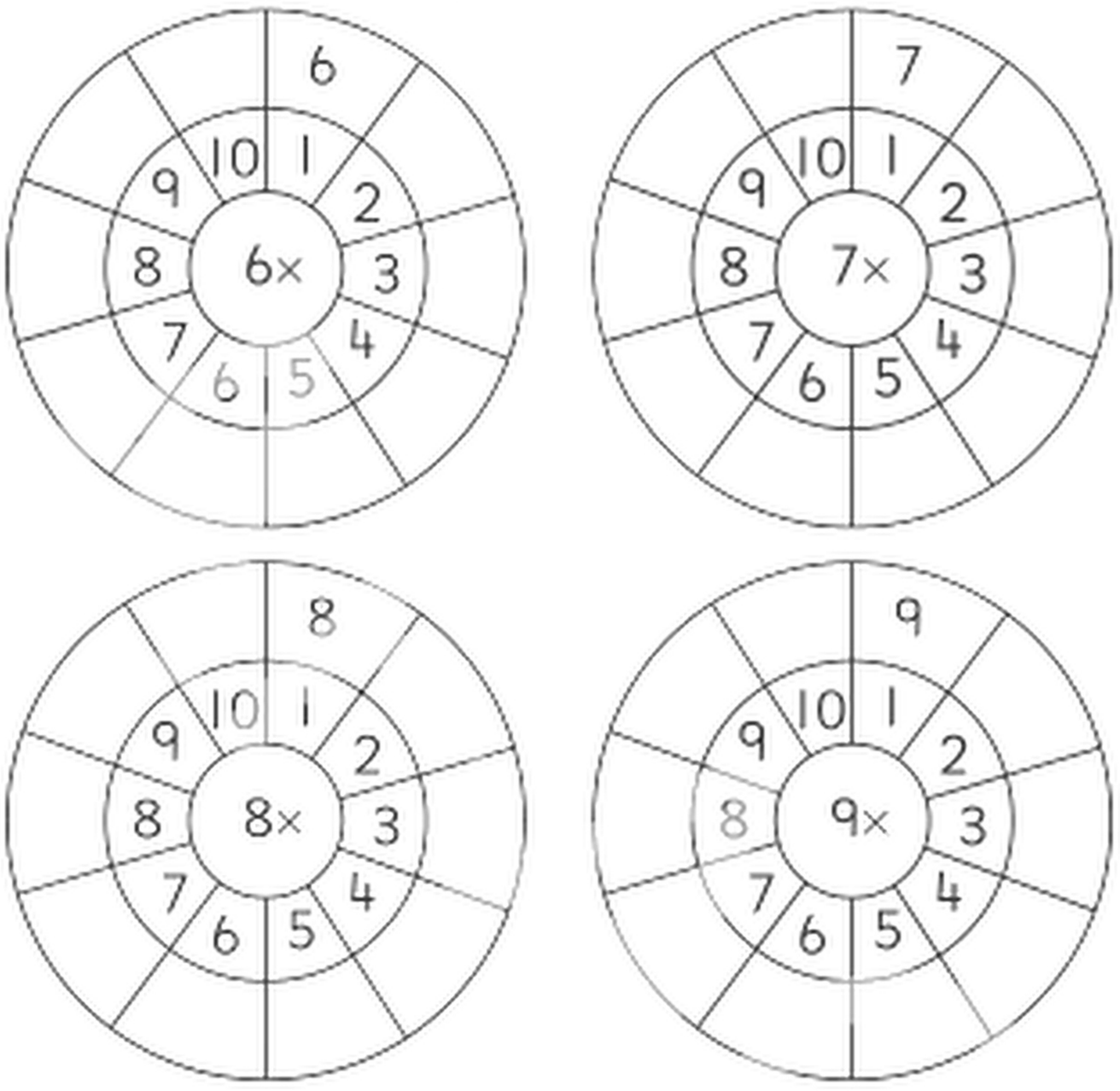


So, 2 × 9 = 18.

Teaching Point: Help students to learn the 9 times table using repeated addition of concrete materials. Emphasize oral learning of times tables.

Exercise 1

1. Complete the following multiplication circles.



2. Use mental multiplication tricks to find the product.

a) $5 \times 7 =$ ☐ b) $4 \times 9 =$ ☐ c) $9 \times 9 =$ ☐

d) $8 \times 6 =$ ☐ e) $7 \times 5 =$ ☐ f) $5 \times 6 =$ ☐

g) $9 \times 9 =$ ☐ h) $7 \times 3 =$ ☐ i) $6 \times 2 =$ ☐

j) $8 \times 3 =$ ☐ k) $9 \times 3 =$ ☐ l) $2 \times 8 =$ ☐

Multiplication of 2-digit Numbers by 1-digit Numbers

I have two boxes of crayons each has 34 crayons in it. How many crayons are there altogether?

Crayons in one box	=	3 4
Number of boxes	=	× 2
Total crayons	=	

Let us multiply 34 by 2.

Step 1: First write the given question in vertical form and align tens and ones columns.

T	O
3	4
×	2

Step 2: Multiply the digits in the ones place, i.e. 4 by 2. Write the answer below the ones column.

T	O
3	4
×	2
	8

Step 3: Multiply the digits in the tens place by 2, i.e. $2 \times 3 = 6$. Write 6 below the tens column.

T	O
3	4
×	2
6	8

The result of multiplication is called the product.

So, there 68 crayons in 2 boxes.

Teaching Point: Solve different examples to let students understand the steps of multiplication

Multiplication (with carrying)

The cost of a notebook is Rs 64. What will be the total cost of 3 such notebooks?

Cost of 1 notebook = 64

Number of notebooks = × 3

Total cost =

Let us multiply 64 by 3 to find the total cost.

Step 1: First write the given question in vertical form.

T	O
6	4
×	3

Step 2: Multiply the ones place digit by 3, i.e. $4 \times 3 = 12$.
We write 2 ones below the ones column and carry 1 ten above the tens digit.

	T	O
1	6	4
×		3
		2

Step 3: Multiply the digit in the tens place by 3, i.e. $6 \times 3 = 18$. Add 1 ten (carry above the tens column) to 18 tens.
1 ten + 18 tens = 19 tens.
Hence, $64 \times 3 = 192$.

	T	O
1	6	4
×		3
1	9	2

So, the cost of 3 notebooks is Rs 192.

Order does not matter in multiplication. For example, $3 \times 7 = 7 \times 3$.

Teaching Point: Brainstorm key words that usually indicate specific mathematical operations. Create flash cards to explain the relationships between key words and operations.

Exercise 2

1. Multiply to find the product.

	T	O
a)	3	2
	×	3

	T	O
b)	4	3
	×	2

	T	O
c)	3	4
	×	2

	T	O
d)	2	0
	×	2

	T	O
e)	2	4
	×	2

	T	O
f)	2	2
	×	4

	T	O
g)	1	3
	×	3

	T	O
h)	4	2
	×	4

	T	O
i)	1	3
	×	4

	T	O
j)	1	0
	×	2

	T	O
k)	1	3
	×	2

	T	O
l)	3	4
	×	2

	T	O
m)	5	5
	×	2

	T	O
n)	8	4
	×	5

	T	O
o)	5	6
	×	4

	T	O
p)	3	6
	×	3

	T	O
q)	7	2
	×	4

	T	O
r)	7	3
	×	4

2. A box has 21 puzzle pieces. How many pieces are there in 3 such boxes?

3. Akmal reads a book in 2 days. How many days does he require to read 25 such books?

4. Sana has 7 baskets of apples. Each basket contains 36 apples. How many apples does she have in all?

5. In a school, there are 8 rooms and each room has 25 chairs. How many chairs are there in 8 rooms altogether?

6. Sara has 4 boxes of chocolates. Each box has 25 chocolate bars in it. How many chocolates bars are there altogether?

Clue words for multiplication are:

Product

Times

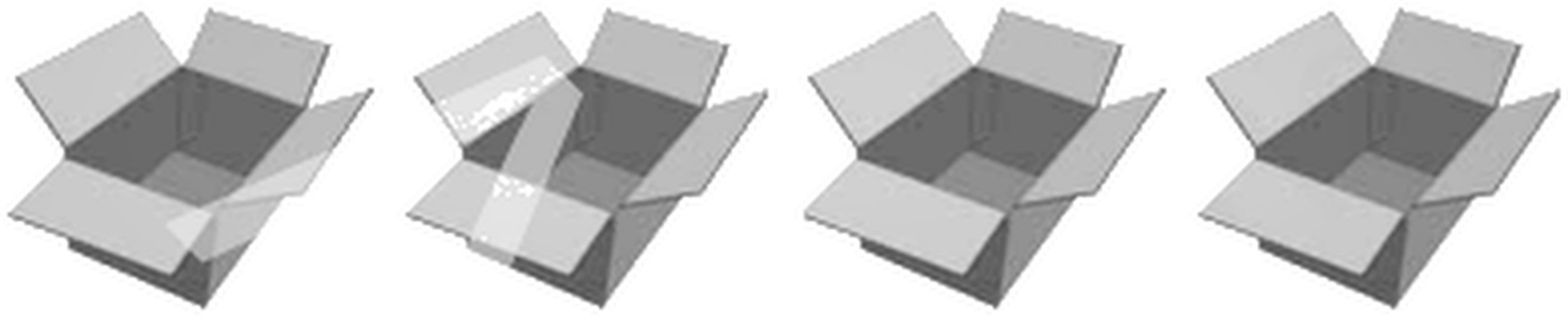
In all

We multiply when the problem asks for a total, and equal groups of objects are given.

Multiplying by Zero

When we multiply any number by zero, the result is always zero.

Here we have 4 boxes and all the boxes are empty. It means there are zero objects in the boxes. Therefore,



0 + 0 + 0 + 0

4 times 0 = 0 or 4 × 0 = 0

Exercise 3

1. Multiply to find the product.

a) 8 × 0 = _____

b) 56 × 0 = _____

c) 10 × 0 = _____

d) 0 × 7 = _____

e) 25 × 0 = _____

f) 0 × 55 = _____

I have learnt

- When 6 is multiplied by an even number, the product has the same last digit as the number.
  Examples: $6 \times 2 = 12$, $6 \times 4 = 24$, $6 \times 6 = 36$, etc
- Order does not matter in multiplication.
- The result of multiplication is called the product.
- When any number is multiplied by 'zero', the result is always zero.
- When the problem asks for a total, and equal groups of objects are given, we multiply.

Review Exercise

1. Choose the correct option.

a) There are 4 nests. Each has 7 eggs. The total number of eggs are _____.

(i) 11 (ii) 3 (iii) 21 (iv) 28

b) The result of multiplication is called _____.

(i) difference (ii) remainder

(iii) sum (iv) product

c) In 7 x 6 = 42, _____ is the product:

(i) 7 (ii) 6

(iii) 42 (iv) 2

d) The product of 12 and 0 is _____.

(i) 12 (ii) 0 (iii) 1 (iv) 2

e) When we multiply any number by 'zero', the result is always _____.

(i) 1 (ii) 10 (iii) 0 (iv) 100

2. Multiply.

×	9	4	2	5	6	3	9	10
5								
6			12	30	36			
8			16		48			
3			6		18			
9			18	45	54			
4								

3. Use mental multiplication tricks to find the product.

a) $4 \times 8 =$ ☐ b) $6 \times 7 =$ ☐

c) $9 \times 5 =$ ☐ d) $2 \times 9 =$ ☐

4. Multiply to find the product.

a)
T	O
2	3
×	2

b)
T	O
4	4
×	2

c)
T	O
3	3
×	3

d)
T	O
3	2
×	3

5. Multiply.

a)
T	O
4	4
×	4
	☐

b)
T	O
3	2
×	5
	☐

c)
T	O
2	3
×	4
	☐

d)
T	O
5	1
×	2
	☐

6. Asif has Rs 94. His sister Humaira has 3 times as much money as Asif. How many rupees does Humaira have?

7. Rehman saves Rs 75 from his pocket money daily. How many rupees does he save in a week?

Unit 5

Division

There are 2 kids and 12 blocks. How many blocks can each kid get if shared equally?

Learning Outcomes

- Divide 2-digit numbers by 1-digit numbers (with zero remainder)
- Apply mental mathematical strategies to divide numbers up to the table of 10.
- Solve real-life situations involving division of 2-digit numbers by 1-digit numbers.

Teaching Point: For effective teaching and learning, feel free to use 'Urdu' as a medium of instruction to explain the concepts.

Division

I want to put 72 beads into 9 jars equally. How many beads will be there in each jar?

Just divide 72 by 9 to get the answer.

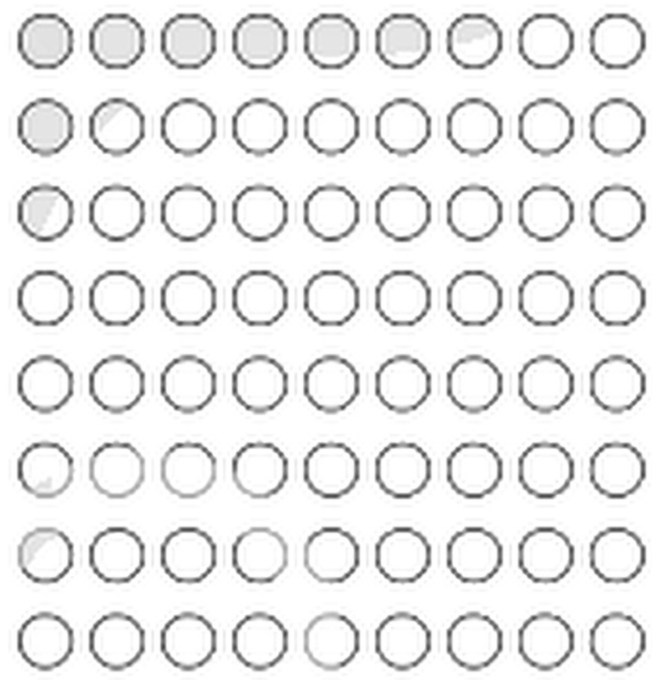
Total number of beads = 72

Number of jars = 9

Number of beads in each jar = 72 ÷ 9

= 8

We divide things to share them equally.



The result obtained is called the quotient.

$8 \div 2 = 4$

↓

quotient

Think of multiplication table of 9. What number multiplied by 9 equals 72?

$9 \times 8 = 72$

Divide 96 pencils in 3 boxes equally.

Step 1: Divide the tens by 3.

9 tens ÷ 3 = 3 tens

Step 2: Divide the ones by 3.

6 ones ÷ 3 = 2 ones

So, 96 ÷ 3 = 32.

When dividing a 2-digit number, first divide the tens and then the ones.

```
   3  2
  ____
3) 9  6
  -9
  ____
     6
   - 6
  ____
     0
```

7 cans hold 63 litres of water. How much water does each can hold?

7cans hold = 63 ℓ
Water each can holds = 63 ÷ 7
= 9 litres

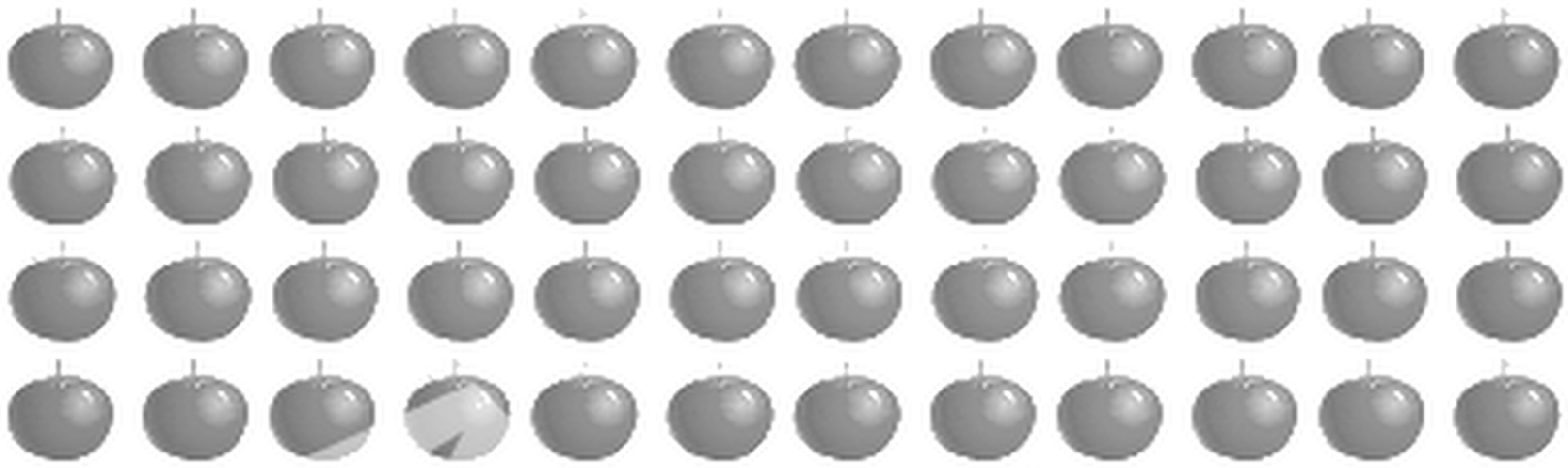
81 students are going on a study trip. They have three buses to travel on. How many students will be there on each bus?

```
    2  7
   ____
3) 8  1
  -6
  ____
     2  1
   - 2  1
  ____
        0
```

Total students = 81
Number of buses = 3
Number of students on each bus = 81 ÷ 3
= 27

Exercise 1

1. Divide 48 tomatoes in 8 groups equally.

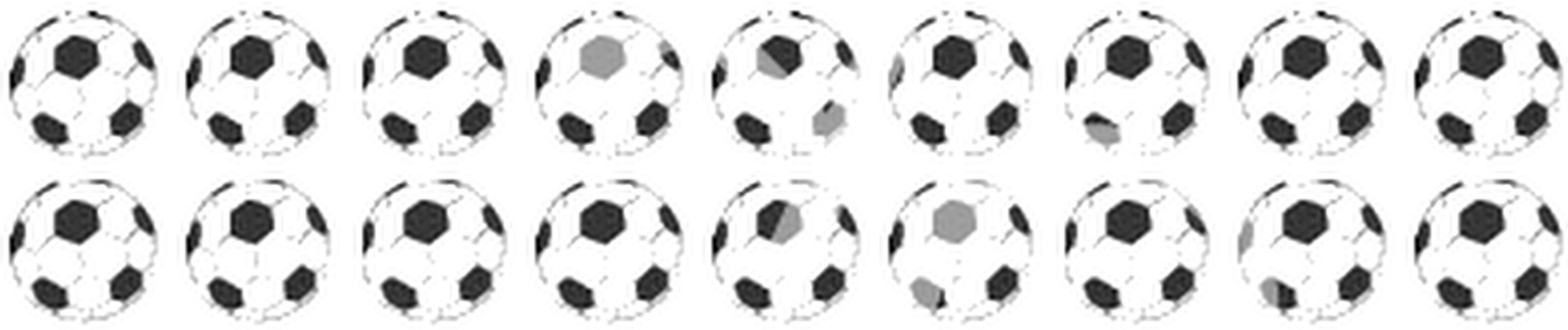


☐ ÷ ☐ = ☐

Check Point

If there are 50 tomatoes, can you divide them equally in 8 groups? If not, why?

2. Divide 18 balls into 9 groups equally.



☐ ÷ ☐ = ☐

3. Divide.

a) 42 ÷ 6

☐ ÷ ☐ = ☐

b) 36 ÷ 9

☐ ÷ ☐ = ☐

c) 64 ÷ 8

□ ÷ □ = □

d) 81 ÷ 9

□ ÷ □ = □

e) 32 ÷ 8

□ ÷ □ = □

f) 49 ÷ 7

□ ÷ □ = □

g) 72 ÷ 9

□ ÷ □ = □

h) 63 ÷ 7

□ ÷ □ = □

i) 48 ÷ 8

□ ÷ □ = □

j) 27 ÷ 9

□ ÷ □ = □

4. There are 72 flowers. Huma wants to make 9 bouquets. How many flowers will be there in each bouquet?

5. Ali wants to put 64 books equally in 8 shelves. How many books will be there in each shelf?

6. There are 99 mango trees in a garden in 9 rows. How many trees are there in each row?

7. Fahad bought 8 storybooks having 96 pages altogether. How many pages are there in each storybook?

Mental Division

We can divide numbers mentally using multiplication tables.

Do you know how to divide numbers mentally?

Divide 63 by 9.

$63 \div 9 = 7$

What number when multiplied by 6 results in 54?

$6 \times (9) = 54$

Divide 54 by 6.

$54 \div 6 = 9$

Exercise 2

1. Divide mentally.

a) $72 \div 9 =$ ☐

b) $36 \div 4 =$ ☐

c) $64 \div 8 =$ ☐

d) $81 \div 9 =$ ☐

e) $56 \div 7 =$ ☐

f) $63 \div 9 =$ ☐

g) $32 \div 4 =$ ☐

h) $90 \div 9 =$ ☐

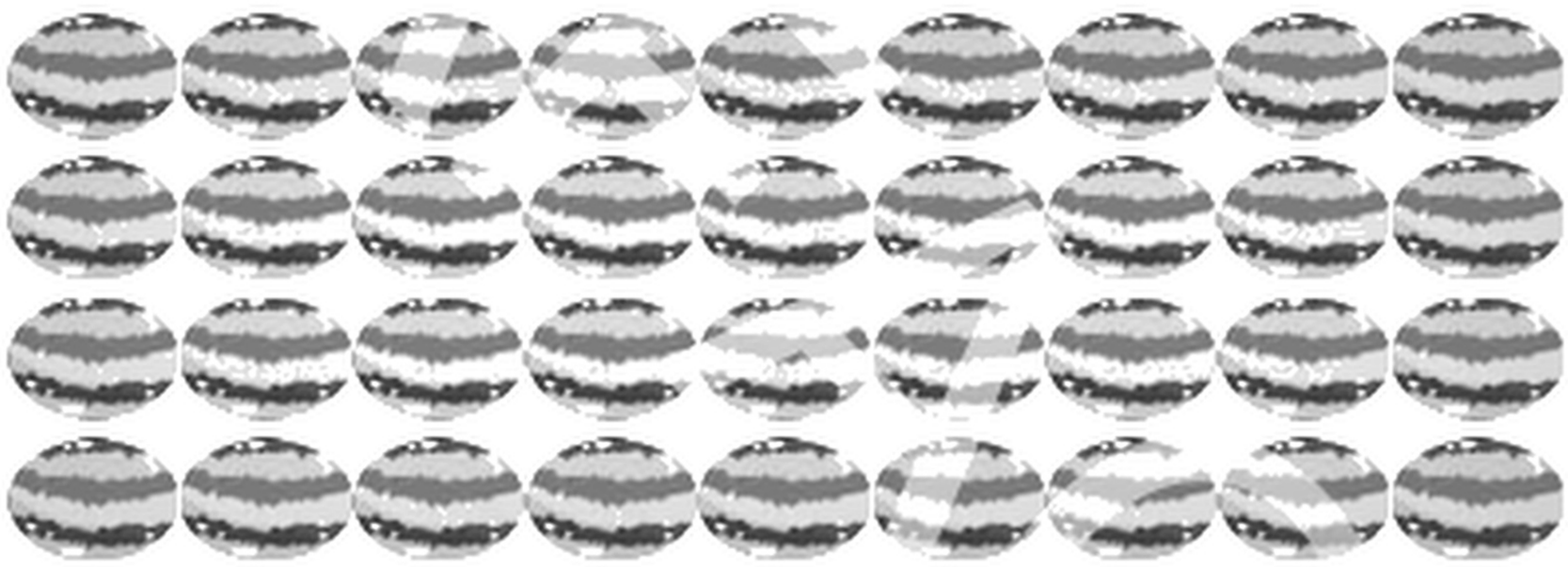
Teaching Point: Explain to students that multiplication tables can be used to divide numbers mentally.

I have learnt

- Division means equal sharing.
- The result obtained is called the quotient.

Review Exercise

1. Divide 36 water melons into groups of 4.

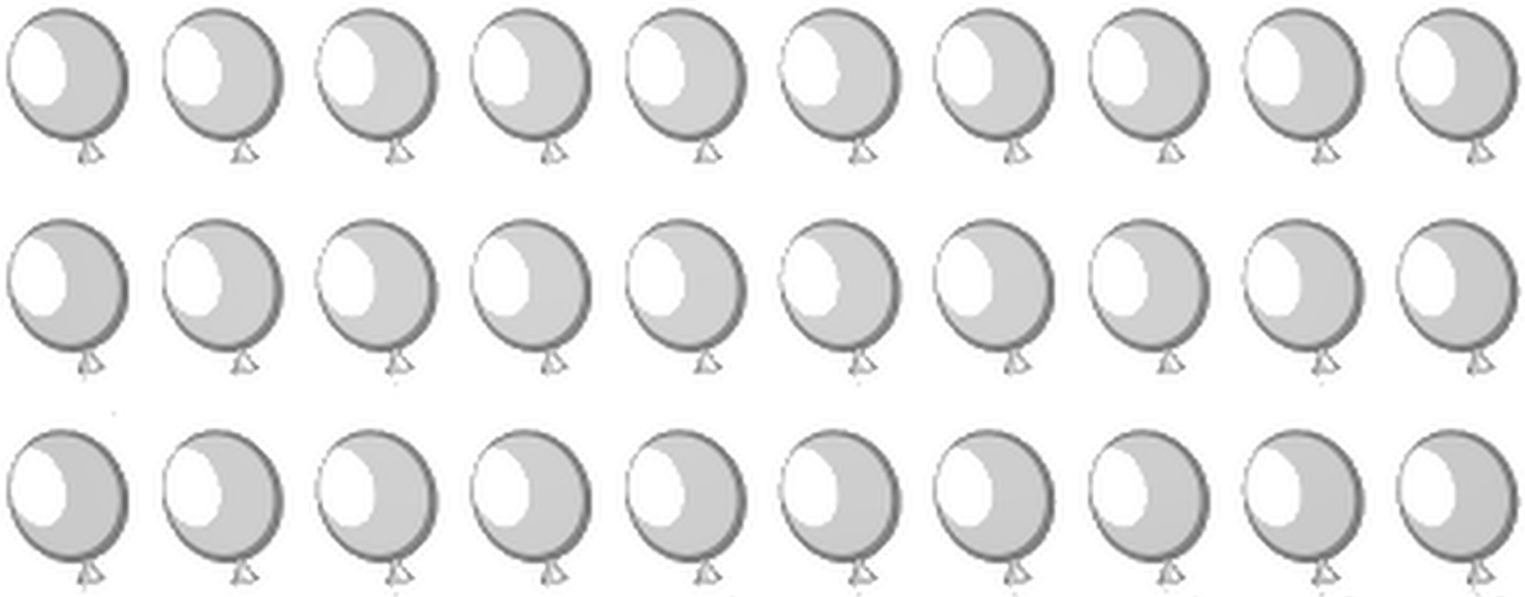


☐ ÷ ☐ = ☐

2. Divide 24 eggs into groups of 8.

☐ ÷ ☐ = ☐

3. Divide 30 balloons into groups of 5.



☐ ÷ ☐ = ☐

4. Divide the following.

a) 54 ÷ 6 b) 48 ÷ 6 c) 81 ÷ 9 d) 70 ÷ 7

e) 84 ÷ 2 f) 36 ÷ 4 g) 25 ÷ 5 h) 56 ÷ 8

5. Divide mentally.

a) 49 ÷ 7 = ☐ b) 90 ÷ 9 = ☐

c) 93 ÷ 3 = ☐ d) 42 ÷ 2 = ☐

e) 45 ÷ 5 = ☐ f) 96 ÷ 8 = ☐

6. There are 9 students in a class. If 45 chocolates are divided equally among them, how many chocolates does each student get?

7. There is 40 cm long ribbon. If we cut it into 5 pieces of equal length, what is the length of each piece of ribbon?

Approved by National Curriculum Council,
Ministry of Federal Education & Professional Training,
Government of Pakistan vide Letter No. F. No 1(1) 17-NCC,
dated 2nd December 2019

قومی ترانہ

پاک سر زمین شاد باد　　کشورِ حسین شاد باد
تُو نِشانِ عزمِ عالی شان　　ارضِ　　پاکستان!

مرکزِ یقین شاد باد

پاک سَر زمین کا نِظام　　قُوّتِ　　اُخوّتِ　　عوام
قوم، ملک، سلطنت　　پائندہ، تابندہ باد

شاد باد منزلِ مراد

پرچمِ ستارہ و ہلال　　رہبرِ ترقّی و کمال
ترجمانِ ماضی، شانِ حال　　جانِ　　استقبال!

سایۂ خدائے ذُوالجلال

Developed by:

AFAQ
Association For Academic Quality

Lahore
18-A Johar Town, Lahore
Phone: +92-42-111-AFAQ-PK (2327-75) 042-35171080-81
Fax: +92-42-35171089 Email: quality@afaq.edu.pk

Islamabad
Ajmir Manzil 2, Stadium Road Junction, IJP Road, Islamabad
Ph: +92-51-8433228, +92-51-8433227
Email: islamabad@afaq.edu.pk

www.afaq.edu.pk