



ADVANCE

MATHEMATICS

2





Contents %

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Revision

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Why Revision ?

Revision is very compulsory, for what we have read in previous class. It makes us active and warms up.

1. Jack and Jill have found a house made of sweets and biscuits. Help them to number the biscuits.

Colour **pink** the biscuits whose number names end with y.

Colour **blue** the biscuits whose number names end with n.

Colour **green** the biscuits whose number names end with e.

1						7			10
11	12	13		15		17	18		20
		23						29	30
51						57		59	
						67			70
						77			
								89	90
		93				97			

2. Write the following numbers in numerals :

Seventy five = _____

Forty = _____

Ninety two = _____

Eighty four = _____

10. What comes in between :

25		27		38		40		65		67
72		74		83		85		93		95

11. Put $>$, $<$ or $=$ between the numbers :

9		11		16		61		76		86
60		41		37		37		68		44

12. Encircle the greatest and smallest numbers :

48	19	35	56	49	36	23	87
----	----	----	----	----	----	----	----

13. Write in ascending and descending order :

45	93	25	36	81	96	75	84
----	----	----	----	----	----	----	----

14. Add :

$\begin{array}{r} 2 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 2 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 8 \\ \hline \end{array}$
---	---	---	---	---

15. Subtract :

$\begin{array}{r} 3 \\ - 2 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - 3 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - 2 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 7 \\ \hline \end{array}$
---	---	---	---	---

16. Add :

$\begin{array}{r} 20 \\ + 30 \\ \hline \end{array}$	$\begin{array}{r} 65 \\ + 20 \\ \hline \end{array}$	$\begin{array}{r} 48 \\ + 46 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ + 24 \\ \hline \end{array}$	$\begin{array}{r} 49 \\ + 34 \\ \hline \end{array}$
---	---	---	---	---

17. Subtract :

$\begin{array}{r} 80 \\ - 40 \\ \hline \end{array}$	$\begin{array}{r} 49 \\ - 28 \\ \hline \end{array}$	$\begin{array}{r} 56 \\ - 35 \\ \hline \end{array}$	$\begin{array}{r} 73 \\ - 47 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ - 63 \\ \hline \end{array}$
---	---	---	---	---

18. Raghav has 12 bananas and his sister has 8 bananas. How many bananas do they have in all ?

19. Mona has 48 biscuits. She gives 29 biscuits to Komal. How many biscuits does Mona have ?

20. There are 36 Pepsi bottles in one crate. How many bottles are there in 2 crates ?

21. 45 sweets are shared equally by 9 children. How many sweets does each get ?

22. Write in multiplication form :

$$4 + 4 + 4 + 4 + 4 = \underline{\quad} \times \underline{\quad} = \underline{\quad}$$

$$7 + 7 + 7 + 7 + 7 = \underline{\quad} \times \underline{\quad} = \underline{\quad}$$

23. Multiply :

$$3 \times 9 = \underline{\quad}$$

$$8 \times 7 = \underline{\quad}$$

$$9 \times 4 = \underline{\quad}$$

24. Multiply :

$$\begin{array}{r} 22 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 24 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 5 \\ \hline \\ \hline \end{array}$$

25. Divide :

$3 \overline{)21}$

$2 \overline{)18}$

$2 \overline{)12}$

$5 \overline{)20}$

$4 \overline{)32}$

26. Fill in the blanks :

1 rupee

=

_____ paise

1 twenty-rupee note

=

_____ 5-rupee notes

1 hundred-rupee note

=

_____ 10-rupee notes

27. Measure and write the length of :

Your pen

=

_____ cm

Your maths book

=

_____ cm

Your notebook

=

_____ cm

28. Write the time in the box :









29. Answer the following questions :

(a) How many months are there in a year ?

(b) What day is today ?

(c) What is this month ?

30. Write the names of the shapes :









Reading and Writing of 3-Digit Numbers

Learning Objectives :

- ❖ What are 3-Digit Numbers ?
- ❖ Reading and Writing of 3-Digit Numbers
- ❖ Ones, Tens and Hundreds
- ❖ After, Before, Between

Do you know that a number is a counting while a numeral is a number written in digits. Most people use the word number and numeral in same meaning.

➤ What are 3-Digit Numbers ?

Numbers that are made by three digits are called 3-digit numbers. 125, 463, 503, 900, etc. are 3-digit numbers.

➤ Reading and Writing of 3-Digit Numbers

 = 1 one

 = 10 ones
or 1 ten

 = 100 ones
or 10 tens
or 1 hundred

10 ones = 1 ten

100 ones = 10 tens = 1 hundred

1 hundred = 10 tens = 100 ones

100 is first 3-digit numeral.

It has 1 hundred, 0 ten and 0 one.

Read and trace numerals and number names from 101 to 115 :

100 + 1 = **101** one hundred one

100 + 2 = **102** one hundred two

100 + 3 = **103** one hundred three

100 + 4 = **104** one hundred four

100 + 5 = **105** one hundred five

100 + 6 = **106** one hundred six

100 + 7 = **107** one hundred seven

100 + 8 = **108** one hundred eight

100 + 9 = **109** one hundred nine

100 + 10 = **110** one hundred ten

100 + 11 = **111** one hundred eleven

100 + 12 = **112** one hundred twelve

100 + 13 = **113** one hundred thirteen

100 + 14 = **114** one hundred fourteen

100 + 15 = **115** one hundred fifteen

Ones, Tens and Hundreds

In any 3-digit number, from right to left, first place is of ones, second is of tens and third is of hundreds.

Look, at this :

Hundreds	Tens	Ones
1	2	5

In 125, 5 digit is of ones, 2 is of tens and 1 is of hundreds.

Now write ones, tens and hundreds in given numbers. Also write in words.

Hundreds Tens Ones

In Words

101				
102				
103				
104				
105				
106				
107				
108				
109				
110				

Read and trace numerals and number names from 116 to 130 :

$100 + 16 =$

116

one hundred sixteen

$100 + 17 =$

117

one hundred seventeen

$100 + 18 =$

118

one hundred eighteen

$100 + 19 =$

119

one hundred nineteen

$100 + 20 =$

120

one hundred twenty

$100 + 21 =$

121

one hundred twenty one

$100 + 22 =$

122

one hundred twenty two

$100 + 23 =$

123

one hundred twenty three

$100 + 24 =$

124

one hundred twenty four

$100 + 25 =$

125

one hundred twenty five

$100 + 26 =$

126

one hundred twenty six

$100 + 27 =$

127

one hundred twenty seven

$100 + 28 =$

128

one hundred twenty eight

$100 + 29 =$

129

one hundred twenty nine

$100 + 30 =$

130

one hundred thirty

Now write ones, tens and hundreds in given numbers. Also write in words

	Hundreds	Tens	Ones	In Words	Re
116					10
117					10
118					10
119					10
120					10
121					10
122					10
123					100
124					100
125					100
126					100
127					
128					
129					
130					

Read and trace :

$100 + 0 \text{ ten} =$	100	one hundred
$100 + 1 \text{ ten} =$	110	one hundred ten
$100 + 2 \text{ tens} =$	120	one hundred twenty
$100 + 3 \text{ tens} =$	130	one hundred thirty
$100 + 4 \text{ tens} =$	140	one hundred forty
$100 + 5 \text{ tens} =$	150	one hundred fifty
$100 + 6 \text{ tens} =$	160	one hundred sixty
$100 + 7 \text{ tens} =$	170	one hundred seventy
$100 + 8 \text{ tens} =$	180	one hundred eighty
$100 + 9 \text{ tens} =$	190	one hundred ninety
$100 + 10 \text{ tens} =$	200	two hundred



Common Mistake



- The number name of 140 is one forty. ✗
The number name of 140 is one hundred forty. ✓
- One hundred thirty nine is written as 10039. ✗
One hundred thirty nine is written as 139. ✓

Write, read and trace in tens (numerals and number names) starting from 100 as directed :

$100 + 0 \text{ ten} = 100$

one hundred

$100 + 1 \text{ ten} = 110$

one hundred ten



Some numerals and number names are given below. Learn these and trace :

139	one hundred thirty nine
146	one hundred forty six
157	one hundred fifty seven
164	one hundred sixty four
173	one hundred seventy three
181	one hundred eighty one
197	one hundred ninety seven
214	two hundred fourteen

Write in ones, tens hundreds and in words too :

	Hundreds	Tens	Ones	In Words
125				
137				
149				
156				
163				
177				
196				
224				

Read and write numbers from 101 to 200 :

101	102	103	104							110
111	112	113								120
121	122									130
131					136					
141										150
			154							
		163								
				175						
181					186					190
		193							199	

Fill in the missing numbers :

121	122								
135	136								
142	143								
151	152								
163	164								
172	173								
184	185								
190									
154									
176									

Read and trace :

100 one hundred

200 two hundred

300 three hundred

400 four hundred

500 five hundred

600 six hundred

700 seven hundred

800 eight hundred

900 nine hundred



Project

Which number comes before each number ?

Which number comes after each number ?

Before	Number	After
124	125	126
	100	
	150	
	170	
	192	
	187	
	145	
	165	



Life Skills

Practise your spelling skills!

Fill in the missing letters in these number names :

fo _ ty t _ _ 42

nin _ t _ si _ 96

sev _ nt _ fiv _ 75

si _ t _ fo _ r 64

f _ rty sev _ n 47

t _ e _ t _ thr _ _ 23

eig _ t _ _ n 18

fi _ ty _ ne 51

Write numbers from 201 to 300 :

201 202 203

211 212

221

238

231

243

254

265

277

271

286

289

297

Fill in the missing numbers :

181 182

201 202

230 231

245 246

259

260

271

285

290

257

Match the following and write the number names again :

12	one hundred ninety	<i>one hundred twelve</i>
25	one hundred sixty three	
35	one hundred twelve	
43	one hundred thirty five	
56	one hundred eighty one	
63	one hundred twenty five	
72	one hundred seventy two	
81	one hundred fifty six	
90	one hundred forty three	

Trace and write numerals :

<i>one hundred twenty six</i>	126
<i>two hundred eighteen</i>	
<i>one hundred forty eight</i>	
<i>two hundred sixty six</i>	
<i>one hundred ninety nine</i>	
<i>two hundred ninety one</i>	
<i>one hundred twenty three</i>	

Write the numbers in counting order (across) :

201 202

311

401

521

641

831

471

551

981

791

Write the missing numbers. Say them aloud as you write :

101	102			105				109	110
		113			116				
									130
			134						
						147			
151									
									170
				175			178		
		183							
									200

121			
131	132		
141		143	
136			
	147		
			158
	178		
187			190
197			

Write counting backwards (200 to 101) :

200	199	198						192	
190	189								
180							173		
170						164		162	
		158							
150									
140		138					133		
			127				123		
						114			
								102	

Write counting backwards (300 to 201) :

300	299	298						292	
290	289							282	
280	279							272	
270								262	
260									
						244			
240						234			
220		218							
					205				

Write counting backwards :

100

201

301

400

420

500

571

655

870

836

Write the numbers in counting order :

141

765

225

142

801

522

849

873

555

805

741

342

After, Before, In between

Write the number that comes :

after

before

In between

25

95

41

59

68

119

130

369

480

709

891

999

169

199

230

7

21

39

51

81

161

120

691

563

610

701

990

242

548

492

6

15

26

9

30

109

128

319

528

779

799

989

139

199

448

8

17

28

11

32

111

130

321

530

781

801

991

141

201

450

Read Aloud

194

256

378

245

264

225

Learning Objectives :

- ❖ What is Place Value ?
- ❖ Place Values of Digits in 3-Digit Numbers

➤ What is Place Value ?

The place value of a digit depends on its position in the number. We use place value headings to work out the value of each digit in a number.

➤ Place Values of Digits in 3-Digit Numbers

Take a number 765. We know that :

$$\begin{aligned} 765 &= 700 + 60 + 5 \\ &= 7 \text{ hundreds, } 6 \text{ tens and } 5 \text{ ones} \end{aligned}$$

In 765, the digit 5 is at ones place.

Here 5 has the value = 5 ones or 5.

In 765, the digit 6 is at tens place.

Here 6 has the value = 6 tens or 60.

In 765, the digit 7 is at hundreds place.

Here 7 has the value = 7 hundreds or 700.

Common Mistake

- The place value of 7 in 769 is 7. ✗
The place value of 7 in 769 is 7 hundred or 700. ✓
- The place value of 3 in 632 is 3. ✗
The place value of 3 in 632 is 3 tens or 30. ✓

Face value of a digit is the digit itself whatever its place be in a numeral.

$$\text{Face value of 6 in 586} = 6$$

$$\text{Face value of 8 in 586} = 8$$

$$\text{Face value of 5 in 586} = 5$$

Write the place and place value of each digit :

Numeral	Digit	Place
875	5	Ones place
	7	Tens place
	8	Hundreds place
295	5	
	9	
	2	
823		
478		
632		
536		
545		

Place value

5 Ones = 5

7 Tens = 70

8 Hundreds = 800

Fill in the blanks :

$$100 + 1 = \underline{101}$$

$$100 + 80 = \underline{\quad}$$

$$100 + 10 + 3 = \underline{\quad}$$

$$1 \text{ hundred} + 3 \text{ tens} = \underline{\quad}$$

$$1 \text{ hundred} + 1 \text{ ten} + 7 \text{ ones} = \underline{\quad}$$

$$1 \text{ hundred} + 2 \text{ tens} + 9 \text{ ones} = \underline{\quad}$$

$$1 \text{ hundred} + 9 \text{ tens} + 2 \text{ ones} = \underline{\quad}$$

$$100 + 20 + 5 = \underline{\quad}$$

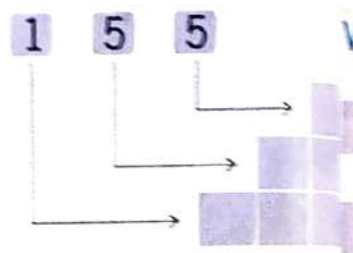
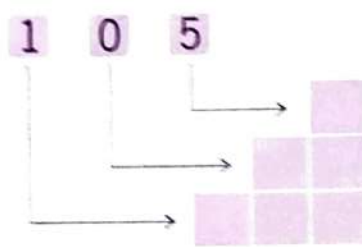
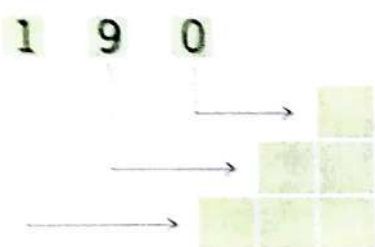
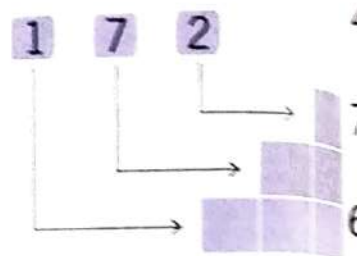
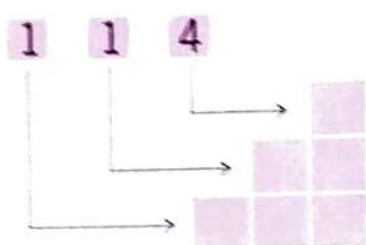
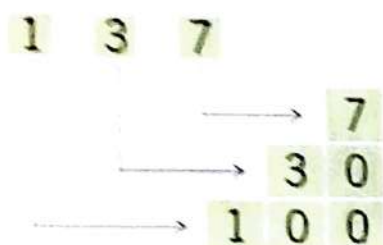
$$100 + 60 + 9 = \underline{\quad}$$

$$1 \text{ hundred} + 6 \text{ ones} = \underline{106}$$

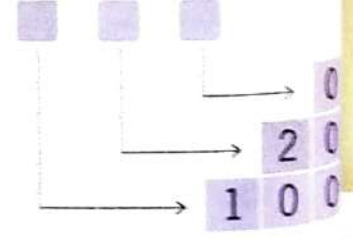
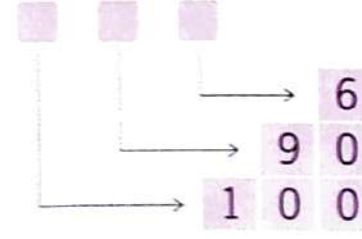
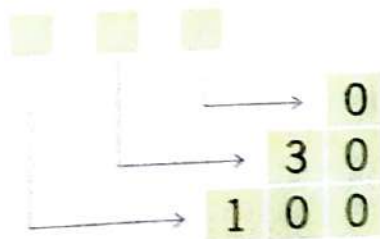
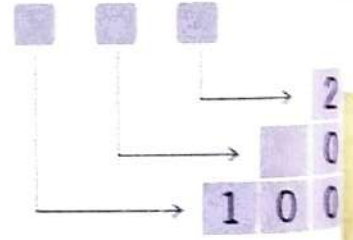
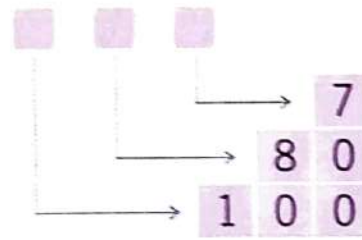
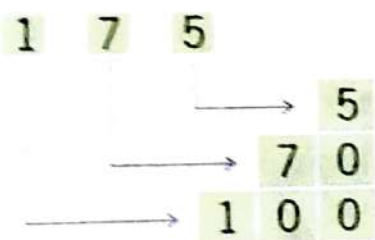
106 birds lives on our tree.



Write the place value of each digit :



Write the number :



Fill in the blanks :

$682 = 600 + \square + \square$	$600 + 0 + 4 = \square$
$503 = \square + \square + 3$	$100 + \square + 8 = 198$
$953 = 900 + \square + \square$	$400 + \square + 0 = 420$

How many hundreds, tens and ones :

$654 = 6$ hundreds + 5 tens + 4 ones
$453 = \square$ hundreds + \square tens + \square ones
$759 = \square$ hundreds + \square tens + \square ones
$609 = \square$ hundreds + \square ten + \square ones

Write the numerals :

5 hundreds + 3 tens + 2 ones = 532
6 hundreds + 8 tens + 7 ones = \square
1 hundred + 9 tens + 3 ones = \square

Hots Questions



I am an even number between 1 and 10. I am less than 4.

I am _____.

I am an odd number between 1 and 10. I am greater than 5 but less than 9. I am _____





Comparison of 3-Digit Numbers

Learning Objectives :

- ❖ What is Comparison of Numbers ?
- ❖ Rules for Comparing of 3-Digit Numbers
- ❖ Word Problems
- ❖ Greatest or Least (Smallest) Number
- ❖ Ascending and Descending Order
- ❖ Ordinal Numbers

What is Comparison of Numbers ?

When we see that any number is greater or smaller any other number is called **comparison of number**.

Rules for Comparing of 3-Digit Numbers

1. A number of more digits is always greater than the number with less digits.

For example : $225 > 44$ or $44 < 225$

Fact File

Sign for greater than is $>$; sign for lesser than is $<$.

2. If the number of digits is the same, the number with greater hundreds digit is greater.

For example : $641 > 498$ or $498 < 641$

3. If the hundreds digits are the same, the number with greater tens digit is greater.

For example : $391 > 359$ or $359 < 391$

4. If the hundreds and tens digits are the same, the number with greater ones digit is greater.

For example : $349 > 344$ or $344 < 349$

Fact File

Compare hundreds first, then tens, then ones.

Write the greater number :

384, 481

_____ 481 _____

121, 111

998, 988

609, 612

673, 678

381, 389

946, 649

786, 781

219, 120

533, 733

Tick (✓) the correct option (MCQs) :

The number for one hundred sixty is :

116

160

10060

The place value of 3 in 123 is :

30

1

3

The number just before 200 is :

199

190

100

One hundred forty two is greater than :

142

124

190

64 is less than :

fifty six

one hundred

fifty two

Compare the numbers and put > or < in between :

101

>

99

264

<

275

258

>

314

385

<

365

721

<

711

648

<

650

736

<

698

940

<

979

466

<

555

899

<

105

841

<

759

705

<

718

255

<

259

371

<

384

816

<

800

Write the numbers that are :

> 177 and < 182

178, 179, 180, 181

> 116 and < 121

> 396 and < 401

> 234 and < 229

> 486 and < 482

Word Problems

1. Write the smallest number of 2-digit.
2. Write the greatest number of 2-digit.
3. What is the smallest number of 3-digit ?
4. What is the greatest number of 3-digit ?
5. There are 243 apples in a box and 301 apples in a basket. Which has more ?
6. Write the smallest number of 3-digit using the digits 1, 3 and 4. Do not repeat any digit.
7. Mayank jumped 20 centimetres and Saurabh jumped 95 centimetres high. Who jumped more ?
8. Jaipur is 281 kilometres from Delhi and Agra is 233 kilometres from Delhi. Which city is nearer from Delhi ?

➤ Greatest or Least (Smallest) Number

We can compare more than two 3-digit numbers, but must always remember that compare hundreds first, then tens, then ones.

Example 1 : Which is the greatest number of 629, 238, 565 ?

Solution : Hundreds digit in 629 is the greatest.

So, 629 is the greatest number of these.

Example 2 : Which is the least number of 254, 245, 265 ?

Solution : Hundreds digit is the same in each number. But tens digit in 245 is the least.

So, 245 is the least number of these.

Encircle the greatest number :

381, 322, 375

630, 733, 819

672, 579, 575

811, 833, 818

649, 536, 731

444, 128, 247

693, 518, 946

Encircle the least number :

572, 472, 372

938, 871, 817

516, 340, 255

602, 612, 671

674, 614, 692

100, 78, 86

815, 694, 761

Ascending and Descending Order

Ascending Order : In ascending order, first we write the least number then the least number of the rest and so on.

Ascending Order

Least number → Greater number → Greater number → Greatest number

Example 3 : Write in the ascending order :

765, 675, 567, 776

Solution : Hundreds digit of 567 is the least of all.

So, 567 is the least of all numbers.

Similarly, 675 is the least of the rest three numbers.

$765 < 776$

Hence, ascending order of the numbers is :

567, 675, 765, 776

Descending order : In descending order, first we write the greatest number, then the greatest number of the rest and so on.

Descending Order

Greatest number → Lesser number → Lesser number → Least number

Example 4 : Write in the descending order :

432, 234, 442, 224

Solution : Hundreds digits of 432 and 442 are the greatest but tens digit of 442 > tens digit of 432.

Hence, $442 > 432$

442 is the greatest of all numbers.

Similarly, 432 is the greatest of the rest.

Again $234 > 224$

Now the descending order of the numbers is :

442, 432, 234, 224

Write in the ascending order :

56, 390, 305, 60

555, 505, 403, 314

432, 121, 241, 234

108, 700, 304, 215

561, 906, 305, 314

99, 487, 145, 106

72, 57, 25, 68

Write in the descending order :

16, 117, 88, 210

25, 101, 685, 421

742, 666, 787, 729

404, 339, 286, 581

603, 599, 573, 807

76, 107, 391, 126

400, 516, 910, 617

56, 60, 305, 390

210, 117, 88, 16

Ordinal Numbers

A number defining the position of something in a series as, first, second, third is called **ordinal numbers**.



₹ 25



₹ 265



₹ 410



₹ 305

In the above toys, toy car is most expensive in all. So, it's on **first position** in rate.

Thus duck toy is on **second position**.

Bat is on **third position**.

Ball is on **fourth position**.

These first, second, third and fourth are **ordinal numbers**.

Word Problems on Ordinal Numbers

1. Start from the left.



Draw a 🌳 on the fourth shirt.

Draw a 😊 on the seventh shirt.

Colour the second and the sixth shirt pink.

Colour the third and the eighth shirt **blue**.

Draw a △ on the ninth shirt.

Write the first letter of your name on the tenth shirt.

2. Write

L on the sixth blank and R on the ninth.

A on the eighth and N on the third.

K on the seventh and E on the second.

D on the fourth and U on the fifth and T on the first.

Find the position of each in the following questions :

	Name	Position
1. Sonam is 108 centimetres tall, Rajan is 121 centimetres tall and Anshu is 119 centimetres tall.	Sonam	
	Rajan	
	Anshu	
2. Gopal got 84 marks, Mona got 68 marks, Kapil got 62 marks and Geet got 90 marks in maths examination.	Gopal	
	Mona	
	Kapil	
	Geet	
3. Sakshi takes 322 seconds, Nitin takes 236 seconds and Roma takes 280 seconds to run a race. (The runner taking least time will be first here.)	Sakshi	
	Nitin	
	Roma	
4. Mayank jumped 120 centimeters high, Saurabh jumped 96 centimeters high and John jumped 117 centimeters high.	Mayank	
	Saurabh	
	John	
5. Sachin got 302 marks, Pallavi got 315 marks and Udit got 292 marks in the class II examination.	Sachin	
	Pallavi	
	Udit	

Let's Recall

Multiple Choice Questions (MCQs) :

- I am odd and less than 10. I am the largest 1-digit number. I am _____ .
(a) 7 (b) 9 (c) 0 (d) 6
- The place of 7 in 742 is _____ .
(a) ones (b) tens
(c) hundreds (d) None of these
- Which one of the following is the smallest number ?
(a) 215 (b) 225 (c) 205 (d) 230
- Which one of the following is correct ?
(a) $314 < 127$ (b) $835 > 742$
(c) $414 < 314$ (d) $750 > 915$
- Sumit got 83 marks, Ankit got 78 marks and John got 92 marks in Math's test. What is the position of John ?
(a) First (b) Second
(c) Third (d) None of these
- Which one of the following is < 253 and > 248 ?
(a) 247 (b) 249
(c) 248 (d) None of these
- Which one of the following is the correct expanded form of 645 ?
(a) $600 + 40 + 5$ (b) $600 + 400 + 5$
(c) $600 + 4 + 5$ (d) None of these
- The greatest number of three digits is :
(a) 100 (b) 99 (c) 999 (d) 900
- The place value of 5 in 953 is :
(a) 500 (b) 50 (c) 5 (d) None of these
- Write the numeral for 7 hundred + 1 ten + 5 ones.
(a) 51 (b) 157 (c) 715 (d) 751

Learning Objectives :

- ❖ What is Addition ?
- ❖ Addition on the Number line
- ❖ Properties of Addition
- ❖ Adding 10 or 100
- ❖ Addition of 2-Digit Numbers without Carrying
- ❖ Addition of 3-Digit Numbers without Carrying
- ❖ Addition of 2-Digit Numbers with Carrying
- ❖ Addition of 3-Digit Numbers with Carrying
- ❖ Word Problems on Addition

➤ What is Addition ?

Addition is finding the total or sum by combining two or more numbers.

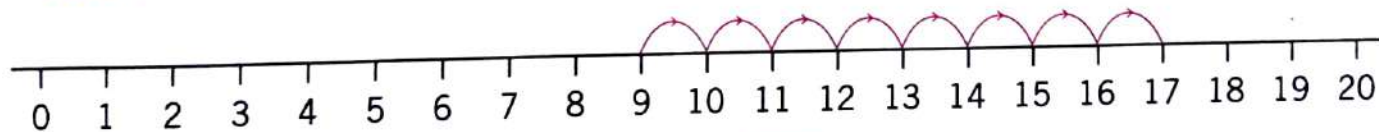
$$\text{Such as } 6 + 7 = 13$$

$$7 + 5 + 2 = 14$$

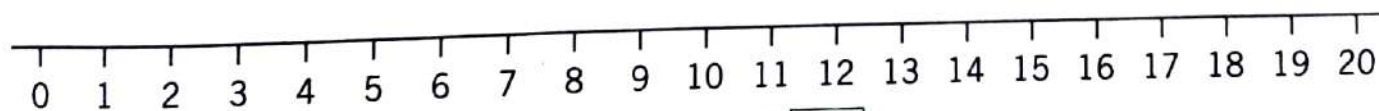
The numbers which are added are called **addends** and the result after addition is called **sum** or **total**.

➤ Addition on the Number Line

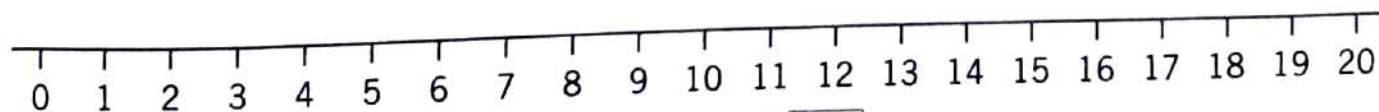
Add these on number lines :



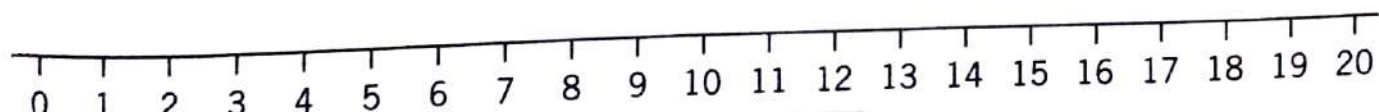
$$9 + 8 = 17$$



$$7 + 8 + 3 = \square$$

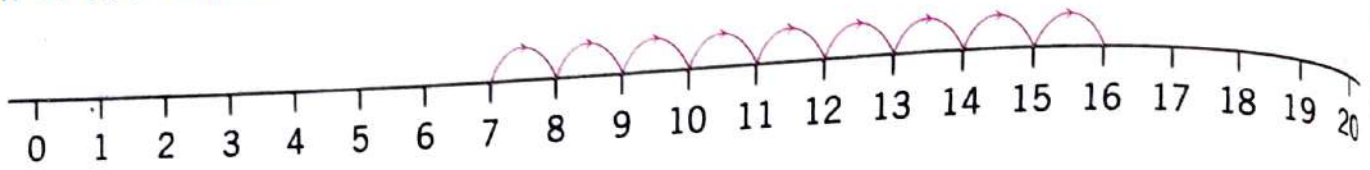


$$4 + 7 + 4 = \square$$

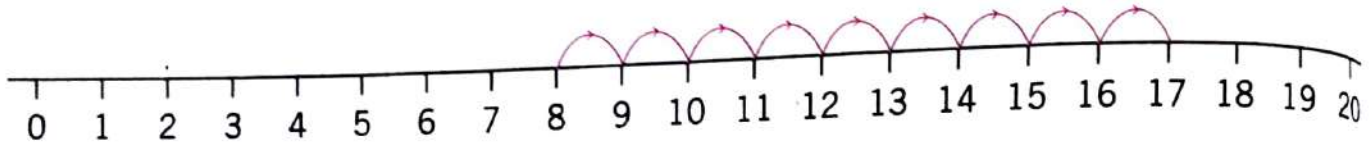


$$2 + 6 + 6 = \square$$

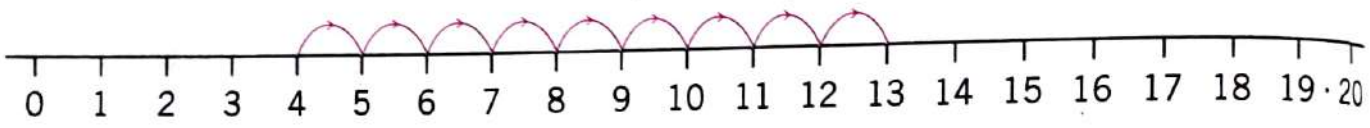
Fill in the blanks :



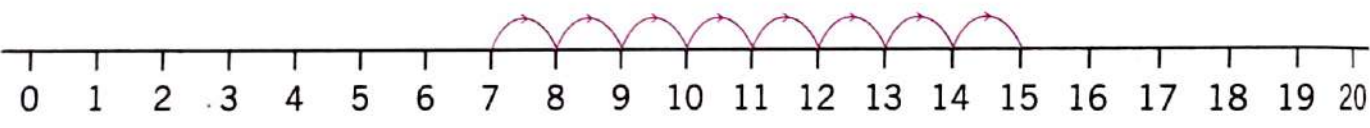
$$7 + 9 = 16$$



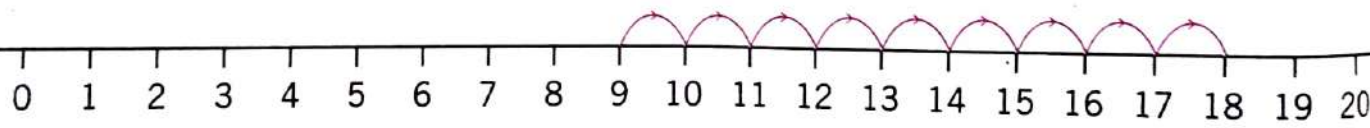
$$\square + \square = \square$$



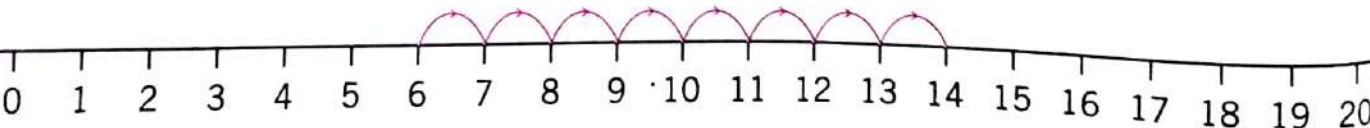
$$\square + \square = \square$$



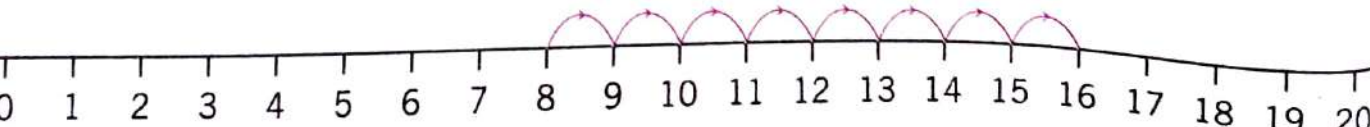
$$\square + \square = \square$$



$$\square + \square = \square$$



$$\square + \square = \square$$



$$\square + \square = \square$$

➤ Properties of Addition

On adding numbers in any order, we get the same total. Such as,

$$5 + 6 = 11$$

$$6 + 5 = 11$$

$$5 + 6 = 6 + 5$$

A change in the grouping of numbers does not change the total. Such as,

$$\begin{aligned}(4 + 3) + 2 &= 7 + 2 \\ &= 9\end{aligned}$$

$$\begin{aligned}4 + (3 + 2) &= 4 + 5 \\ &= 9\end{aligned}$$

On adding zero to a number, we get the number itself. Such as,

$$7 + 0 = 7$$

$$0 + 7 = 7$$

On adding one to a number, we get the next number. Such as,

$$5 + 1 = 6$$

➤ Adding 10 or 100

$$83 + 10 = 93$$

$$163 + 10 = 173$$

On adding 1 ten to a number, the tens digit increases by 1.

$$349 + 100 = 449$$

On adding 1 hundred to a number, the hundreds digit increases by 1.

$$359 + 20 = 379$$

On adding 2 tens to a number, the tens digit increases by 2.

Fill in the blanks :

$$\square + 5 = 5 + 35$$

$$8 + 4 = \square + 8$$

$$76 + 4 = 4 + \square$$

$$44 + 33 = \square + 44$$

$$7 + 13 = 13 + \square$$

$$5 + \square = 9 + 5$$

$$(3 + 5) + 2 = \square + (5 + 2)$$

$$(6 + 3) + 4 = 6 + (3 + \square)$$

$$135 + 0 = \square$$

$$8 + 0 = \square$$

$$76 + 0 = \square$$

$$0 + 276 = \square$$

$$0 + 5 = \square$$

$$0 + 89 = \square$$

$$128 + 1 = \square$$

$$7 + 1 = \square$$

$$19 + 1 = \square$$

$$70 + 20 = \square$$

$$20 + 10 = \square$$

$$50 + 10 = \square$$

$$465 + 20 = \square$$

$$123 + 10 = \square$$

$$465 + 10 = \square$$

$$325 + 100 = \square$$

$$249 + 20 = \square$$

$$732 + 100 = \square$$

$$741 + 100 = \square$$

$$100 + 10 = \square$$

$$230 + 200 = \square$$

Write four numbers adding on 10 each time :

740

750

923

933

Write four numbers adding on 100 each time :

224

324

430

530

Addition of 2-Digit Numbers without Carrying

Example 1 : Add 43 and 25 in expanded form.

Solution :

$$\begin{array}{r}
 43 \rightarrow 4 \text{ tens} + 3 \text{ ones} \\
 + 25 \rightarrow 2 \text{ tens} + 5 \text{ ones} \\
 \hline
 6 \text{ tens} + 8 \text{ ones} \\
 = 68
 \end{array}
 \quad \text{or} \quad
 \begin{array}{r}
 43 \rightarrow 40 + 3 \\
 + 25 \rightarrow 20 + 5 \\
 \hline
 60 + 8 \\
 = 68
 \end{array}$$

Example 2 : Add 43 and 25 in short form.

Solution :

Addition of ones - 3 ones + 5 ones = 8 ones

Addition of tens - 4 tens + 2 tens = 6 tens

$$\begin{array}{r}
 \text{ T} \text{ O} \\
 4 \text{ T} \text{ O} \\
 + 2 \text{ T} \text{ O} \\
 \hline
 6 \text{ T} \text{ O} \\
 \hline
 68
 \end{array}$$

Now add these in expanded form :

$$\begin{array}{r}
 52 \longrightarrow 5 \text{ tens} + 2 \text{ ones} \longrightarrow 50 + 2 \\
 + 23 \longrightarrow 2 \text{ tens} + 3 \text{ ones} \longrightarrow 20 + 3 \\
 \hline
 = \boxed{}
 \end{array}$$

$$\begin{array}{r}
 42 \longrightarrow \boxed{} \text{ tens} + \boxed{} \text{ ones} \longrightarrow \boxed{} + \boxed{} \\
 + 15 \longrightarrow \boxed{} \text{ tens} + \boxed{} \text{ ones} \longrightarrow \boxed{} + \boxed{} \\
 \hline
 = \boxed{}
 \end{array}$$

$$\begin{array}{r}
 43 \longrightarrow \boxed{} \text{ tens} + \boxed{} \text{ ones} \longrightarrow \boxed{} + \boxed{} \\
 + 25 \longrightarrow \boxed{} \text{ tens} + \boxed{} \text{ ones} \longrightarrow \boxed{} + \boxed{} \\
 \hline
 = \boxed{}
 \end{array}$$

Add :

Common Mistake

$$\begin{array}{r} T O \\ 34 \\ + 43 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 66 \\ + 21 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 33 \\ + 42 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ + 21 \\ \hline 671 \end{array} \quad \times$$

$$\begin{array}{r} T O \\ 65 \\ + 21 \\ \hline 86 \end{array} \quad \checkmark$$

$$\begin{array}{r} T O \\ 46 \\ + 23 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 62 \\ + 25 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 75 \\ + 14 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 20 \\ + 42 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 50 \\ + 26 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 35 \\ + 24 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 31 \\ + 42 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 37 \\ + 22 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 27 \\ + 21 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 52 \\ + 36 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 42 \\ + 17 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 52 \\ + 13 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 44 \\ + 50 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 13 \\ + 36 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 57 \\ + 42 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 37 \\ + 51 \\ + 11 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 60 \\ + 34 \\ + 15 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 62 \\ + 11 \\ + 26 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 24 \\ + 22 \\ + 32 \\ \hline \end{array}$$

$$\begin{array}{r} T O \\ 56 \\ + 33 \\ + 10 \\ \hline \end{array}$$



Mental Maths

Fill in the blanks :

$37 + 1 = \underline{\quad}$

$68 + \underline{\quad} = 68$

Add 13 to 47. $\underline{\quad}$

9 added 2 times = $\underline{\quad}$

10 plus 16 = $\underline{\quad}$

$16 + 7 = 7 + \underline{\quad}$

Addition of 3-Digit Numbers without Carrying

Example 3 : Add 432 and 253 in expanded form.

Solution :

$$\begin{array}{r}
 432 \rightarrow 4 \text{ hundreds} + 3 \text{ tens} + 2 \text{ ones} \rightarrow 400 + 30 + 2 \\
 +253 \rightarrow 2 \text{ hundreds} + 5 \text{ tens} + 3 \text{ ones} \rightarrow 200 + 50 + 3 \\
 \hline
 6 \text{ hundreds} + 8 \text{ tens} + 5 \text{ ones} \rightarrow 600 + 80 + 5 \\
 = 685
 \end{array}$$

add in expanded form :

$$\begin{array}{r}
 462 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + 60 + \square \\
 + 235 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square \\
 = \square
 \end{array}$$

$$\begin{array}{r}
 214 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow 200 + 10 + 4 \\
 + 543 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + 40 + \square \\
 \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square \\
 = \square
 \end{array}$$

$$\begin{array}{r}
 635 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 + 248 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square \\
 = \square
 \end{array}$$

Help Mona to add :



$$\begin{array}{r} \text{H T O} \\ 134 \\ + 425 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 731 \\ + 124 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 157 \\ + 242 \\ \hline \end{array}$$

$$\begin{array}{r} 331 \\ + 425 \\ \hline \end{array}$$

$$\begin{array}{r} 152 \\ + 543 \\ \hline \end{array}$$

$$\begin{array}{r} 271 \\ + 524 \\ \hline \end{array}$$

$$\begin{array}{r} 332 \\ + 615 \\ \hline \end{array}$$

$$\begin{array}{r} 352 \\ + 326 \\ \hline \end{array}$$

$$\begin{array}{r} 152 \\ + 435 \\ \hline \end{array}$$

$$\begin{array}{r} 341 \\ + 507 \\ \hline \end{array}$$

$$\begin{array}{r} 327 \\ + 561 \\ \hline \end{array}$$

$$\begin{array}{r} 127 \\ + 726 \\ \hline \end{array}$$

$$\begin{array}{r} 636 \\ + 63 \\ \hline \end{array}$$

$$\begin{array}{r} 101 \\ + 816 \\ \hline \end{array}$$

$$\begin{array}{r} 204 \\ + 561 \\ \hline \end{array}$$

$$\begin{array}{r} 723 \\ + 165 \\ \hline \end{array}$$

$$\begin{array}{r} 205 \\ + 391 \\ \hline \end{array}$$

$$\begin{array}{r} 271 \\ + 625 \\ \hline \end{array}$$

$$\begin{array}{r} 265 \\ + 432 \\ \hline \end{array}$$

$$\begin{array}{r} 451 \\ + 518 \\ \hline \end{array}$$

$$\begin{array}{r} 623 \\ + 144 \\ \hline \end{array}$$

$$\begin{array}{r} 432 \\ + 544 \\ \hline \end{array}$$

$$\begin{array}{r} 131 \\ 26 \\ + 342 \\ \hline \end{array}$$

$$\begin{array}{r} 102 \\ 203 \\ + 574 \\ \hline \end{array}$$

$$\begin{array}{r} 324 \\ 241 \\ + 302 \\ \hline \end{array}$$

$$\begin{array}{r} 142 \\ 126 \\ + 500 \\ \hline \end{array}$$

Help Rohan to add :



$$\begin{array}{r} \text{H T O} \\ 323 \\ + 125 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 418 \\ + 171 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 365 \\ + 214 \\ \hline \end{array}$$

$$\begin{array}{r} 460 \\ + 129 \\ \hline \end{array}$$

$$\begin{array}{r} 311 \\ + 497 \\ \hline \end{array}$$

$$\begin{array}{r} 215 \\ + 190 \\ \hline \end{array}$$

$$\begin{array}{r} 235 \\ + 182 \\ \hline \end{array}$$

$$\begin{array}{r} 375 \\ + 284 \\ \hline \end{array}$$

$$\begin{array}{r} 453 \\ + 296 \\ \hline \end{array}$$

$$\begin{array}{r} 376 \\ + 181 \\ \hline \end{array}$$

$$\begin{array}{r} 109 \\ + 380 \\ \hline \end{array}$$

$$\begin{array}{r} 135 \\ + 142 \\ \hline \end{array}$$

$$\begin{array}{r} 218 \\ + 170 \\ \hline \end{array}$$

$$\begin{array}{r} 165 \\ + 213 \\ \hline \end{array}$$

$$\begin{array}{r} 343 \\ + 133 \\ \hline \end{array}$$

$$\begin{array}{r} 153 \\ + 224 \\ \hline \end{array}$$

$$\begin{array}{r} 244 \\ + 185 \\ \hline \end{array}$$

$$\begin{array}{r} 347 \\ + 181 \\ \hline \end{array}$$

$$\begin{array}{r} 416 \\ + 342 \\ \hline \end{array}$$

$$\begin{array}{r} 142 \\ + 133 \\ \hline \end{array}$$

$$\begin{array}{r} 156 \\ + 172 \\ \hline \end{array}$$

$$\begin{array}{r} 314 \\ + 123 \\ \hline \end{array}$$

$$\begin{array}{r} 133 \\ 131 \\ + 214 \\ \hline \end{array}$$

$$\begin{array}{r} 211 \\ 110 \\ + 142 \\ \hline \end{array}$$

$$\begin{array}{r} 102 \\ 125 \\ + 121 \\ \hline \end{array}$$

$$\begin{array}{r} 340 \\ 110 \\ + 210 \\ \hline \end{array}$$

Help Rohan to add :



$$\begin{array}{r} \text{H T O} \\ 323 \\ + 125 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 418 \\ + 171 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 365 \\ + 214 \\ \hline \end{array}$$

$$\begin{array}{r} 460 \\ + 129 \\ \hline \end{array}$$

$$\begin{array}{r} 311 \\ + 497 \\ \hline \end{array}$$

$$\begin{array}{r} 215 \\ + 190 \\ \hline \end{array}$$

$$\begin{array}{r} 235 \\ + 182 \\ \hline \end{array}$$

$$\begin{array}{r} 375 \\ + 284 \\ \hline \end{array}$$

$$\begin{array}{r} 453 \\ + 296 \\ \hline \end{array}$$

$$\begin{array}{r} 376 \\ + 181 \\ \hline \end{array}$$

$$\begin{array}{r} 109 \\ + 380 \\ \hline \end{array}$$

$$\begin{array}{r} 135 \\ + 142 \\ \hline \end{array}$$

$$\begin{array}{r} 218 \\ + 170 \\ \hline \end{array}$$

$$\begin{array}{r} 165 \\ + 213 \\ \hline \end{array}$$

$$\begin{array}{r} 343 \\ + 133 \\ \hline \end{array}$$

$$\begin{array}{r} 153 \\ + 224 \\ \hline \end{array}$$

$$\begin{array}{r} 244 \\ + 185 \\ \hline \end{array}$$

$$\begin{array}{r} 347 \\ + 181 \\ \hline \end{array}$$

$$\begin{array}{r} 416 \\ + 342 \\ \hline \end{array}$$

$$\begin{array}{r} 142 \\ + 133 \\ \hline \end{array}$$

$$\begin{array}{r} 156 \\ + 172 \\ \hline \end{array}$$

$$\begin{array}{r} 314 \\ + 123 \\ \hline \end{array}$$

$$\begin{array}{r} 133 \\ 131 \\ + 214 \\ \hline \end{array}$$

$$\begin{array}{r} 211 \\ 110 \\ + 142 \\ \hline \end{array}$$

$$\begin{array}{r} 102 \\ 125 \\ + 121 \\ \hline \end{array}$$

$$\begin{array}{r} 340 \\ 110 \\ + 210 \\ \hline \end{array}$$

Addition of 2-Digit Numbers with Carrying

Example 4 : Add 47 to 29.

Solution :

Add ones first,
 $9 + 7 = 16$ ones
 $= 1$ ten + 6 ones

Write 6 ones at the bottom of the ones column. Carry 1 ten above the tens.

Add tens : $1 + 2 + 4 = 7$ Sum = 76

	T	O
	1	
	2	9
+	4	7
	7	16

Add :

	T	O
	2	4
+	1	6

	T	O
	2	7
+	1	8

	T	O
	1	5
+	2	6

	T	O
	2	9
+	1	7
	3	16

Common Mistake

	T	O
	1	
	2	9
+	1	7
	4	6

	7	5
+	1	6

	4	5
+		7

	1	6
+	3	8

	3	5
+		6

	2	1
+	2	9

	6	5
+	4	8

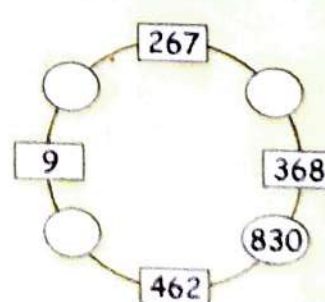
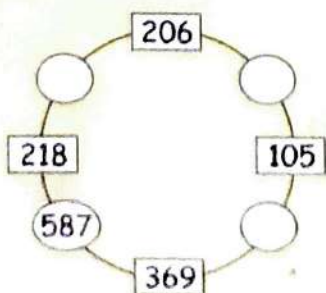
	6	6
+	2	8

	2	7
+	6	4

	5	2
+	3	8

	3	9
+	4	7

Fill in the circles



Hots Questions

Add :

$$\begin{array}{r} \text{T O} \\ 46 \\ 73 \\ + 61 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 25 \\ 42 \\ + 7 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 16 \\ 26 \\ + 36 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 24 \\ 48 \\ + 22 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 29 \\ 21 \\ + 40 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 19 \\ 37 \\ + 18 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 37 \\ 28 \\ + 16 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 43 \\ 18 \\ + 23 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 29 \\ 37 \\ + 25 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 27 \\ 52 \\ + 9 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 48 \\ 27 \\ + 14 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 35 \\ 46 \\ + 17 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 28 \\ 27 \\ + 18 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 49 \\ 34 \\ + 5 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 6 \\ 57 \\ + 63 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 12 \\ 54 \\ + 36 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 14 \\ 46 \\ + 78 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 79 \\ 47 \\ + 9 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 38 \\ 27 \\ + 14 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 27 \\ 18 \\ + 65 \\ \hline \hline \end{array}$$

Hots Questions

Meenu has 68 storybooks. Raja has 36 books more than Meenu.

How many books does Raja have ?

How many books do Meenu and Raja have together ?



➤ Addition of 3-Digit Numbers with Carrying

Example 5 : Add 358 to 249.

Solution : Add ones : $8 + 9 = 17 = 1 \text{ ten} + 7 \text{ ones}$
Write 7 in the ones column. Carry 1 ten above the tens column and add :

$$1 + 5 + 4 = 10 \\ = 1 \text{ hundred} + 0 \text{ ten}$$

Write 0 in the tens column. Carry 1 hundred above the hundreds column and add :

$$1 + 3 + 2 = 6 \text{ (hundreds)}$$

Write 6 in the hundreds column.

$$\text{Sum} = 607$$

	H	T	O
	1	1	0
	3	5	8
+	2	4	9
	6	0	7

Add :

	H	T	O
	1	4	8
+	3	5	6

	H	T	O
	1	8	2
+	2	8	9

	H	T	O
	3	6	4
+	1	7	6
	4	13	10

Common Mistake

	H	T	O
	1	1	
	3	6	4
+	1	7	6
	5	4	0

	H	T	O
	1	8	5
+	5	3	7

	H	T	O
	1	7	6
+	6	4	6

	H	T	O
	5	6	8
+	3	9	9

	H	T	O
	7	7	7
+	3	4	5



Mental Maths

Add by grouping the numbers. First, look for numbers that will add up to 10 :

$5 + 4 + 6 = \underline{\quad\quad\quad} \quad 5 + 3 + 5 = \underline{\quad\quad\quad} \quad 3 + 7 + 6 = \underline{\quad\quad\quad}$

$42 + 33 + 48 = \underline{\quad\quad\quad} \quad 17 + 52 + 68 = \underline{\quad\quad\quad} \quad 34 + 74 + 16 = \underline{\quad\quad\quad}$

$82 + 98 + 44 = \underline{\quad\quad\quad} \quad 51 + 64 + 99 = \underline{\quad\quad\quad} \quad 17 + 89 + 53 = \underline{\quad\quad\quad}$

Add :

$$\begin{array}{r} \text{H T O} \\ 678 \\ + 294 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 284 \\ + 439 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 117 \\ + 289 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ 678 \\ + 123 \\ \hline \end{array}$$

$$\begin{array}{r} 287 \\ + 197 \\ \hline \end{array}$$

$$\begin{array}{r} 196 \\ + 787 \\ \hline \end{array}$$

$$\begin{array}{r} 298 \\ + 646 \\ \hline \end{array}$$

$$\begin{array}{r} 199 \\ + 736 \\ \hline \end{array}$$

$$\begin{array}{r} 356 \\ + 297 \\ \hline \end{array}$$

$$\begin{array}{r} 543 \\ + 419 \\ \hline \end{array}$$

$$\begin{array}{r} 235 \\ + 345 \\ \hline \end{array}$$

$$\begin{array}{r} 652 \\ + 254 \\ \hline \end{array}$$

$$\begin{array}{r} 235 \\ + 186 \\ \hline \end{array}$$

$$\begin{array}{r} 387 \\ + 556 \\ \hline \end{array}$$

$$\begin{array}{r} 268 \\ + 345 \\ \hline \end{array}$$

$$\begin{array}{r} 345 \\ + 179 \\ \hline \end{array}$$

$$\begin{array}{r} 136 \\ 529 \\ + 194 \\ \hline \end{array}$$

$$\begin{array}{r} 798 \\ 82 \\ + 105 \\ \hline \end{array}$$

$$\begin{array}{r} 489 \\ 412 \\ + 75 \\ \hline \end{array}$$

$$\begin{array}{r} 654 \\ 147 \\ + 27 \\ \hline \end{array}$$

Practice these :

$$608 + 209 + 184 =$$

$$143 + 572 + 106 =$$

$$185 + 234 + 185 =$$

$$345 + 187 + 229 =$$

$$115 + 249 + 209 =$$

$$613 + 218 + 154 =$$

Word Problems on Addition

1. In a shop, there are 289 mangoes and 315 apples. How many fruits are there in all ?

H	T	O
1	1	0
2	8	9
+	3	1
5	0	4

2. Mona buys 224 chocolates and 92 toffees. How many sweets does she buy in all ?

+

3. In a cattle farm, there are 329 buffaloes and 145 cows. How many animals are there in all ?

+

4. In a school, there are 256 boys and 197 girls. How many students are there in all ?

+

5. In a marriage party, there are 105 men, 118 women and 56 children. How many persons are there in all ?

+



Project

Find the value of each word by adding.

M	O	N	S	T	E	R
1	2	3	4	5	6	7

ME = $\underline{1} + \underline{6} = \underline{7}$

ON = $\underline{\quad} + \underline{\quad} = \underline{\quad}$

MEN = $\underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$

NOSE = $\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$

TENT = $\underline{\quad} + \underline{\quad} + \underline{\quad} + \underline{\quad} = \underline{\quad}$



Learning Objectives :

- ❖ What is Subtraction ?
- ❖ Subtraction on the Number Line
- ❖ Subtraction of Zero, Ten or Hundred
- ❖ Subtraction without Borrowing (2-Digit Numbers)
- ❖ Subtraction in Expanded Form
- ❖ Subtraction without Borrowing (3-Digit Numbers)
- ❖ Subtraction with Borrowing (2-Digit Numbers)
- ❖ Subtraction with Borrowing (3-Digit Numbers)
- ❖ Word Problems on Subtraction

What is Subtraction ?

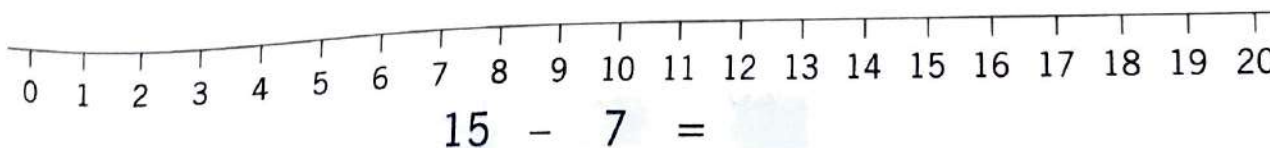
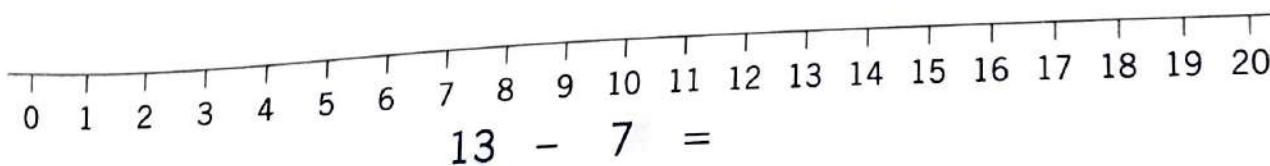
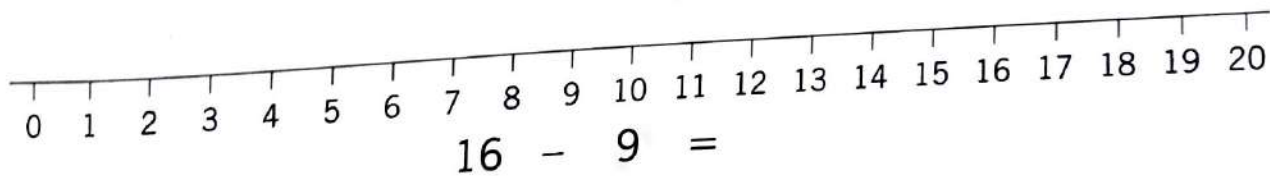
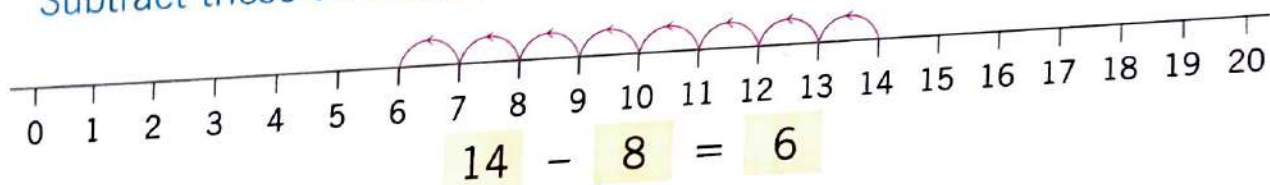
Subtraction is an arithmetic operation that represents the operation of removing objects from collection. The result of subtraction is called **difference**.

Subtraction signified the minus sign (-).

Such as, $5 - 2 = 3$.

Subtraction on the Number Line

Subtract these on number lines :



➤ Subtraction of Zero, Ten or Hundred

1. On Subtracting zero from a number, gives the number itself.

For example : $7 - 0 = 7$

$$54 - 0 = 54$$

$$165 - 0 = 165$$

2. On subtracting 1 ten from a number, the tens digit decreases by

For example : $87 - 10 = 77$

$$452 - 10 = 442$$

3. On subtracting 1 hundred from a number, the hundreds d
decreases by 1.

For example : $974 - 100 = 874$

Fill in the blanks :

$25 - 10 = \square$

$259 - 100 = \square$

$995 - 10 = \square$

$432 - 100 = \square$

$28 - 10 = \square$

$34 - 0 = \square$

$135 - 0 = \square$

$749 - 100 = \square$

$325 - 100 = \square$

$818 - 10 = \square$

$512 - 0 = \square$

$432 - 20 = \square$

$74 - 10 = \square$

$134 - 10 = \square$

$469 - 10 = \square$

$286 - 10 = \square$

$32 - 0 = \square$

$79 - 10 = \square$

$995 - 100 = \square$

$94 - 30 = \square$

$5 - 0 = \square$

$134 - 100 = \square$

$434 - 100 = \square$

$145 - 0 = \square$

Subtraction without Borrowing (2-Digit Numbers)

Example 1 : Subtract 43 from 85.

Solution :

Subtract ones from ones $\rightarrow 5 - 3 = 2$

Subtract tens from tens $\rightarrow 8 - 4 = 4$

Remainder = 42

$$\begin{array}{r} \text{T} \quad \text{O} \\ 8 \quad 5 \\ - 4 \quad 3 \\ \hline 4 \quad 2 \end{array}$$

Subtraction = 42

Subtract :

$$\begin{array}{r} \text{T} \quad \text{O} \\ 6 \quad 4 \\ - 2 \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 1 \quad 6 \\ - 1 \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 2 \quad 8 \\ - 1 \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 8 \\ - 3 \quad 0 \\ \hline 1 \quad 0 \end{array} \quad \times$$

Common Mistake

$$\begin{array}{r} 4 \quad 8 \\ - 3 \quad 0 \\ \hline 1 \quad 8 \end{array} \quad \checkmark$$



$$\begin{array}{r} 5 \quad 6 \\ - 2 \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 7 \\ - 1 \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 6 \\ - 3 \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 7 \\ - 2 \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 9 \\ - 3 \quad 4 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 4 \\ - 5 \quad 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 9 \\ - 7 \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 6 \\ - 3 \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 7 \\ - 5 \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 5 \\ - 6 \quad 1 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 9 \\ - 1 \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 9 \\ - 1 \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 7 \\ - 5 \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 9 \\ - 3 \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 7 \\ - 1 \quad 4 \\ \hline \end{array}$$

Subtraction in Expanded Form

$$\begin{array}{r}
 795 \rightarrow 7 \text{ hundreds} + 9 \text{ tens} + 5 \text{ ones} \rightarrow 700 + 90 + 5 \\
 - 452 \rightarrow 4 \text{ hundreds} + 5 \text{ tens} + 2 \text{ ones} \rightarrow 400 + 50 + 2 \\
 \hline
 \rightarrow 3 \text{ hundreds} + 4 \text{ tens} + 3 \text{ ones} \rightarrow 300 + 40 + 3 \\
 = 343
 \end{array}$$

$$\begin{array}{r}
 597 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 - 124 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 \hline
 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 = \square
 \end{array}$$

$$\begin{array}{r}
 856 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 - 243 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 \hline
 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 = \square
 \end{array}$$

$$\begin{array}{r}
 589 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 - 428 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 \hline
 \rightarrow \square \text{ hundreds} + \square \text{ tens} + \square \text{ ones} \rightarrow \square + \square + \square \\
 = \square
 \end{array}$$

Hots Questions

How many pages are left for them?



Saurbh

$$\begin{array}{r}
 36 \\
 - 20 \\
 \hline
 \end{array}$$



Meera

$$\begin{array}{r}
 48 \\
 - 31 \\
 \hline
 \end{array}$$



Harpal

$$\begin{array}{r}
 80 \\
 - 40 \\
 \hline
 \end{array}$$

I am at page number 56 of _____. This chapter ends at page number 62. There are _____ pages left to do.

Subtraction without Borrowing (3-Digit Numbers)

Example 2 : Subtract 235 from 786.

Solution :

Subtract ones from ones

$$\rightarrow 6 - 5 = 1$$

Subtract tens from tens

$$\rightarrow 8 - 3 = 5$$

Subtract hundreds from hundreds

$$\rightarrow 7 - 2 = 5$$

Remainder = 551

H	T	O
7	8	6
-	2	3
5	5	1

Subtraction = 551

Subtract :

H	T	O
3	9	5
-	7	4

H	T	O
6	4	8
-	4	2

H	T	O
3	9	5
-	3	0

H	T	O
9	8	4
-	8	7

5	7	9
-	3	0

5	8	7
-	1	6

6	8	4
-	3	6

4	8	9
-	2	7

5	9	7
-	2	4

9	6	6
-	3	3

7	3	6
-	4	2

3	5	5
-	2	2

Life Skills

Deepa buys balloons for ₹ 42. She gives the shopkeeper.



The shopkeeper pays her back  and asks for change.

How much change should she give him? Tick (✓) the correct option.

₹ 1 ₹ 2 ₹ 3 ₹ 4

Subtraction with Borrowing (2-Digit Numbers)

Example 3 : Subtract 58 from 82.

Solution : We cannot subtract 8 ones from 2 ones.

We borrow 1 ten from 8 tens, leaving behind 7 tens.

1 ten = 10 ones

Now,

10 ones + 2 ones	=	12 ones
12 ones - 8 ones	=	4 ones
7 tens - 5 tens	=	2 tens
Remainder	=	24

	T	O
	7	12
	8	2
-	5	8
	2	4

Subtraction = 24

Subtract :

	T	O
	4	4
-		7

	T	O
	9	0
-		3

	T	O
	5	0
-	2	5

	T	O
	4	8
-	3	9
	1	1

✗

	T	O
	3	18
	4	8
-	3	9
	0	9

✓

Common Mistake



	6	5
-	3	6

	2	4
-	1	9

	7	2
-	3	5

	8	3
-	7	5

	9	1
-	6	9

	8	1
-	2	7

	9	0
-	5	4

	7	2
-	4	6

	8	4
-	3	5

	6	7
-	2	8

	7	3
-	2	9

	5	1
-	3	8

	9	3
-	6	9

	8	4
-	2	9

	8	1
-	5	9

Subtraction with Borrowing (3-Digit Numbers)

Example 4 : Subtract 258 from 432.

Solution : We cannot subtract 8 ones from 2 ones.

We borrow 1 ten from 3 tens, leaving behind 2 tens.

$$1 \text{ ten} + 2 \text{ ones} = 10 \text{ ones} + 2 \text{ ones} = 12 \text{ ones}$$

$$12 - 8 = 4 \text{ ones}$$

Now we cannot subtract 5 tens from 2 tens.

We borrow 1 hundred from 4 hundreds, leaving behind 3 hundreds.

$$1 \text{ hundred} + 2 \text{ tens} = 10 \text{ tens} + 2 \text{ tens} = 12 \text{ tens}$$

$$12 \text{ tens} - 5 \text{ tens} = 7 \text{ tens}$$

$$3 \text{ hundreds} - 2 \text{ hundreds} = 1 \text{ hundred}$$

Again,

$$\text{Remainder} = 174$$

H	T	O
3	12	2
4	3	8
-	2	5
-	2	8
1	7	4

Subtraction = 174

Subtract :

H	T	O
4	3	4
-	2	5
-	2	6

H	T	O
3	2	7
-	1	5
-	1	9

H	T	O
5	2	0
-	3	6
-	3	8
2	4	8

Common Mistake

H	T	O
4	11	10
5	2	0
-	3	6
-	3	8
1	5	2

2	6	5
-	1	8
-	1	7

1	4	8
-	3	5
-	3	6

9	3	1
-	8	1
-	8	6

5	4	0
-	2	6
-	2	7

4	3	5
-	1	8
-	1	7

5	1	4
-	2	9
-	2	7

6	3	5
-	1	8
-	1	9

9	7	3
-	1	8
-	1	5

Subtract :

$$\begin{array}{r} \text{H T O} \\ \square \square \square \\ 688 \\ - 539 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ \square \square \square \\ 414 \\ - 275 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ \square \square \square \\ 644 \\ - 499 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{H T O} \\ \square \square \square \\ 376 \\ - 159 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 895 \\ - 396 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 634 \\ - 278 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 844 \\ - 567 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 726 \\ - 509 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 441 \\ - 189 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 517 \\ - 489 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 842 \\ - 156 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 734 \\ - 487 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 401 \\ - 163 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 703 \\ - 367 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 542 \\ - 278 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 459 \\ - 284 \\ \hline \hline \end{array}$$

Hots Questions



Paul and Elan had 125 marbles each. Paul gave some of his marbles to Elan, and Elan now has 160 marbles. How more marbles does Elan have than Paul?



Word Problems on Subtraction

1. Elan bought 50 marbles for Annu. He lost 27 marbles. How many marbles are left?

$$\begin{array}{r} 4 \ 10 \\ 5 \ 0 \\ - 2 \ 7 \\ \hline 2 \ 3 \end{array}$$

2. For Govind's birthday party, 316 bottles of Pepsi were bought. If 125 bottles were left, how many bottles were empty?

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

3. There were 311 oranges at the home. Children ate 224 of them. How many oranges are left now?

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

4. Tina's storybook has 216 pages. She has read 148 pages. How many pages remain for her to read?

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

5. Mona had 324 apples. She sold 198 apples. How many apples are left?

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

6. There are 536 students in a school. If the number of girls is 278, what is the number of boys?

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

Learning Objectives :

- ❖ What is Multiplication ? ❖ Multiplication on Number Line ❖ Properties of Multiplication ❖ Multiplication by 10 ❖ Multiplication of Ones by Ones ❖ Multiplication of 2-Digit Numbers by Ones (without Carrying)
- ❖ Multiplication of 3-Digit Numbers by Ones (without Carrying) ❖ Multiplication of 2-Digit Numbers by Ones (with Carrying) ❖ Multiplication of 3-Digit Numbers by Ones (with Carrying) ❖ Multiplication by Tens
- ❖ Word Problems on Multiplication

What is Multiplication ?

Multiplication is repeated addition of a number to itself.

Write in the form of multiplication :

$2 + 2 + 2 + 2 =$	2	\times	4	$=$	8
$3 + 3 + 3 + 3 + 3 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$5 + 5 + 5 + 5 + 5 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$4 + 4 + 4 + 4 + 4 + 4 + 4 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$7 + 7 + 7 + 7 + 7 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$9 + 9 + 9 + 9 + 9 + 9 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$6 + 6 + 6 + 6 + 6 + 6 + 6 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$8 + 8 + 8 + 8 + 8 + 8 + 8 + 8 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$4 + 4 + 4 + 4 + 4 + 4 + 4 + 4 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$2 + 2 + 2 + 2 + 2 + 2 + 2 + 2 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>
$4 + 4 + 4 + 4 + 4 + 4 + 4 =$	<input type="text"/>	\times	<input type="text"/>	$=$	<input type="text"/>

Write in the addition form :

$$5 \times 6 = 5 + 5 + 5 + 5 + 5 + 5 = 30$$

$$8 \times 4 =$$

$$4 \times 8 =$$

$$10 \times 4 =$$

$$4 \times 10 =$$

$$3 \times 9 =$$

$$9 \times 3 =$$

$$2 \times 9 =$$

$$6 \times 7 =$$

$$10 \times 8 =$$

$$9 \times 2 =$$

$$7 \times 6 =$$



Mental Maths

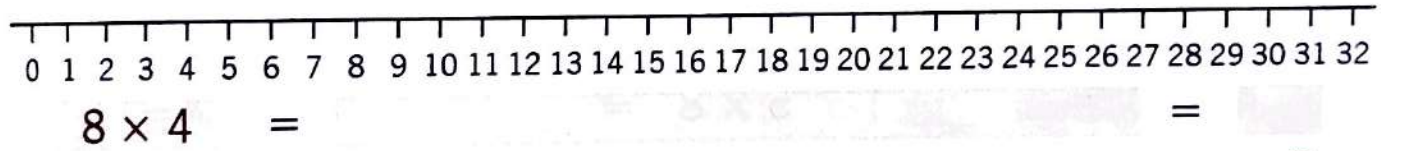
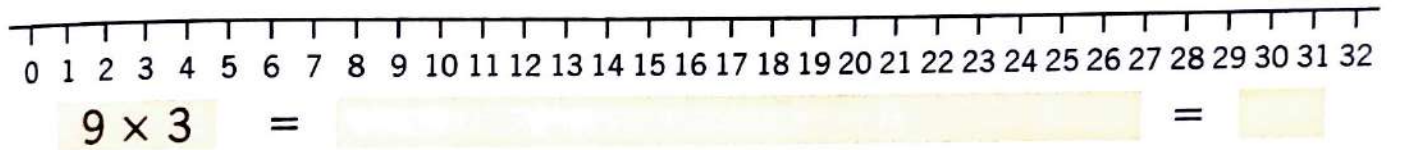
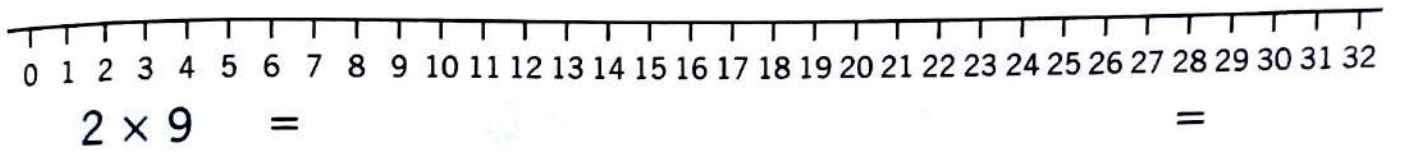
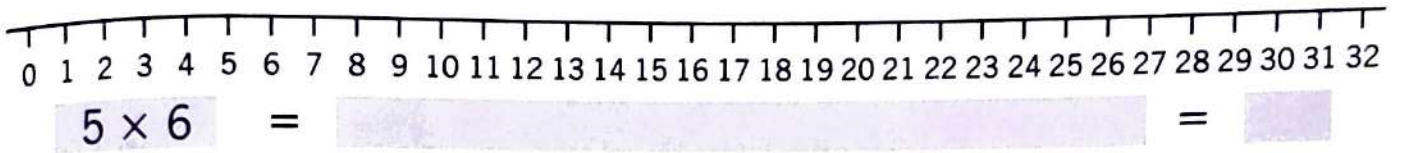
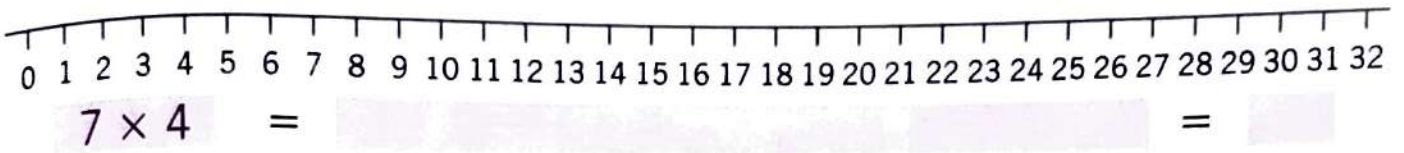
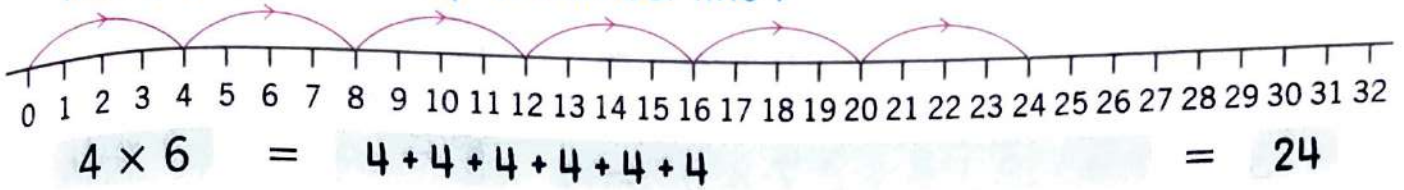
Skip count by 2

Begin at 2 and colour every second number. Use the same colour for all the numbers.

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

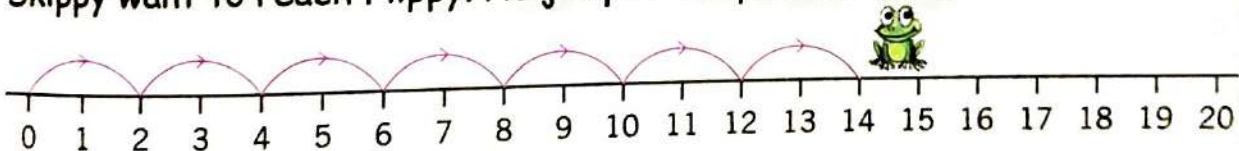
➤ Multiplication on Number Line

Multiply with the help of number line :



Hots Questions

Skippy want to reach Flippy. He jumps 2 steps each time.



7 jumps of 2 steps each, $7 \times 2 =$

How many times does Skippy jump ?

Write the multiplication fact. $\quad \times \quad = \quad$



Multiply using multiplication tables :

$7 \times 4 = \square$

$3 \times 8 = \square$

$4 \times 2 = \square$

$3 \times 9 = \square$

$6 \times 8 = \square$

$6 \times 6 = \square$

$5 \times 9 = \square$

$8 \times 3 = \square$

$6 \times 7 = \square$

$3 \times 5 = \square$

$4 \times 4 = \square$

$9 \times 10 = \square$

$8 \times 9 = \square$

$7 \times 3 = \square$

$6 \times 9 = \square$

$5 \times 4 = \square$

$7 \times 5 = \square$

$5 \times 5 = \square$

$4 \times 8 = \square$

$7 \times 7 = \square$

$5 \times 6 = \square$

$6 \times 4 = \square$

$4 \times 3 = \square$

$9 \times 4 = \square$

$3 \times 2 = \square$

$5 \times 8 = \square$

$4 \times 5 = \square$

$6 \times 7 = \square$

$5 \times 7 = \square$

$8 \times 4 = \square$

Common Mistake

$8 \times 8 = 16 \quad \times$

$8 \times 8 = 64 \quad \checkmark$

$9 \times 5 = \square$

$3 \times 4 = \square$

$9 \times 8 = \square$

$9 \times 1 = \square$

$8 \times 7 = \square$

$1 \times 6 = \square$

$9 \times 3 = \square$

$8 \times 5 = \square$

$8 \times 6 = \square$

$9 \times 9 = \square$

$10 \times 8 = \square$

$9 \times 6 = \square$

$7 \times 8 = \square$

Properties of Multiplication

1. If we multiply two numbers in any order, the product will be the same.

For example :

$$8 \times 7 = 8 + 8 + 8 + 8 + 8 + 8 + 8$$

$$\begin{aligned} 7 \times 8 &= 7 + 7 + 7 + 7 + 7 + 7 + 7 \\ &= 56 \end{aligned}$$

Hence, $8 \times 7 = 7 \times 8$

2. If we multiply a number by 1, the product is equal to the number itself.

For example :

$$\begin{aligned} 1 \times 6 &= 1 + 1 + 1 + 1 + 1 + 1 \\ &= 6 \end{aligned}$$

$$\begin{aligned} 1 \times 7 &= 1 + 1 + 1 + 1 + 1 + 1 + 1 \\ &= 7 \end{aligned}$$

3. If we multiply a number by zero, the product is zero.

For example :

$$\begin{aligned} 0 \times 4 &= 0 + 0 + 0 + 0 \\ &= 0 \end{aligned}$$

$$\begin{aligned} 0 \times 6 &= 0 + 0 + 0 + 0 + 0 + 0 \\ &= 0 \end{aligned}$$

Multiplication by 10

To multiply a number by 10, we write one zero after the number. It's product of that number and 10.

For example :

$$7 \times 10 = 7\boxed{0} = 70$$

$$35 \times 10 = 35\boxed{0} = 350$$

$$86 \times 10 = 86\boxed{0} = 860$$

$$90 \times 10 = 90\boxed{0} = 900$$

Fill in the blanks :

$$\square \times 9 = 9 \times 7$$

$$8 \times 8 = \square \times 8$$

$$10 \times 9 = 9 \times \square$$

$$9 \times 1 = \square$$

$$7 \times 0 = \square$$

$$0 \times 1 = \square$$

$$6 \times \square = 6$$

$$8 \times 10 = \square$$

$$10 \times 10 = \square$$

$$15 \times 10 = \square$$

$$6 \times \square = 3 \times 6$$

$$1 \times \square = 7 \times 1$$

$$8 \times 4 = 4 \times \square$$

$$6 \times 1 = \square$$

$$5 \times 0 = \square$$

$$0 \times 9 = \square$$

$$\square \times 1 = 5$$

$$5 \times 10 = \square$$

$$12 \times 10 = \square$$

$$20 \times 10 = \square$$

$$5 \times 8 = \square \times 5$$

$$1 \times 4 = 4 \times \square$$

$$3 \times 12 = \square \times 3$$

$$14 \times 1 = \square$$

$$8 \times 0 = \square$$

$$0 \times 4 = \square$$

$$8 \times \square = 8$$

$$9 \times 10 = \square$$

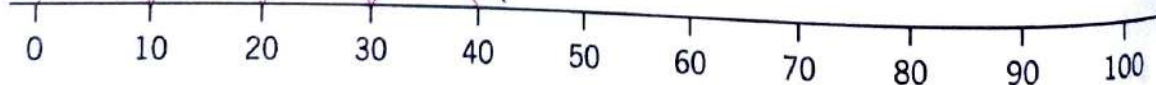
$$26 \times 10 = \square$$

$$50 \times 10 = \square$$



Mental Maths

Tina, the butterfly, wants to reach the flower. She jumps 10 steps each time.



4 jumps of 10 steps each $4 \times 10 = \underline{\quad}$

How many times does the butterfly jump ?

Write the multiplication fact. $\underline{\quad} \times \underline{\quad} = \underline{\quad}$



Multiplication of Ones by Ones

Multiply :



Common Mistake

$$\begin{array}{r} 7 \\ \times 2 \\ \hline \end{array}$$

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

$$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline 16 \end{array}$$

$$\begin{array}{r} 8 \\ \times 8 \\ \hline 64 \end{array}$$

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

$$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$$

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

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

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

$$\begin{array}{r} 3 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 2 \\ \hline \end{array}$$

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

$$\begin{array}{r} 5 \\ \times 5 \\ \hline \end{array}$$

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

$$\begin{array}{r} 3 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$$

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

$$\begin{array}{r} 3 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$$

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

$$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$$

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

$$\begin{array}{r} 2 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \times 0 \\ \hline \end{array}$$

time

100

➤ Multiplication of 2-Digit Numbers by Ones (without Carrying)

Multiply :

$$\begin{array}{r} T \quad O \\ 4 \quad 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} T \quad O \\ 3 \quad 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} T \quad O \\ 2 \quad 0 \\ \times 4 \\ \hline \end{array}$$

Common Mistake	
$\begin{array}{r} 1 \quad 2 \\ \times 3 \\ \hline 6 \quad 3 \end{array}$	$\begin{array}{r} 1 \quad 2 \\ \times 3 \\ \hline 3 \quad 6 \end{array}$

$$\begin{array}{r} 2 \quad 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 1 \\ \times 8 \\ \hline \end{array}$$

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

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

$$\begin{array}{r} 4 \quad 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 1 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 0 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 1 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 0 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 1 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 2 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 3 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 2 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 4 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \quad 2 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \quad 3 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 0 \\ \times 3 \\ \hline \end{array}$$

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

Hots Questions

Aman has 10 coins of ₹ 2 each and Alisha has 4 coins of ₹ 5 each. Can they together buy a ball that costs ₹ 40?



Multiplication of 3-Digit Numbers by Ones (without Carrying)

Example 1 : Multiply 123 by 3.

Solution :

3 ones \times 3 = 9 ones
 2 tens \times 3 = 6 tens
 1 hundred \times 3 = 3 hundreds
 Multiplication = 369

H	T	O	
1	2	3	
		\times 3	
3	6	9	

Multiply :

H	T	O	
4	2	4	
		\times 2	

H	T	O	
1	3	2	
		\times 2	

4	2	3	
		\times 2	✗
6	4	8	

Common Mistake

4	2	3	
		\times 2	✓
8	4	6	



1	1	1	
		\times 3	

1	1	2	
		\times 2	

2	2	1	
		\times 4	

3	2	3	
		\times 3	

3	2	3	
		\times 2	

2	4	0	
		\times 2	

1	3	3	
		\times 3	

2	1	3	
		\times 3	

3	3	2	
		\times 3	

4	2	3	
		\times 2	

2	3	2	
		\times 2	

4	3	4	
		\times 2	

4	2	0	
		\times 2	

2	3	0	
		\times 3	

3	0	3	
		\times 3	

3	4	4	
		\times 2	

➤ Multiplication of 2-Digit Numbers by Ones (with Carrying)

Example 2 : Multiply 45 by 7.

Solution :

$$5 \text{ ones} \times 7 = 35 \text{ ones}$$

$$= 3 \text{ tens} + 5 \text{ ones.}$$

Write 5 under ones. Carry 3 tens.

$$4 \text{ tens} \times 7 = 28 \text{ tens}$$

$$28 \text{ tens} + 3 \text{ tens (carry)} = 31 \text{ tens}$$

$$= 3 \text{ hundreds} + 1 \text{ ten.}$$

Write 1 under ten and 3 under hundreds.

$$\text{Multiplication} = 315$$

H	T	O
	3	0
	4	5
	×	7
3	1	5

Multiply :

T	O
5	3
×	6

T	O
7	2
×	6

1	6
×	3
3 18	

Common Mistake

1	6
×	3
4 8	

2	5
×	2

1	2
×	6

6	5
×	5

9	6
×	7

2	8
×	3

3	5
×	4

4	7
×	5

3	4
×	6

1	7
×	8

2	5
×	9

3	6
×	8

4	8
×	6

Multiply :

$$\begin{array}{r} \text{T O} \\ 93 \\ \times 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 79 \\ \times 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 75 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{T O} \\ 84 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 85 \\ \times 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 54 \\ \times 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 67 \\ \times 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 87 \\ \times 3 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 73 \\ \times 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ \times 7 \\ \hline \\ \hline \end{array}$$

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

$$\begin{array}{r} 72 \\ \times 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 44 \\ \times 6 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 76 \\ \times 4 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 77 \\ \times 7 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ \times 9 \\ \hline \\ \hline \end{array}$$



Learning By Doing

Let's Play Pop!

Students will sit in a circle. Each student will say a number. If the number is in the table of 5, say POP instead of the number.

For example 1, 2, 3, 4, POP, 6, 7, 8, 9, POP! _____

If the student says the number or POP in place of the wrong number, she/he is out and the game begins once again.

The game can be played with other multiplication tables too.

➤ Multiplication of 3-Digit Numbers by Ones (with Carrying)

Example 3 : Multiply 254 by 8.

Solution :

$$4 \text{ ones} \times 8 = 32 \text{ ones} \\ = 3 \text{ tens} + 2 \text{ ones}$$

Write 2 under ones. Carry 3 tens.

$$5 \text{ tens} \times 8 = 40 \text{ tens}$$

$$40 \text{ tens} + 3 \text{ tens (carry)} = 43 \text{ tens}$$

$$= 4 \text{ hundreds} + 3 \text{ tens}$$

Write 3 tens under tens. Carry 4 hundreds.

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

$$16 \text{ hundreds} + 4 \text{ hundreds (carry)} = 20 \text{ hundreds.}$$

$$\text{Multiplication} = 2032$$

H	T	O
4	3	0
2	5	4
	×	8
2	0	3
		2

Multiply :

H	T	O
1	2	4
	×	8

H	T	O
1	5	6
	×	5

1	2	9
	×	7
7	1	4
6	3	

Common Mistake

2	6	
1	2	9
	×	7
9	0	3

1	4	7
	×	6

2	4	4
	×	3

2	4	5
	×	4

1	3	7
	×	6

2	0	6
	×	7

3	8	8
	×	2

2	8	6
	×	3

1	9	5
	×	5



Multiplication by Tens

Example 4 : Multiply 36×10 .

Solution : $36 \times 10 = 36 \times 1 \text{ ten}$
 $= 36 \text{ tens}$
 $= 360$

Multiplication = **360**

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 36 \\ \times 10 \\ \hline 360 \end{array}$$

Example 5 : Multiply 48 by 20.

Solution : $48 \times 20 = 48 \times 2 \text{ tens}$
 $= 96 \text{ tens}$
 $= 960$

Multiplication = **960**

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 48 \\ \times 20 \\ \hline 960 \end{array}$$

Multiply :

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 12 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 44 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 56 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} \text{H} \quad \text{T} \quad \text{O} \\ 23 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 30 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \\ \times 20 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} 89 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 32 \\ \times 30 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ \times 40 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 60 \\ \hline \end{array}$$



Mental Maths

Write **T** for True and **F** for false.

9 times 8 is 72.

$9 + 9 + 9 + 9 = 27$

$0 \times 9 = 9$

4 groups of 10 is 14.

9 Multiplied by 2 is 18.

$125 \times 4 = 500$

Word Problems on Multiplication

1. There are 42 mangoes in a basket. How many mangoes will be there in 5 such baskets ?
2. A crate contains 35 Pepsi bottles. How many bottles will 8 crates contain ?
3. If each family has two children, find the number of children in such 37 families.
4. 48 monkeys are climbing on a tree. How many legs are seen there in all ?
5. There are 78 rusks in a packet. Roma buys 7 packets. How many rusks does she have ?
6. Mona gave 8 toffees to each of her 54 classmates. How many toffees did she give in all ?

$$\begin{array}{r} 1 \\ 42 \\ \times 5 \\ \hline 210 \end{array}$$

Learning Objectives :

❖ What is Division ? ❖ Multiplication and Division are Reverse Operations ❖ Long Division ❖ Word Problems on Division

What is Division ?

Division is repeated subtraction of a number. Its sign is \div .

We know that $4 \times 5 = 20$

and $20 \div 5 = 4$

We can subtract 4 from 20, 5 times.

$$\begin{array}{r} 1 \ 10 \\ 2 \ 0 \\ - \ 4 \\ \hline 1 \ 6 \end{array}$$

$$\begin{array}{r} 1 \ 6 \\ - \ 4 \\ \hline 1 \ 2 \end{array}$$

$$\begin{array}{r} 0 \ 12 \\ 1 \ 2 \\ - \ 4 \\ \hline 0 \ 8 \end{array}$$

$$\begin{array}{r} 8 \\ - \ 4 \\ \hline 4 \end{array}$$

$$\begin{array}{r} 4 \\ - \ 4 \\ \hline 0 \end{array}$$

We call 20 **dividend**, 4 **divisor** and 5 **quotient**.

Divide 32 by 8 by repeated subtraction.

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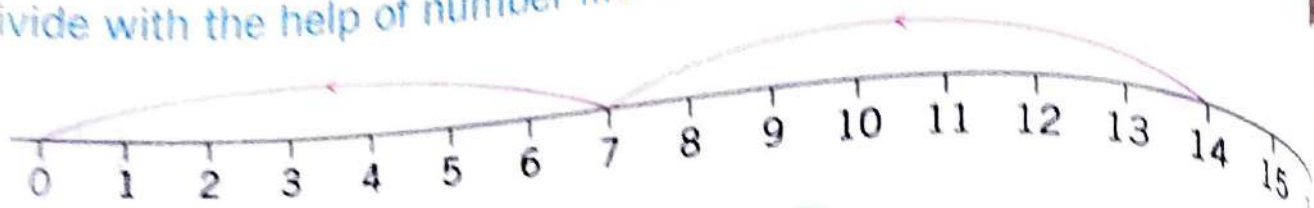
$$32 \div 8 =$$

Divide 63 by 9 by repeated subtraction :

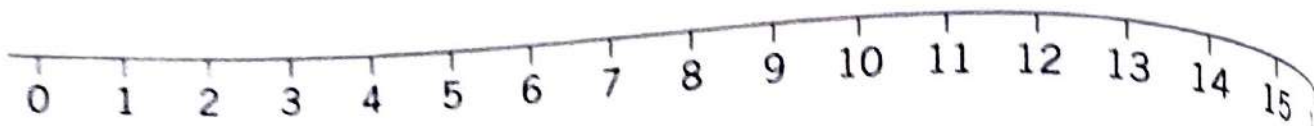
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$$63 \div 9 =$$

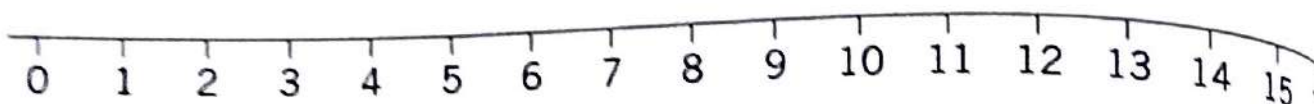
Divide with the help of numberline :



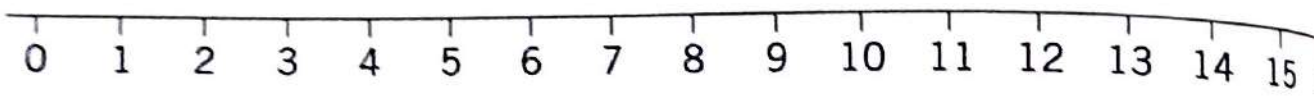
$$14 \div 7 = 2$$



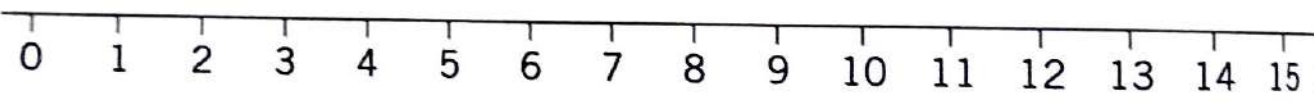
$$15 \div 3 = 5$$



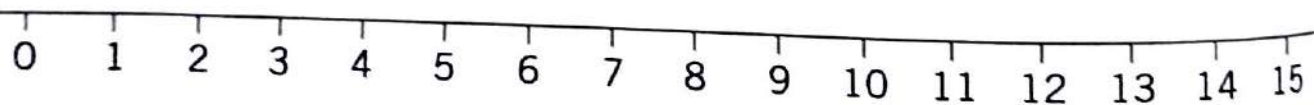
$$12 \div 4 = 3$$



$$16 \div 2 = 8$$



$$12 \div 3 = 4$$



$$16 \div 4 = 4$$

Multiplication and Division are Reverse Operations

Fill in the blanks :

$5 \times 6 = \boxed{30}$

$6 \times 5 = \boxed{30}$

$4 \times 5 = \boxed{}$

$5 \times 4 = \boxed{}$

$3 \times 6 = \boxed{}$

$6 \times 3 = \boxed{}$

$9 \times 5 = \boxed{}$

$5 \times 9 = \boxed{}$

$6 \times 7 = \boxed{}$

$7 \times 6 = \boxed{}$

$10 \times 5 = \boxed{}$

$5 \times 10 = \boxed{}$

$8 \times 4 = \boxed{}$

$4 \times 8 = \boxed{}$

$3 \times 7 = \boxed{}$

$7 \times 3 = \boxed{}$

$30 \div 5 = \boxed{6}$

$30 \div 6 = \boxed{5}$

$20 \div 4 = \boxed{}$

$20 \div 5 = \boxed{}$

$18 \div 3 = \boxed{}$

$18 \div 6 = \boxed{}$

$45 \div 9 = \boxed{}$

$45 \div 5 = \boxed{}$

$42 \div 6 = \boxed{}$

$42 \div 7 = \boxed{}$

$50 \div 10 = \boxed{}$

$50 \div 5 = \boxed{}$

$32 \div 8 = \boxed{}$

$32 \div 4 = \boxed{}$

$21 \div 3 = \boxed{}$

$21 \div 7 = \boxed{}$

Long Division

Divide :

$$\underline{15 \div 3}$$

$$\begin{array}{r} 5 \\ 3 \overline{) 15} \\ \underline{15} \\ \times \end{array}$$

$$\underline{18 \div 3}$$

$$\begin{array}{r} \\ \overline{) 18} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{32 \div 4}$$

$$\begin{array}{r} \\ \overline{) 32} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{30 \div 3}$$

$$\begin{array}{r} \\ \overline{) 30} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{24 \div 4}$$

$$\begin{array}{r} \\ \overline{) 24} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{54 \div 9}$$

$$\begin{array}{r} \\ \overline{) 54} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{56 \div 7}$$

$$\begin{array}{r} \\ \overline{) 56} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{21 \div 7}$$

$$\begin{array}{r} \\ \overline{) 21} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{81 \div 9}$$

$$\begin{array}{r} \\ \overline{) 81} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{42 \div 7}$$

$$\begin{array}{r} \\ \overline{) 42} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{60 \div 10}$$

$$\begin{array}{r} \\ \overline{) 60} \\ \underline{0} \\ 0 \end{array}$$

$$\underline{72 \div 8}$$

$$\begin{array}{r} \\ \overline{) 72} \\ \underline{0} \\ 0 \end{array}$$

Word Problems on Division

1. 36 marbles are shared equally among 9 children. How many marbles does each child get ?

$$\begin{array}{r} 4 \\ 9 \overline{) 36} \\ \underline{36} \\ \times \end{array}$$

2. Priya divided 20 toffees in 5 children equally. How many toffees did each child get ?

$$\begin{array}{r} \\ \\ \end{array}$$

3. A week has 7 days. How many weeks will have 28 days ?

$$\begin{array}{r} \\ \\ \end{array}$$

4. 48 mangoes are equally divided among 6 children. How many mangoes does each child get ?

$$\begin{array}{r} \\ \\ \end{array}$$

5. 72 flowers plants are planted in rows of 8 each. How many rows are there ?

$$\begin{array}{r} \\ \\ \end{array}$$

6. 81 players are divided into teams of 9 each. How many teams are made ?

$$\begin{array}{r} \\ \\ \end{array}$$

Let's Recall

Multiple Choice Questions (MCQs) :

1. Bholu sold 58 shawls in a fair. Next day he sold 27 more shawls. How many shawls in all did he sell ?
(a) 85 (b) 75 (c) 95 (d) None of these
2. Minni has 42 bangles. Tina has 15 bangles. How many more bangles does Minni have ?
(a) 17 (b) 27 (c) 33 (d) None of these
3. A car travels 35 km in one litre of petrol. How much distance is covered in 5 litres of petrol ?
(a) 200 (b) 751 (c) 175 (d) None of these
4. Shikhar scored 24 runs in a cricket match and Kohli scored 69. How many runs did they make in all ?
(a) 83 (b) 93 (c) 73 (d) None of these
5. Binny rabbit can eat 39 carrots in one week. Minny rabbit can eat 42 carrots in one week. How many does Minny rabbit eat more in a week ?
(a) 3 (b) 5 (c) 4 (d) None of these
6. If 6 boys sit on one bench. How many benches are required for 48 boys to sit ?
(a) 7 (b) 8 (c) 6 (d) None of these
7. Mona had 30 fruits. She ate 16 fruits. How many fruits are left ?
(a) 24 (b) 14 (c) 4 (d) None of these
8. How many hours are there in one week ?
(a) 420 (b) 168 (c) 350 (d) None of these
9. Roma has 84 chocolates. She gave 4 each to her friends. How many friends received the chocolates ?
(a) 22 (b) 20 (c) 21 (d) None of these

Fractions (Half and Quarter)

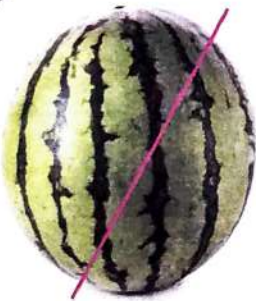
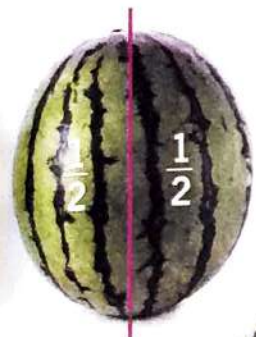
Learning Objectives :

- ❖ What is Fraction ?
- ❖ A Half
- ❖ Half of a Collection
- ❖ A Quarter

What is Fraction ?

A fraction represents a part of a whole or more generally, any number of equal parts. When we speak in every day English, a fraction describes how many parts of a certain size these are, for example, one-half, one-fourth, etc. It can represent by $\frac{1}{2}$, $\frac{1}{4}$, etc.

A Half



One of two **equal** parts of any thing, collection or number is called a **half**.

Divide a watermelon into two equal parts. One of the two equal parts is called a half.

A half is written as $\frac{1}{2}$.

A half + A half = A whole.

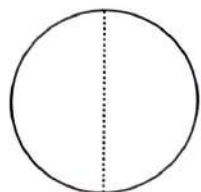
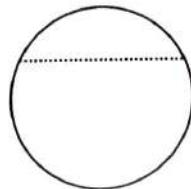
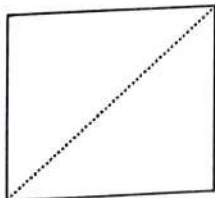
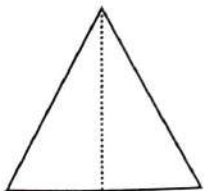
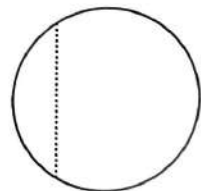
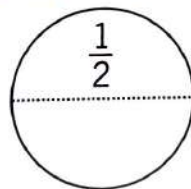
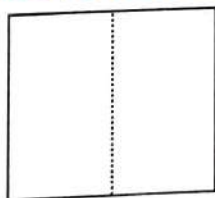
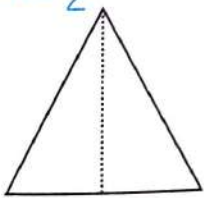
$\frac{1}{2}$ is also read as 'one by two'.

Divide watermelon into two **unequal** parts.

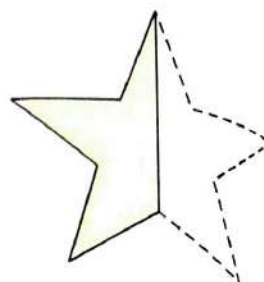
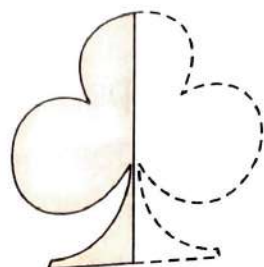
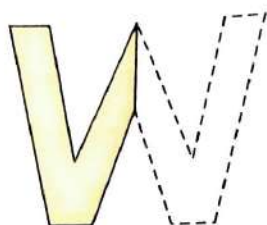
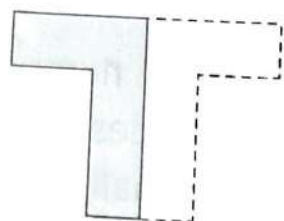
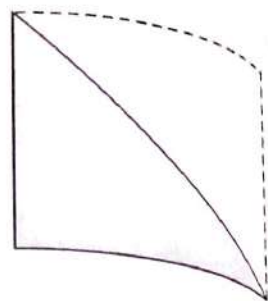
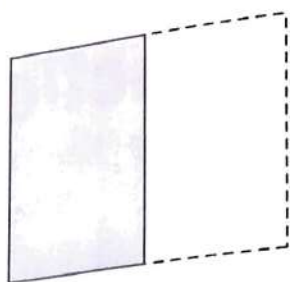
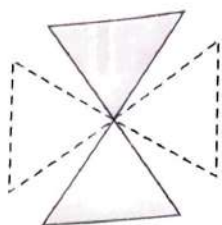
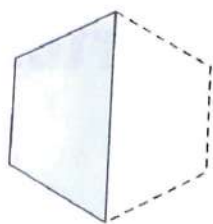
No part is called a half.

A part of a whole is called a **fraction**.

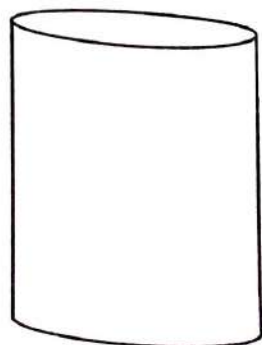
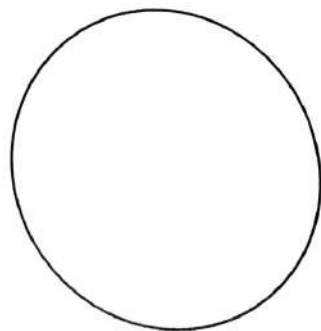
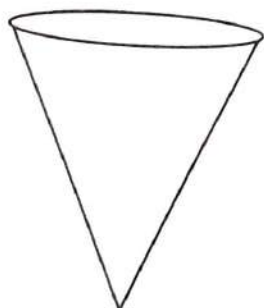
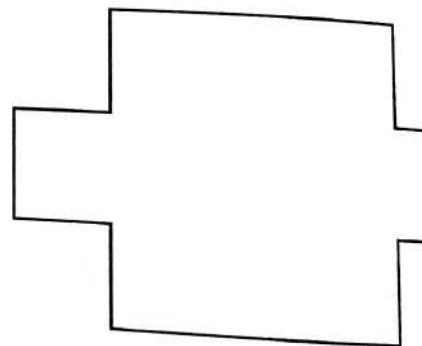
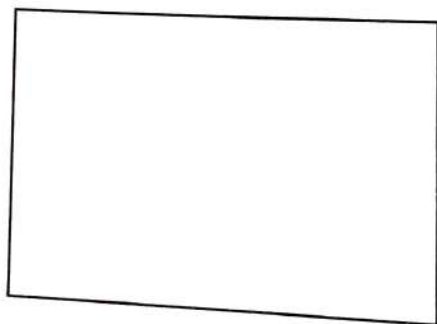
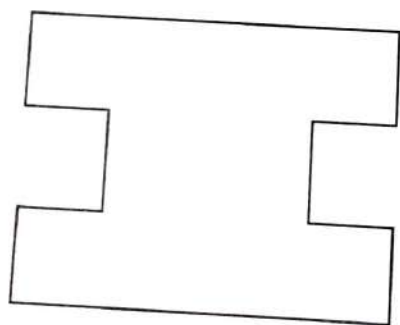
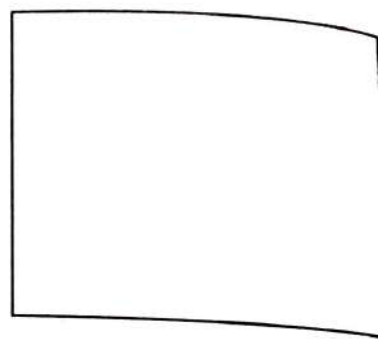
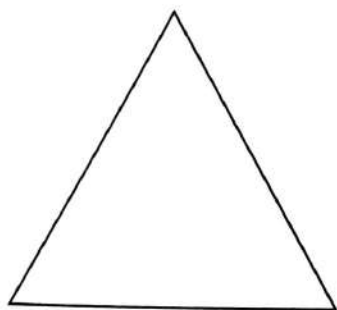
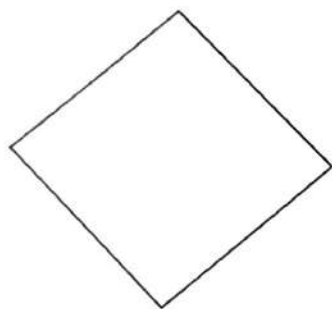
Write $\frac{1}{2}$ in the figures which show two equal parts :



Join the dots to draw the missing half :



Draw a line to cut each shape in half :



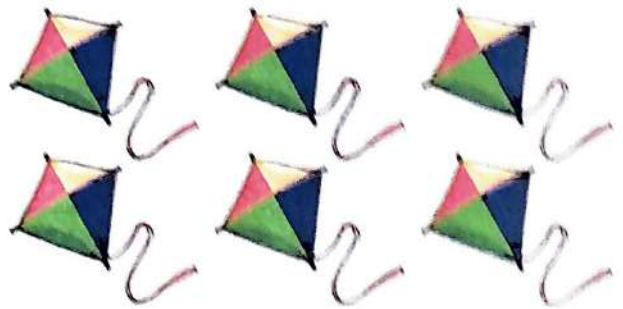
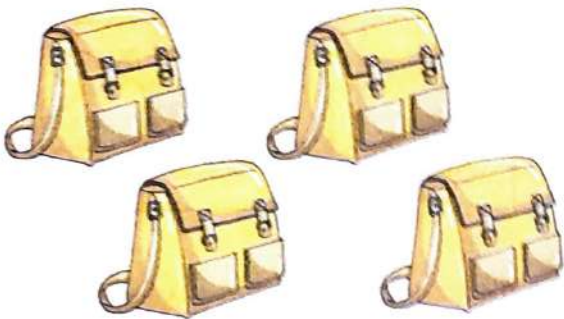
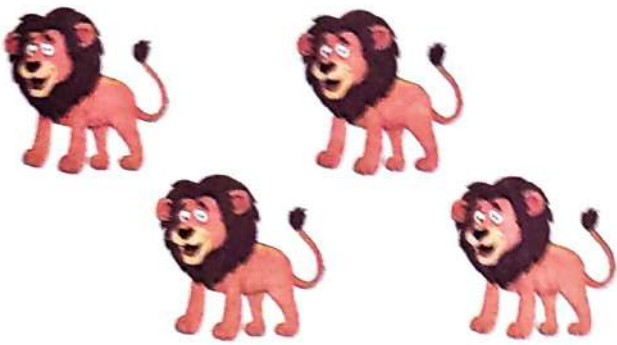
Half of a Collection

Ravi and Moni have divided the chocolate into two equal parts.



They have divided the chocolate collection in half.

Draw a line to divide the collection in half :

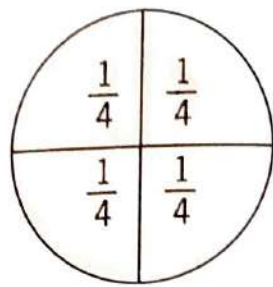
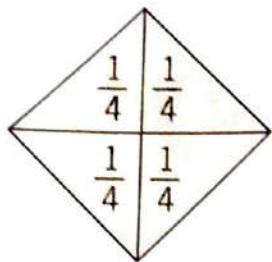


➤ A Quarter

One of the four equal parts of any object, collection or number is called a **quarter**.

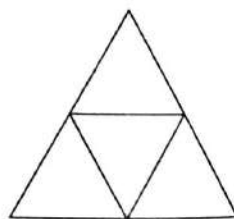
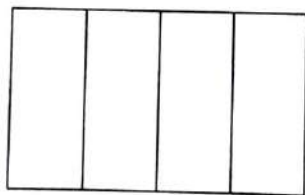
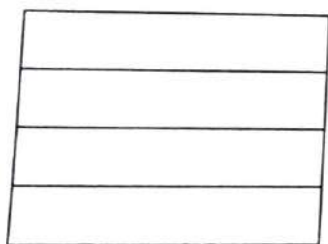
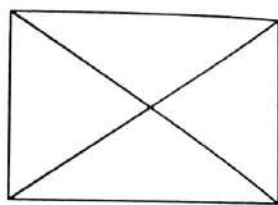
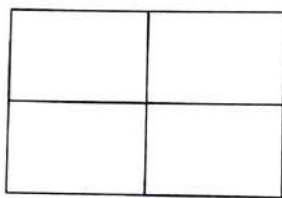
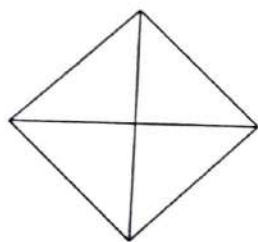
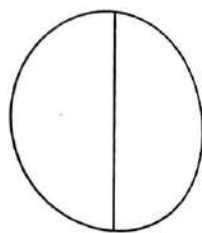
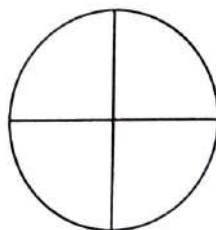
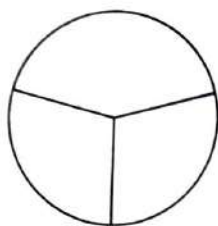
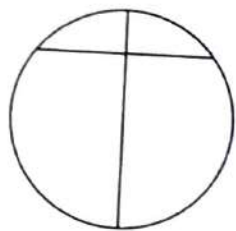
When we divide something into 4 equal parts, we **cut it into quarters**.

A quarter is written as $\frac{1}{4}$.



$\frac{1}{4}$ is also read as 'one by four'. 4 quarters equal a whole.

Write $\frac{1}{4}$ in the figures which show 4 equal parts :

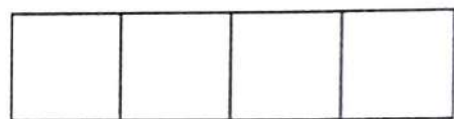
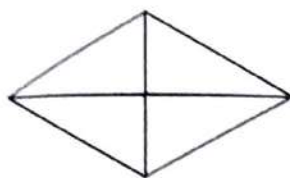
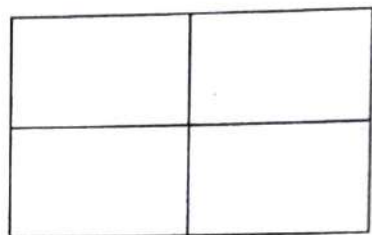
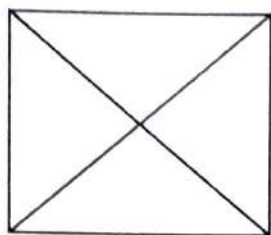
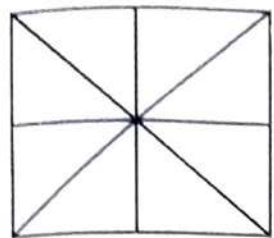
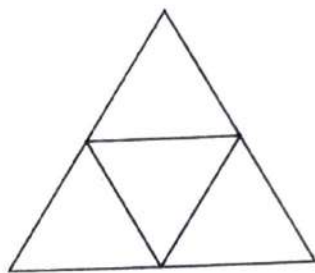
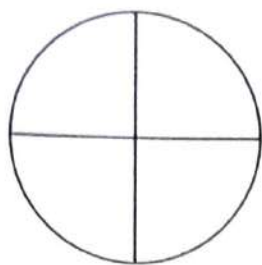
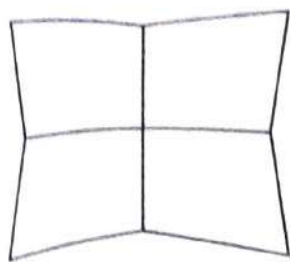


Hots Questions

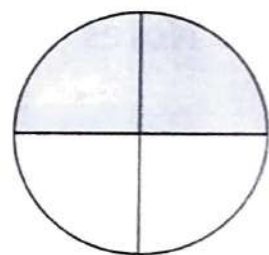
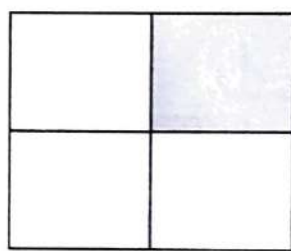
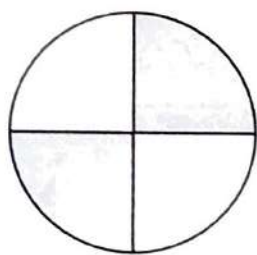
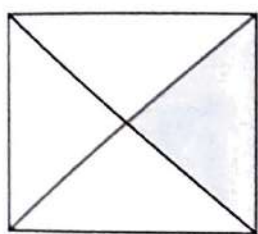
Amma made an uttapam for her granddaughters Jyoti, Malati and Revati. What fraction of uttapam will each girl get if it is shared equally among them?



Shade a quarter to each figure :

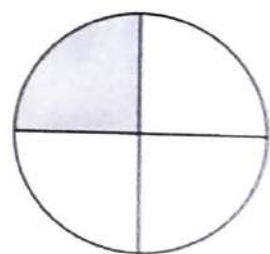
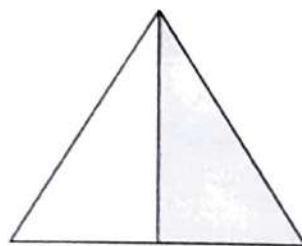
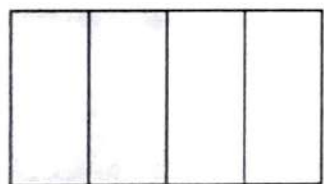
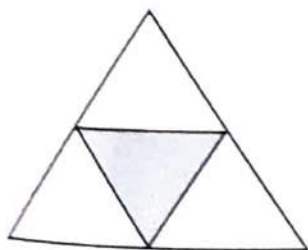


Write $\frac{1}{2}$ or $\frac{1}{4}$ for the shaded part :



$\frac{1}{4}$

$\frac{1}{2}$



Learning Objectives :

- ❖ What is Currency ? ❖ Coins and Notes ❖ Exchange of One Currency Note into Other Notes
- ❖ Conversion of Currency into Rupees and Paise ❖ Let us Go Shopping ❖ Addition of Rupees and Paise
- ❖ Subtraction of Rupees and Paise ❖ Word Problems on Rupees and Paise

➤ **What is Currency ?**

A currency is a system of money (monetary units) in common use, especially in a nation. In India currency is rupee (₹). It is in coins and notes.

➤ **Coins**



1 Rupee



2 Rupees



5 Rupees



10 Rupees

➤ **Notes**



Conversion of Currency into Rupees and Paise

We know 1 rupee = 1 hundred paise = 100 paise

So 4 rupees = 4 hundred paise = 400 paise

8 rupees = 8 hundred paise = 800 paise

9 rupees = 9 hundred paise = 900 paise

Example 1 : Convert 6 rupees and 80 paise into paise.

Solution : 6 rupees and 80 paise
= 600 paise + 80 paise
= 680 paise

Example 2 : Convert 769 paise into rupees and paise.

Solution : 769 paise
= 700 paise + 69 paise
= 7 rupees 69 paise

Convert into paise :

1 rupee 80 paise = paise

2 rupees 30 paise = paise

2 rupees 25 paise = paise

5 rupees 50 paise = paise

7 rupees 20 paise = paise

4 rupees 85 paise = paise

8 rupees 75 paise = paise

9 rupees 25 paise = paise

4 rupees 45 paise = paise

7 rupees 60 paise = paise

Convert paise into rupees and paise :

205 paise = rupees paise

715 paise = rupees paise

850 paise = rupees paise

125 paise = rupee paise

435 paise = rupees paise

Let us Go Shopping

Encircle the notes and coins needed to buy :



₹ 12



₹ 10



₹ 8



₹ 24



Use the given coins repeatedly any one coin to make the following amount :

₹ 4 use  

₹ 9 use   

₹ 5 use   coins only.

➤ Addition of Rupees and Paise

Example 3 : Add 95 paise and 65 paise.

Solution : One hundred paise = 1 rupee
 So, 160 paise = 1 rupee and 60 paise
 = 1 rupee and 60 paise

Example 4. Add 16 rupees 75 paise and 12 rupees 85 paise.

Solution : If we count ones, tens and hundreds starting from paise, rupees start from hundreds digit. Hence, we carry the hundreds (obtained from sum of tens of paise) to rupees.

Sum = 29 rupees and 60 paise

$$\begin{array}{r} 95 \text{ paise} \\ + 65 \text{ paise} \\ \hline 160 \text{ paise} \end{array}$$

	₹	P
	1	75
+	12	85
<hr/>		
	29	60

Add :

	₹	P
	7	85
+	6	35
<hr/>		

	₹	P
	6	50
+	28	75
<hr/>		
	34	125

Common Mistake

	₹	P
	1	1
	6	50
+	28	75
<hr/>		
	35	25

	₹	P
	10	20
+	9	90
<hr/>		

	₹	P
	45	85
+	24	45
<hr/>		

	₹	P
	48	15
+	76	85
<hr/>		

	₹	P
	15	25
+	9	75
<hr/>		

	₹	P
	14	75
+	9	35
<hr/>		

	₹	P
	55	60
+	36	75
<hr/>		

Subtraction of Rupees and Paise

Example 5 :

Solution :

Subtract 45 paise from 1 rupee.
1 rupee = 100 paise

$$\begin{array}{r} 100 \text{ paise} \\ - 45 \text{ paise} \\ \hline 55 \text{ paise} \end{array}$$

Example 6 :

Solution :

Remainder = 55 paise
Subtract 5 rupees 85 paise from 7 rupees 20 paise.

1 rupee = 1 hundred paise
= 10 tens of paise
Remainder = 1 rupee 35 paise

$$\begin{array}{r} \text{₹} \quad \text{P} \\ 6 \quad 11 \quad 10 \\ 7 \quad 2 \quad 0 \\ - \quad 5 \quad 8 \quad 5 \\ \hline 1 \quad 3 \quad 5 \end{array}$$

Subtract :

$$\begin{array}{r} \text{₹} \quad \text{P} \\ 1 \quad 7 \quad 8 \quad 0 \\ - \quad 7 \quad 6 \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{₹} \quad \text{P} \\ 1 \quad 5 \quad 8 \quad 0 \\ - \quad 6 \quad 5 \quad 5 \\ \hline 1 \quad 1 \quad 3 \quad 5 \end{array} \quad \times$$

Common Mistake

$$\begin{array}{r} \text{₹} \quad \text{P} \\ 0 \quad 15 \quad 7 \quad 10 \\ 1 \quad 5 \quad 8 \quad 0 \\ - \quad 6 \quad 5 \quad 5 \\ \hline 9 \quad 2 \quad 5 \end{array} \quad \checkmark$$


$$\begin{array}{r} 1 \quad 8 \quad 5 \quad 0 \\ - \quad 5 \quad 8 \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \quad 0 \quad 4 \quad 0 \\ - \quad 1 \quad 8 \quad 4 \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 0 \quad 0 \quad 0 \\ - \quad 1 \quad 5 \quad 6 \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 8 \quad 7 \quad 5 \\ - \quad 1 \quad 9 \quad 2 \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \quad 3 \quad 2 \quad 0 \\ - \quad 2 \quad 1 \quad 5 \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \quad 4 \quad 2 \quad 0 \\ - \quad 2 \quad 5 \quad 3 \quad 5 \\ \hline \end{array}$$

Word Problems on Rupees and Paise

1. Savita bought a pair of shoes for 95 rupees 65 paise and a pair of socks for 12 rupees 85 paise. How many rupees did she pay in all ?

$$\begin{array}{r} \text{₹} \\ 95 \\ + 12 \\ \hline 108 \end{array}$$

2. Mona bought biscuits pack for 14 rupees 50 paise and a chocolate for 12 rupees 50 paise. How many rupees did she pay ?

3. David had a fifty rupee note. He ate an ice-cream cone for 27 rupees 65 paise. How much money is left with him ?

4. Sonia bought snacks for 65 rupees 75 paise. She gave a 100 rupee note to the shopkeeper. How much money will she get back ?

5. Jai bought apples for 35 rupees 65 paise and Orange for 16 rupees 75 paise. How many rupees did he spend ?

6. Roma purchased a ball for 42 rupees. She gave 28 rupees 75 paise to the vendor. How many rupees does she have to pay more ?

Measurement of Length

Learning Objectives :

- What is Measurement of Length ?
- Conversion of Metres into Centimetres
- Conversion of Centimetres into Metres and Centimetres
- Addition of Metre and Centimetres
- Subtraction of Metre and Centimetres
- Word Problems on Metre and Centimetre

What is Measurement of Length ?

How long or short any object is called **measurement of length**. There are many ways to measure length.

Generally, we measure length in metre and centimetre.

$$1 \text{ metre} = 100 \text{ centimetres}$$

We write metre in short as **m**.

We write centimetre in short as **cm**.

Metre scales are marked in m and cm.

We use three kinds of metre scales :

- Metre tape** is used by tailors.
- Long metre tape** is used to measure big lengths. It is used by masons.



Students use 15 cm or 30 cm long scale called ruler.

- Metre rod** is used for measuring length of cloth, table, etc. Metre rod is used by cloth merchants.

25

50

75

100

Measure and write in the boxes :

1. Measure your height.



my height = m cm

2. Measure the length of your table.

Length of the table = m cm

3. Measure the breadth of your school bag.

Breadth of the school bag = m cm

What will you use m or cm to measure these ?

Length of a table = 1 m

Height of a table = 75 cm

Length of a new pencil = 18

Length of your eraser = 3

Length of a room = 5

Length of your book = 25

Height of the blackboard = 1

Hots Questions

How would you measure the following ? Tick (✓) the correct body part :



Conversion of Metres into Centimetres

Example 1 :
Solution :

Convert 5 m and 48 cm into centimetres.

$$\begin{aligned} & 5 \text{ m } 48 \text{ cm} \\ &= 500 \text{ cm} + 48 \text{ cm} \\ &= 548 \text{ cm} \end{aligned}$$

Conversion of Centimetres into Metres and Centimetres

Example 2 :
Solution :

Convert 865 centimetres into metres and centimetres.

$$\begin{aligned} & 865 \text{ cm} \\ &= 800 \text{ cm} + 65 \text{ cm} \\ &= 8 \text{ m} + 65 \text{ cm} \\ &= 8 \text{ m } 65 \text{ cm} \end{aligned}$$

Convert metres into centimetres :

$5 \text{ m } 50 \text{ cm} = \boxed{550} \text{ cm}$

$6 \text{ m } 75 \text{ cm} = \boxed{} \text{ cm}$

$3 \text{ m } 8 \text{ cm} = \boxed{} \text{ cm}$

$7 \text{ m } 10 \text{ cm} = \boxed{} \text{ cm}$

$9 \text{ m } 5 \text{ cm} = \boxed{} \text{ cm}$

$9 \text{ m } 8 \text{ cm} = \boxed{} \text{ cm}$

$7 \text{ m } 95 \text{ cm} = \boxed{} \text{ cm}$

$1 \text{ m } 17 \text{ cm} = \boxed{} \text{ cm}$

$8 \text{ m } 25 \text{ cm} = \boxed{} \text{ cm}$

$9 \text{ m } 20 \text{ cm} = \boxed{} \text{ cm}$

Convert centimetres into metres and centimetres :

$830 \text{ cm} = \boxed{8} \text{ m } \boxed{30} \text{ cm}$

$335 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$739 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$655 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$978 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$695 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$945 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$823 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$843 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

$528 \text{ cm} = \boxed{} \text{ m } \boxed{} \text{ cm}$

➤ Addition of Metre and Centimetre

Example 3 : Add 94 cm and 86 cm.

Solution : $100 \text{ cm} = 1 \text{ m}$
 So, $180 \text{ cm} = 1 \text{ m } 80 \text{ cm}$
 $= 1 \text{ m } 80 \text{ cm}$

Example 4 : Add 12 m 65 cm and 9 m 75 cm.

Solution : If we count ones, tens and hundreds starting from cm, metres start from hundreds. Hence, we add m-cm like common addition.
 Sum = $22 \text{ m } 40 \text{ cm}$

$$\begin{array}{r} 94 \text{ cm} \\ + 86 \text{ cm} \\ \hline 180 \text{ cm} \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 1 \ 1 \ 1 \\ 1 \ 2 \ 6 \ 5 \\ + \quad 9 \ 7 \ 5 \\ \hline 2 \ 2 \ 1 \ 4 \ 0 \end{array}$$

Add :

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 6 \ 2 \ 2 \\ + 2 \ 8 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 5 \ 8 \ 5 \\ + 5 \ 1 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 3 \ 2 \ 4 \\ + 7 \ 6 \ 8 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 2 \ 6 \ 5 \\ + 4 \ 8 \ 0 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 5 \ 5 \ 0 \\ + 8 \ 7 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 8 \ 0 \ 5 \\ + 6 \ 7 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 8 \ 7 \ 3 \\ + 1 \ 0 \ 7 \ 5 \\ \hline \end{array}$$

$$\begin{array}{r} 5 \ 8 \ 4 \\ + 1 \ 5 \ 7 \ 9 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \ 8 \ 0 \ 5 \\ + 5 \ 0 \ 0 \ 8 \\ \hline \end{array}$$

Subtraction of Metre and Centimetre

Example 5 :
Solution :

Subtract 48 cm from 84 cm.
 $84 \text{ cm} - 48 \text{ cm} = 36 \text{ cm}$.

$$\begin{array}{r} 84 \text{ cm} \\ - 48 \text{ cm} \\ \hline 36 \text{ cm} \end{array}$$

Example 6 :
Solution :

Subtract 8 m 25 cm from 29 m 75 cm.

If we count ones, tens, hundreds starting from cm, metres start from hundreds. Hence, we subtract m-cm like common subtraction.

Remainder = 21 m 50 cm

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 29 \quad 75 \\ - \quad 8 \quad 25 \\ \hline 21 \quad 50 \end{array}$$

Subtract :

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 1 \quad 10 \\ - \quad \quad 75 \\ \hline \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 12 \quad 15 \\ - 10 \quad 82 \\ \hline \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 29 \quad 54 \\ - 11 \quad 78 \\ \hline \end{array}$$

$$\begin{array}{r} 25 \quad 65 \\ - 13 \quad 75 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 82 \\ - \quad 8 \quad 18 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \quad 46 \\ - \quad 3 \quad 82 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \quad 76 \\ - \quad 1 \quad 30 \\ \hline \end{array}$$

$$\begin{array}{r} 15 \quad 75 \\ - \quad 7 \quad 86 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \quad 21 \\ - 29 \quad 35 \\ \hline \end{array}$$

Word Problems on Metre and Centimetre

1. Radha weaves 7 m 80 cm and 8 m 14 cm cloth on Sunday and Monday. How much cloth does she weave in all ?

	m	cm
	7	80
+	8	14
<hr/>		
	15	94

2. Rani purchase 4 m 25 cm cloth for shirt, 6 m 85 cm cloth for trousers and 6 m 45 cm for kurti. How much cloth did she purchase in all ?

3. Kadir threw a ball 25 m 22 cm away. Ali threw the ball 24 m 88 cm farther. How much distance did Ali threw the ball ?

4. Mona had 10 m long string. She cut 5 m 50 cm out of it to give to Roma. How much long string is left with Mona ?

5. From a rope of length 7 m 25 cm, a piece of 2 m 75 cm is cut out. What is the length of the left out piece ?

6. Abhinav jumps 2 m 76 cm high. Ram jumps 87 cm less than him. How much high does Ram jump ?

Learning Objectives :

- ❖ What is Measurement of Weight ?
- ❖ Addition of Kilogram and Gram
- ❖ Subtraction of Kilogram and Gram
- ❖ Word Problems on Kilogram and Gram

What is Measurement of Weight ?

To know how much weighty any object is called **measurement of weight**.

Generally, we measure weight by kilograms and grams.

Kilo means **one thousand**.

So, $1 \text{ kilogram} = 1000 \text{ gram}$

We write 1 kilogram in short as 1 kg.

We write 1 gram in short as 1 g.

Thus, $\text{Half kilogram} = 500 \text{ gram}$

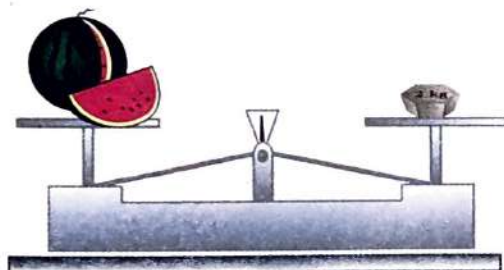
$\text{Quarter kilogram} = 250 \text{ gram}$

We use several gram-kilogram weights for weighing articles.

Some of the weights used are the following :



To know the weight of article, we put the article on one pan of a simple balance. Then we put weights on the other pan to balance the article.



Weight of watermelon
is 2 kilogram.

Find the total of weights in each case :



650g



We use **kg** to weigh big packets or bags of dal, sugar, rice, fruits, vegetables, etc.

We use **g** to weigh small packets of fruits, biscuits, sweets, sugar, etc.

Would you use **kg** or **g** to weight these ?

Fill **g** or **kg** in the blanks :

1. Weight of a small packet of biscuits = 50

2. Weight of rice for the family for a week = 5

3. Weight of a cartoon of grapes = 5

4. Weight of a chocolate = 25

5. Weight of an apple = 250

6. Weight of a packet of salt = 1

7. Weight of a muskmelon = 2

8. Weight of a basket of apples = 10

9. Weight of a bread pack = 400

10. Weight of an ice-cream cone = 50

11. Weight of a 1 year old baby = 4

12. Weight of your maths book = 300

13. Weight of a big tomato = 50

➤ Addition of Kilogram and Gram

Example 1 : Add 12 kg 725 g and 5 kg 558 g.

Solution : We add both the weights like common addition.

$$12 \text{ kg } 725 \text{ g} + 5 \text{ kg } 558 \text{ g} = 18 \text{ kg } 283 \text{ g}$$

$$\text{Sum} = 18 \text{ kg } 283 \text{ g}$$

kg	g
12	725
+ 5	+ 558
18	1283

Add :

kg	g
35	365
+ 18	+ 235
35	600

kg	g
19	072
+ 67	+ 289
25	361

kg	g
26	225
+ 24	+ 175
50	400

kg	g
34	755
+ 43	+ 155
34	910

kg	g
16	685
+ 8	+ 426
24	1111

kg	g
28	785
+ 16	+ 097
44	882

kg	g
8	339
+ 8	+ 678
16	1017

kg	g
4	456
+ 54	+ 656
58	1112

kg	g
8	878
+ 49	+ 829
57	1707

kg	g
29	685
+ 1	+ 185
30	870

kg	g
36	515
+ 15	+ 885
51	1400

kg	g
44	646
+ 21	+ 195
65	841

Subtraction of Kilogram and Gram

Example 2 : Subtract 9 kg 785 g from 14 kg 631 g.

Solution : We subtract both the weights like common subtraction.

$$14 \text{ kg } 631 \text{ g} - 9 \text{ kg } 785 \text{ g} = 4 \text{ kg } 846 \text{ g}$$

$$\text{Remainder} = 4 \text{ kg } 846 \text{ g}$$

	kg		g	
0	13	15	12	11
1	4	6	3	1
-	9	7	8	5
	4	8	4	6

Subtract :

	kg		g
		9	00
5		0	0
-	3	4	75

	kg		g
		3	0
7		5	0
-	2	5	80

	kg		g
		3	0
7		0	0
-	2	5	250

3	8	7	3	0
-	9	6	5	9

2	6	5	0	2
-	7	4	2	1

2	8	4	1	2
-	1	8	2	20

5	0	8	2	5
-	3	9	7	70

8	4	3	0	5
-	6	1	1	08

8	7	8	3	0
-	3	5	7	55

2	2	7	0	0
-	1	1	3	50

4	4	5	5	0
-	2	3	1	75

5	2	2	5	0
-	2	4	1	25

Word Problems on Kilogram and Gram

1. Weight of an empty tin is 1 kg 750 g. Weight of chocolates in it is 6 kg 980 g. Find the weight of the tin and chocolates together.
2. A box of mangoes weighs 14 kg 250 g and another box of mangoes weighs 15 kg 550 g. Find the total weight of both the boxes.
3. Madhu purchased 2 kg 250 g of sugar and 4 kg 650 g of rice. How much total weight she has to carry ?
4. A tin with sugar weighs 6 kg 350 g. If the empty tin weighs 1 kg 480g, what is the weight of sugar ?
5. Shiva purchased 6 kg 678 g of sweets. He gave 5 kg 976 g of sweets to his friends. How much sweets are left with him ?
6. Weight of Madhu was 24 kg 600 g. Her weight was reduced by 8 kg 975 g because of illness. What is her weight now ?

	kg	g
	1	750
+	6	980
	8	730

Learning Objectives :

- ❖ What is Measurement of Capacity ?
- ❖ Addition of Litre and Millilitre
- ❖ Subtraction of Litre and Millilitre
- ❖ Word Problems on Litre and Millilitre

What is Measurement of Capacity ?

To know the quantity of any liquid is called **measurement of capacity**. In the other words, quantity of a liquid that a vessel can hold is its **capacity**.

We measure milk, kerosene and petrol in litres and millilitres.

$$1 \text{ litre} = 1000 \text{ millilitres}$$

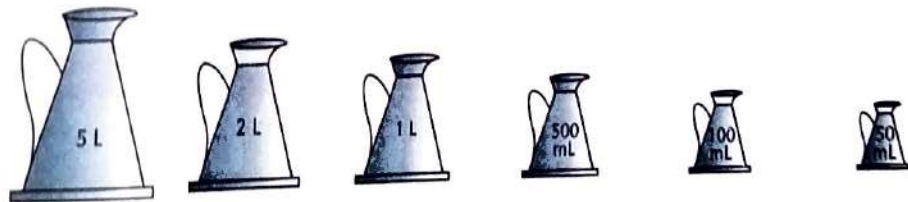
We write litre in short as **L**.

We write millilitre in short as **mL**.

Have you seen the measure of milk with the milk vendor ?



The measure for petrol or kerosene vessels are of different shapes :



$$\text{Half litre} = 500 \text{ mL}$$

$$\text{Quarter litre} = 250 \text{ mL}$$

We also measure cold liquid, drinks medicines and cooking oil in litres and millilitres.

Generally, we use litre (L) to measure big amounts of water, milk, oil etc.

We use millilitres (mL) to measure small amount of medicine, shampoo, milk etc.

Would you use L or mL to measure these ?

Fill in the blanks :

1. Petrol in the scooter's tank = 2

2. Small pack of shampoo = 10

3. Coke bottle you drink = 200

4. Cooking oil tin = 15

5. Milk in a cup = 100

6. Water in a bucket = 15

7. Small pack of mango drink = 250

8. Milk in the container of a milkman = 20

9. Kerosene in a drum = 200

10. Water in one coconut = 100

11. Tomato sauce in a bottle = 300

12. Cough syrup medicine = 100

13. A spoonful of medicine = 5

Addition of Litre and Millilitre

Example 1 : Add 4 L 865 mL and 5 L 469 mL.

Solution : We add both the volumes like common addition.

$$4 \text{ L } 865 \text{ mL} + 5 \text{ L } 469 \text{ mL} = 10 \text{ L } 334 \text{ mL}$$

$$\text{Sum} = 10 \text{ L } 334 \text{ mL}$$

L		mL
1	1	1
4	8	6
5	4	6
10	13	34

Add :

L		mL
15	200	0
+ 13	175	5

L		mL
44	226	6
+ 10	390	0

L		mL
29	075	5
+ 38	850	0

15	560	0
+ 18	375	5

24	571	1
+ 16	392	2

36	825	5
+ 28	170	0

40	066	6
+ 28	839	9

9	661	1
+ 68	259	9

32	943	3
+ 18	678	8

27	650	0
+ 2	250	0

65	05	5
+ 32	25	5

15	357	7
+ 4	213	3

Subtraction of Litre and Millilitre

Example 2 : Subtract 6 L 987 mL from 12 L 275 mL.

Solution : We Subtract both the volumes like common Subtraction.

$$12 \text{ L } 275 \text{ mL} - 6 \text{ L } 987 \text{ mL} = 5 \text{ L } 288 \text{ mL}$$

Remainder = 5 L 288 mL

	L			mL
0	11	11	16	15
1	2	2	7	5
-	6	9	8	7
	5	2	8	8

Subtract :

	L		mL
		8	570
-		3	435
		5	135

	L		mL
		5	078
-		3	539
		2	539

	L		mL
		15	300
-		12	225
		3	75

	L		mL
		19	859
-		8	661
		11	198

	L		mL
		28	323
-		4	414
		24	909

	L		mL
		15	418
-		3	739
		12	679

	L		mL
		39	751
-		28	869
		11	882

	L		mL
		25	078
-		18	539
		7	547

	L		mL
		90	005
-		80	277
		10	728

	L		mL
		82	50
-		64	50
		18	00

	L		mL
		98	850
-		62	075
		36	775

	L		mL
		84	698
-		43	089
		41	609

Word Problems on Litre and Millilitre

1. A tin contains 16 L 630 mL of oil and another 14 L 860 mL. How much oil is there in both the tins ?

L	mL
1	
16	630
+ 14	860
31	490

2. Ravi's cow gives 15 L 350 mL of milk everyday. His buffalo gives 17 L 250 mL of milk everyday. How much milk does Ravi get from both ?

3. Mona has 6 L 750 mL of petrol in his car. She got 5 L 470 mL of petrol more in it. How much petrol is there in the car now ?

4. A bucket can hold 15 L of water. Rita poured 6 L 950 mL of water in it. How much water can this bucket hold more ?

5. A small tin contains 6 L 960 mL of oil. A big tin contains 16 L 825 mL of oil. How much more oil the big tin contains ?

6. There was 3 L 645 mL of milk in the kitchen. The children drank 2 L 350 mL out of it. How much milk is left ?

Let's Recall

Multiple Choice Questions (MCQs) :

1. What fraction of the figure is shaded ?



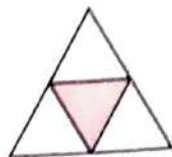
(a) $\frac{1}{4}$

(b) $\frac{1}{3}$

(c) $\frac{1}{2}$

(d) $\frac{1}{5}$

2. Fraction for the shaded part in the figure is :



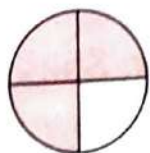
(a) $\frac{1}{4}$

(b) $\frac{1}{2}$

(c) $\frac{1}{3}$

(d) $\frac{1}{5}$

3. Fraction for the shaded part in the figure is :



(a) $\frac{1}{4}$

(b) $\frac{1}{2}$

(c) $\frac{3}{4}$

(d) $\frac{1}{5}$

4. The conversion of 1225 paise into ₹ is :

(a) ₹ 1.225 (b) ₹ 1225 (c) ₹ 12.25 (d) ₹ 122.50

5. The sum of ₹ 18.70, ₹ 9.20, ₹ 12.00 and ₹ 14.50 is :

(a) ₹ 65.90 (b) ₹ 53.90 (c) ₹ 54.40 (d) ₹ 55.00

6. Monu bought a toy for ₹ 32.50. He gave ₹ 50 to the shopkeeper. The money returned by the shopkeeper to Monu is :

(a) ₹ 17.50 (b) ₹ 27.50 (c) ₹ 7.50 (d) ₹ 31.50

7. A tin can hold 15 L of water. Mona poured 4 L 750 mL of water in it. How much water can the tin hold more ?

(a) 11 L 250 mL (b) 10 L 250 mL

(c) 10 L 750 mL (d) None of these

8. A box of apples weighs 12 kg 250 g and another box of apples weighs 13 kg 550 g. Total weight of both the boxes is :

(a) 25 kg 700 g (b) 25 kg 800 g

(c) 26 kg 800 g (d) None of these

Learning Objectives :

❖ What is the Clock ? ❖ Telling the Time ❖ Calendar ❖ Calendar of January 2019

What is the Clock ?

A clock is an instrument used to measure, keep and indicate time. The hours are marked on the dial (or face) of the clock from 1 to 12. The dial between one number to the next number is divided into 5 equal parts.



Each part shows 1 minute for the long hand. Thus, long hand moves 1 full round in $12 \times 5 = 60$ minutes.

$$1 \text{ hour} = 60 \text{ minutes}$$

The short hand takes 1 hour to move from one number to the next number.

Telling the Time

In the clock above, the short (hour) hand has crossed number 1.

But it has not reached number 2. It means 1 hour.

The long (minutes) hand has moved 2 small divisions after the number 8.

$$\begin{aligned} \text{Number of minutes} &= 8 \times 5 + 2 \\ &= 40 + 2 = 42 \end{aligned}$$

Hence, the time in this clock is 1 hour 42 minutes.

We also write it as 1 : 42

Common Mistake



The time is 12.30. ✗

The time is 6.00. ✓

What is the time ? Write in the box :













Draw hands on the clock to show the time given :



7 : 25



3 : 30



10 : 37



4 : 36



4 : 52



12 : 09

Hots Questions

What time does the clock show ? Fill in the blanks with 'before' or 'after' :







Calendar

There are 24 hours in a day.

Midnight to noon	12 hours
Noon to next midnight	+ 12 hours
	<hr/>
	24 hours

Days are also measure of time.

7 days make a week.

1. Sunday
2. Monday
3. Tuesday,
4. Wednesday,
5. Thursday,
6. Friday,
7. Saturday.

For measuring longer periods of time, we use measures of months and years.

There are 12 months in a year.

Number of days in each month :

January	31	July	31
February (29 in a leap year)	28	August	31
March	31	September	30
April	30	October	31
May	31	November	30
June	30	December	31

After every December comes January.

Each month comes again after 12 months.

1 year has 365 days.

1 leap year has 366 days.

A year that is divisible by 4 is called a **leap year**.

For example, the years 2008, 2012, 2016, 2020, 2024

Complete the names of the days :

W _____
F _____
Tu _____
M _____

Th _____
Sa _____
Su _____

Fill in the blanks :

1. First day of the week
2. Last day of the week
3. Shortest month of the year
4. Number of months having 30 days each
5. Number of months having 31 days each
6. Month of our Independence Day
7. Month just after March
8. Number of days in a year
9. Number of months in a year.



Life Skills

Helping at home!

If you get up at 9 o'clock and sleep at 9 o'clock you have 12 hours.

Can you take out 1 hour on each Sunday to help at home ?

What can you do ? Tick (✓) as many as you can. Add your own too.

clean my room

lay the table

water the plants

help clean up after a meal

open the door for visitors

get water for guests

Learning Objectives :

- ❖ Some Geometrical Figures
- ❖ Kinds of Straight Line
- ❖ Surfaces : Plane and Curved
- ❖ Faces, Edges and Vertices

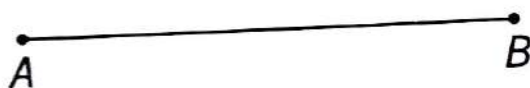
Some Geometrical Figures

A small round mark or spot is called **dot**. Put your pen or pencil on the paper. A round mark or spot will be made. It is called dot or point.

We give a name to a point by any alphabet such as, AB or C .

If we join two points, then we make a **line segment** or **curve**.

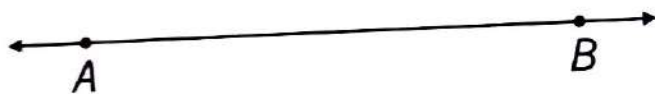
If we join two points straight by a ruler, then we get a **line segment**.



It is called line segment AB . Its sign is AB .

On producing the line segment endlessly we get a **line**.

We put arrows on two ends of line segment to show a line.

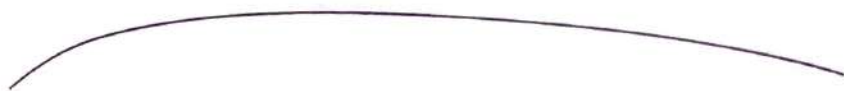


It is called line AB . If we join two points in any way without a ruler then we get a **curve**.



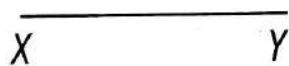
It is called curve AB .

Is the figure a line or a curve? Write :



• Kinds of Straight Line

The straight line is of three kinds. You can see below.



Standing line

Sleeping line

Slanting line

Take some matchsticks. Use them to write today's date.

14-11-2019

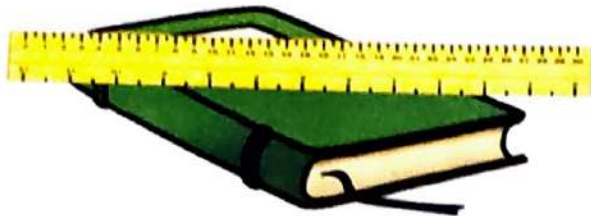


How many lines of each kind did you make ?

Surfaces : Plane and Curved

The upper most part of an article which we usually see or touch is called its **surface**.

Put a scale on a book. The scale's surface touches the surface of the table **regularly**.



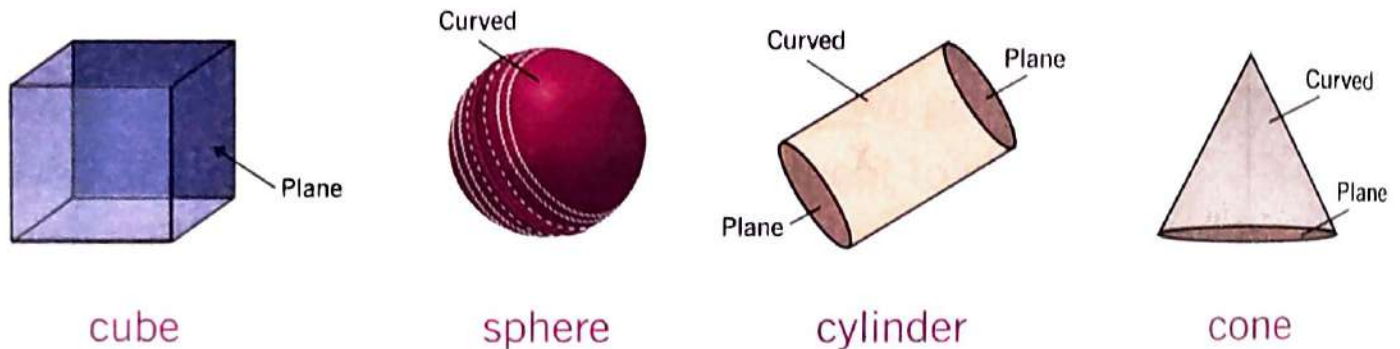
Now put this scale on a cricket ball. The scale's surface **does not touch** the surface of the cricket ball **regularly**.

The surface of the book is **plane**.

The surface of the cricket ball is **curved**.

Similarly, surface of all the faces of cubes and cuboids is plane.

Surface of a sphere is curved.



Surface of two faces of the cylinder is plane.

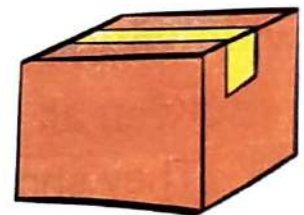
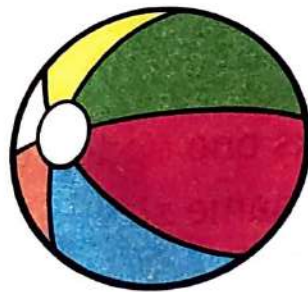
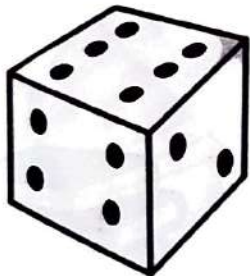
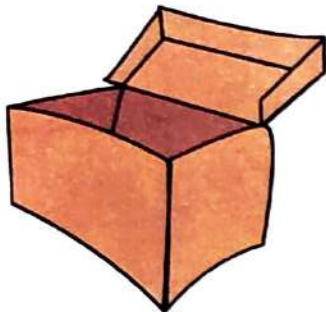
The surface of the third face of cylinder is curved.

The surface of one face of the cone is plane.

The surface of the other face of the cone is curved.

Thus, the surface of cone and cylinder are plane and curved both.

Mark each surface of the articles—plane/curved :



Tick (✓) the correct word :

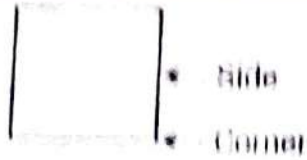
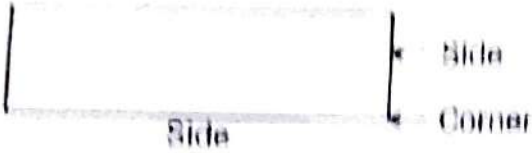


1. The surface of a football is :
2. The surface of the wall of a room is :
3. The surface of your book is :
4. The surface of an apple is :

plane/curved
 plane/curved
 plane/curved
 plane/curved

Write the names of three articles having surfaces plane and curved both :

• Faces, Edges and Vertices

How many corners and sides do these flat shapes have ?

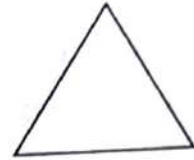
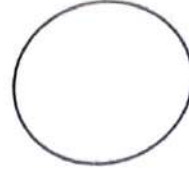
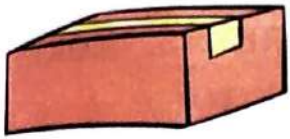
Shape	Corners	Sides
	4	4
		
		
		

Now do yourself

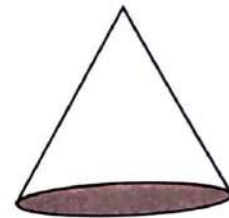
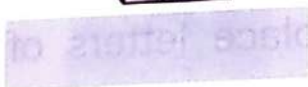
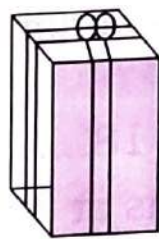
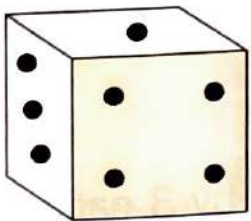
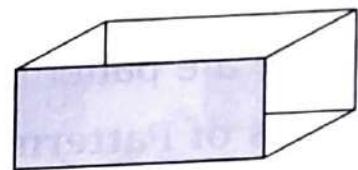
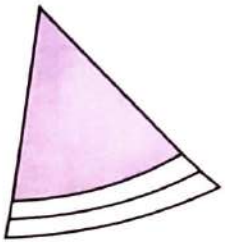
- Keep all your notebooks one on top of the other. They should all be the same size. What shape do you get ? _____
- Ask your parents to give you ₹ 1 or ₹ 2 coins. Keep all the coins one on top of the other. What shape do you get ? _____
- Take four dice from your ludo game. Keep them joined together. Then place four more dice one on top of each dice. What shape do you get ? _____



Match the pictures with the correct shapes :



Name the shapes of the colour faces :



Fill in the blanks :

A cube has faces.
 A cylinder has edges.

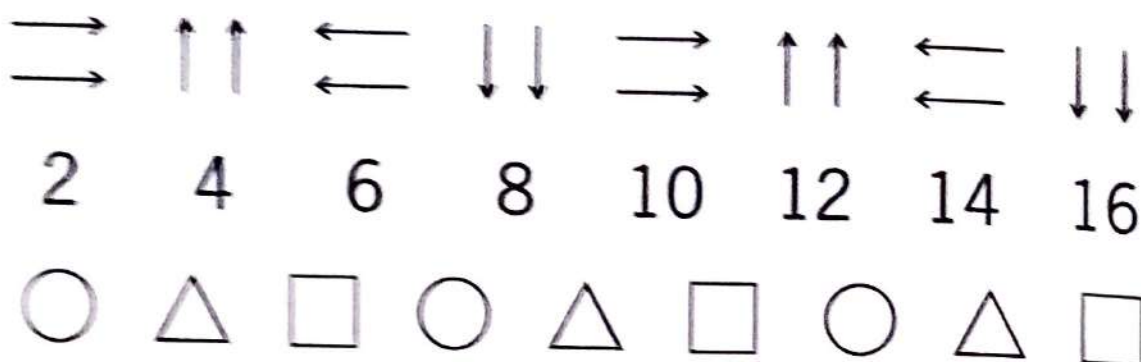
A sphere has vertex.
 A cone has faces.

Learning Objectives :

What is Patterns ? Kinds of Patterns

What is Patterns ?

A pattern is an arrangement of lines, shapes, numbers, colours, alphabets etc. That is repeated again and again.



These are pattern.

Kinds of Patterns

There are many kinds of patterns. Some are **number patterns**, **alphabet patterns**, **geometrical patterns**, etc.

A list of numbers that follows a certain sequence or pattern is called a **number pattern**.

For example : 3, 6, 9, 12, 15, 18.....

The above number pattern starts at 3 and skip count by 3 each time.

In **alphabet patterns** we place letters of the alphabet in ways that make it repetitive.

For example : M, N, O, M, N, O, M, N, O

The above pattern repeats letters M, N and O in a sequential manner.

Look at the patterns and fill up the boxes :

Look at some patterns with numbers. Fill the number in the blank space of each pattern :

Read and write what comes next :

DAY	NIGHT	DAY
1	2	1
15	20	25
18	21	24
55	50	45
20	19	18
40	38	36
AA	BB	CC
AB	CD	EF

What will come next ? Draw it :

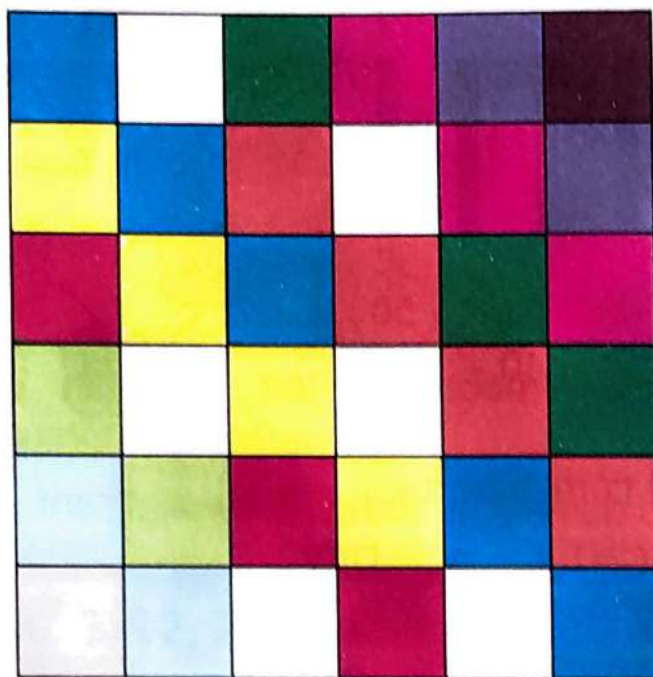


1 3 5 7

5 10 15 20

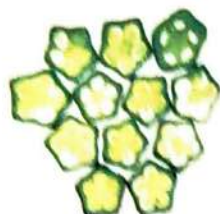


Colour the white boxes. Complete the pattern :



Learning By Doing

- Take some ladies' fingers.
- Ask Mummy or Papa to cut them into two halves.
- Dip the halves in different colours.
- Dab them on white paper to make beautiful patterns.



Learning Objectives :

- What is Data Handling ?
- Listing Things





What is Data Handling ?

Collection of information is called **data handling**.





Mohan have 30 students in his class. In them, 8 like football, 4 like kabaddi, 10 like cricket and 8 like hockey.

It is called **data handling**.

Papa, Roma, Mehul and Mummy went shopping for Diwali. Mona made a list of things they bought for the house.

Diyas 	Candles 	Glitter bulbs 	Lanterns 
30	20	16	4

Mona and Mummy used the following for decoration.

Diyas 	Candles 	Glitter bulbs 	Lanterns 
27	20	13	3

How many of each were left ? Write in your notebook.

These were some of the things that Mona's family ate during the week.

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Bhindi masala	Vegetable biryani	Dal-rice	Matar paneer	Stuffed capsicum	Rajma rice	Dum aloo

On how many days was rice not cooked ?

On how many days were vegetables cooked ?

Rajma-rice was cooked how many days after matar paneer ?
Bhindi masala was cooked how many days before Saturday ?

Write in capital letters the names of your teachers :

My class teacher

My Maths teacher

My games teacher

Now count and write how many of each of these letters are there in the names :

How many As ?

How many Ts ?

How many Ss ?

Listing Things

Mother is going to the market. She makes a list of the things she has to buy.

List of Items	Number of Items
Biscuits	2 packets
Sugar	1 packet
Tea leaves	1 packet
Soaps	2
Toothbrush	4

After she has bought the items, she ticks it.

A list also helps us to remember important information.

Project

1. With the help of an adult, open the first-aid box at home.
Make a list of the items in the box. Find out what each item is used for.
2. Make a list of the things you carry in your schoolbag everyday.



Life Skills

Your parents keep summer and winter clothes in two different cupboards. Which of these will go into the winter box? Encircle them :

cotton shirts/frocks/mufflers/sweaters/sun shades

long socks/short pants/cotton skirts/jackets/sleeveless/T-shirts

ankle-socks/stockings/woollen gloves/long trousers

Help your parents fold the clothes and put them away in the winter cupboard.

Make a list of the things you have to do during the weekend :

This is your list.

TO DO LIST

This is Mugdha's list

TO DO LIST

- Change cover of Maths notebook
- Clean my bicycle
- Polish school shoes
- Complete homework

Birthday time for Mona's class! The table shows the number of boys and girls in Mona's class who have their birthdays in each month of the year. Write the missing numbers :

Months	Girls	Boys	In all
January	1	2	3
February	3	4	
March	1	1	
April		2	6
May		4	4
June	2	5	
July	0		2
August	1	4	
September		3	5
October	2	0	
November	5		7
December	3		9

Look at the birthday chart and answer the questions :

1. Which month has the most number of birthdays ?
2. Which month has the least number of birthdays ?
3. How many boys celebrate their birthdays in December ?
4. How many girls celebrate their birthdays in April ?



How do the children in Mona's class come to school ?

Means of Transport				
Number of Children	7	5	12	14

Least number of children come _____






Most number of children come _____


How many children come by bicycle ?

How many more children come by bus than by car ?

Look at these fresh fruits. Count and fill in the information in the following table :



Fruits					
Numbers					

What is the total number of fruits in the basket ? 

Hots Questions



Read about the trees in Mona's school ground. Think and answer the questions. Ashoka trees are the most. Neem trees are more than tamarind trees. Tamarind trees are the least.

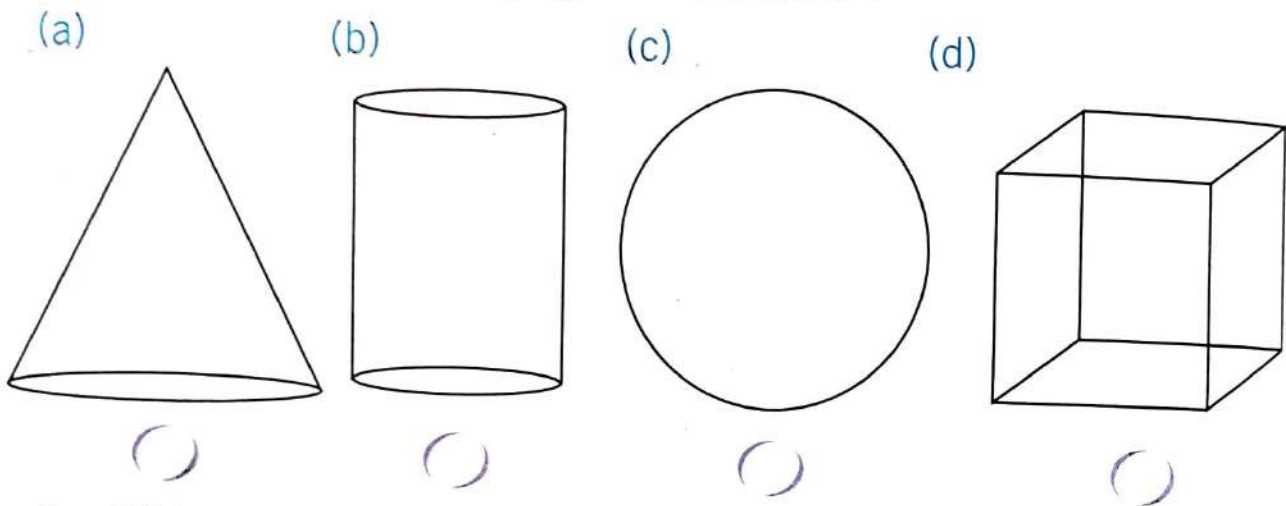
- How many tamarind trees are there ? 5 3 2
- How many neem trees are there ? 1 5 2
- How many Ashoka trees are there ? 9 4 3



Let's Recall

Multiple Choice Questions (MCQs) :

- The time from 12 O' clock noon to 12 O' clock mid-night is called :
(a) am (b) pm
(c) both (a) and (b) (d) None of these
- The number of days in the month of February in a leap year is :
(a) 28 (b) 29 (c) 27 (d) None of these
- To convert days into hours, we multiply the number of days by :
(a) 30 (b) 60 (c) 28 (d) 24
- When the longer hand in a clock is at 3. It is read as :
(a) quarter past (b) quarter to
(c) half past (d) None of these
- Which one of the following figure has 3 faces ?



- A solid having only one edge is a :
(a) cone (b) square (c) triangle (d) None of these
- Frequency 9 can be represented by tally marks as :
(a) ← (b) → (c) ← (d) →

Half Yearly Test Paper

(Based on Chapter From 1 to 3)

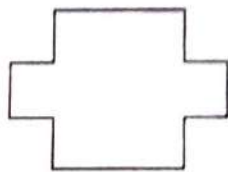
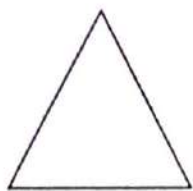
Time
MM

Note : All questions are compulsory.

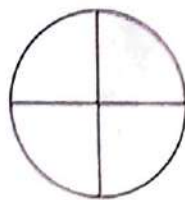
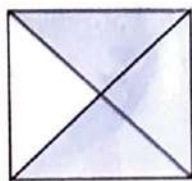
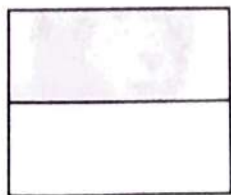
A. Tick (✓) the correct option :

- 469 has _____ tens.
(a) 4 (b) 6 (c) 9 (d) None of these
- The place value of 9 in 976 is _____.
(a) 9 (b) 90 (c) 900 (d) None of these
- $265 + 469$ is _____.
(a) 734 (b) 634 (c) 744 (d) 644
- $844 - 567$ is _____.
(a) 367 (b) 267 (c) 377 (d) 277
- 286×3 is _____.
(a) 758 (b) 858 (c) 658 (d) 685
- $72 \div 8$ is _____.
(a) 5 (b) 7 (c) 9 (d) 8

B. Draw a line to cut each shape in half :



C. Write the fraction for the shaded part :



- D. There are 536 students in a school. If the number of girl is 278 what is the number of boys ?
- E. In a cattle farm there are 329 buffaloes and 145 cows. How many animals are there in all ?
- F. Mona gave 8 toffees to each of her 54 classmates. How many toffees did she give in all ?
- G. 48 mangoes are equally divided among 6 children. How many mangoes does each child get ?
- H. Divide these picture in one fourth :



Annual Test Paper

(Based on Chapter From 1 to 16)

Time _____

MM _____

Fill in the blanks :

508 509

303 302

Write number-names :

319

756

How many hundreds, tens and ones :

473 = _____ hundreds + _____ tens + _____ ones

Compare the numbers and put $>$ or $<$ in between :

102 98 275 257 755 751

Write the greatest and least numbers of three digits.

Write in the ascending and descending order :

630, 733, 819, 602

Add :

$$\begin{array}{r} 75 \\ + 43 \\ \hline \end{array}$$

$$\begin{array}{r} 98 \\ + 82 \\ \hline \end{array}$$

$$\begin{array}{r} 582 \\ + 389 \\ \hline \end{array}$$

$$\begin{array}{r} 297 \\ + 305 \\ \hline \end{array}$$

Subtract :

$$\begin{array}{r} 48 \\ - 25 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ - 49 \\ \hline \end{array}$$

$$\begin{array}{r} 320 \\ - 164 \\ \hline \end{array}$$

$$\begin{array}{r} 523 \\ - 376 \\ \hline \end{array}$$

9. Solve the following :

$$\begin{array}{r} 177 \\ \times 5 \\ \hline \hline \end{array}$$

$$\begin{array}{r} 229 \\ \times 4 \\ \hline \hline \end{array}$$

$$4 \overline{) 32}$$

$$5 \overline{) 35}$$

10. Solve the following :

$$\begin{array}{r} \text{₹} \quad \text{P} \\ 935 \\ + 1945 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 954 \\ - 178 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 7272 \\ - 1818 \\ \hline \hline \end{array}$$

11. Solve the following :

$$\begin{array}{r} \text{L} \quad \text{mL} \\ 9661 \\ + 68259 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 26502 \\ - 7421 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 84305 \\ - 61108 \\ \hline \hline \end{array}$$

12. Fill in the blanks :

- First day of the week
- Number of months having 31 days each
- Month of your birthday