

## Chapter-1

## NUMBER SYSTEM

## Arabic Number:

The numbers which we use in our daily life are known as Arabic numbers.

For example

0, 1, 2, 3, 4, 5, 6, 7, 8, 9 .....

But before Arabic numbers there was a system of Roman numbers but now Arabic numbers are in force. Some times we use Roman numbers also.

Arabic Number	Roman Number	Arabic Number	Roman Number	Arabic Number	Roman Number
1	I	18	XVIII	35	XXXV
2	II	19	XIX	36	XXXVI
3	III	20	XX	37	XXXVII
4	IV	21	XXI	38	XXXVIII
5	V	22	XXII	39	XXXIX
6	VI	23	XXIII	40	XL
7	VII	24	XXIV	41	XLI
8	VIII	25	XXV	42	XLII
9	IX	26	XXVI	43	XLIII
10	X	27	XXVII	44	XLIV
11	XI	28	XXVIII	45	XLV
12	XII	29	XXIX	46	XLVI
13	XIII	30	XXX	47	XLVII
14	XIV	31	XXXI	48	XLVIII
15	XV	32	XXXII	49	XLIX
16	XVI	33	XXXIII	50	L
17	XVII	34	XXXIV		



*Mayari*

# MATHS

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EXERCISE 1.1

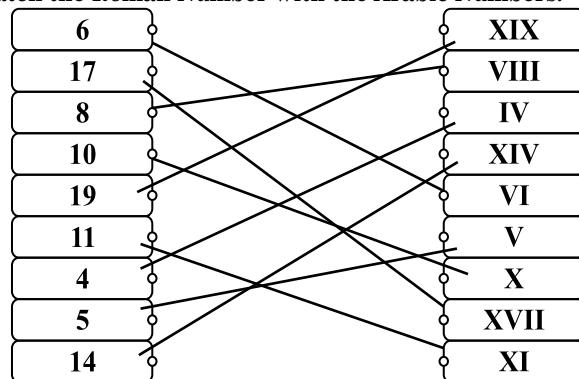
Convert the Arabic Numbers into Roman Numbers.

Arabic Number	Roman Number						
3	iii	9	viii	40	XI	49	xlix
15	xv	37	xxxvii	25	xxv	31	xxxii
7	vii	22	xxii	6	vi	26	Xxvi
14	xiv	13	xxiiii	33	xxxiiii	10	x
20	xx	16	xvi	45	xlv	50	l

Convert the Roman numbers into Arabic Number in given boxes.

Arabic Number	Roman Number						
17	XVIII	8	VIII	25	XXV	40	XL
2	II	22	XXII	13	XIII	26	XXVI
5	V	3	III	45	XLV	20	XX
46	XLVI	16	XVI	6	VI	11	XI
21	XXI	42	XLII	19	XIX	30	XXX

Match the Roman Number with the Arabic Numbers.



NATURAL NUMBERS EVEN NUMBERS UPTO 100

Counting is called natural number. There are two Parts of natural numbers, Even numbers and odd numbers.

**Even Numbers:** Such numbers which contain 0, 2, 4, 6 and 8 etc are called even number Examples 8,16, 22, 34, etc.

**Odd Numbers:** Such numbers which contain 1, 3, 5, 7 and 9 are called odd numbers. Example 11,25,43,57,79 etc.

EXERCISE 1.2

Write Even or Odd against the given numbers.

1	888	even	2	965	odd	3	966	odd
4	999	odd	5	562	odd	6	722	odd
7	346	odd	8	442	even	9	869	even
10	656	even	11	879	even	12	410	even

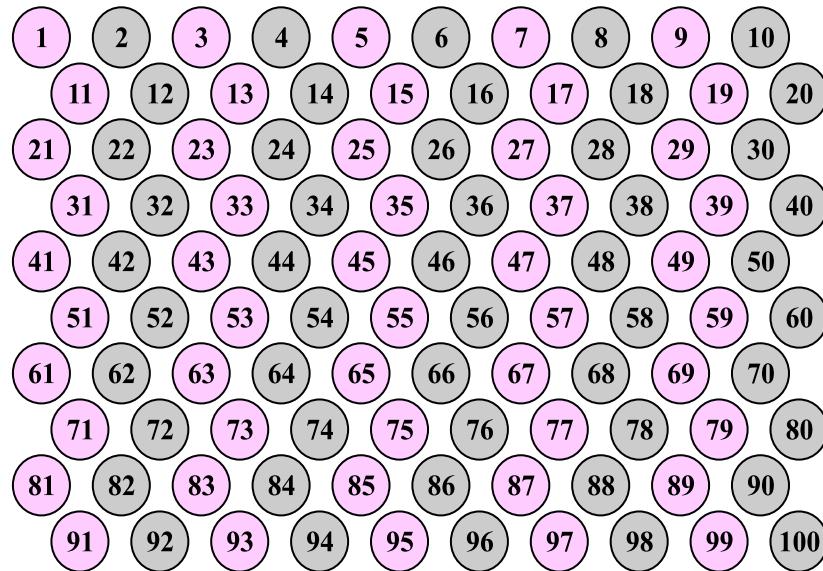
Identify the even number from the following.

1	10, 20 33, 45	2	23, 33 43, 46	3	26, 28 29, 21
4	24, 10 19, 13	5	32, 11 14, 19	6	11, 18 20, 12

Encircle the odd numbers.

- 606, 533, 556, 547, 522, 255
- 757, 480, 260, 484, 666, 499
- 222, 957, 297, 824, 646, 945

Activity: Separate Odd and Even numbers and write in the following boxes.



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

## COUNTER BALANCE AND ORDER OF NUMBER

We use two symbol for counter balance. The symbol “ $<$ ” is used for less than and the symbol “ $>$ ” used for greater than

**Ascending order:** From least to greatest number order is called the Ascending order.

For Example: 3579 , 4526 , 3576 , 3570

Ascending order: 3570 , 3576 , 3579 , 4526

**Descending order:** From greatest to least number order is called the descending order.

For Example: 3570 , 3576 , 3579 , 4526

Descending order: 4526, 3579 , 3576 , 3570

### EXERCISE 1.3

Fill in the blanks with “ $>$ ”, “ $=$ ” or “ $<$ ”.

1	7575	$>$	7521	2	7219	$>$	7219	3	6230	$<$	6245
4	4445	$>$	5451	5	7777	$>$	7777	6	6238	$<$	4595
7	1459	$>$	1444	8	6249	$<$	6395	9	5202	$<$	6263
10	5634	$>$	5202	11	3465	$<$	3468	12	4295	$<$	3021
13	6630	$>$	6657	14	3502	$<$	5398	15	8883	$<$	5200
16	7219	$>$	7263	17	4295	$>$	3021	18	4828	$<$	4828

Write the following numbers in descending order.

1	23410	48956	23409	35476	48956	35476	23410	23409
2	7564	4654	4505	6490	4654	6490	7564	4505
3	32190	78032	32189	32188	78032	32188	32190	32189
4	7766	7665	5498	9480	7665	9480	7766	5498

5	6748	4896	9765	6845	4896	6845	6748	9765
6	75321	45489	27941	98099	45489	98099	75321	27941
7	2961	9647	4895	2266	9647	2266	2961	4875
8	2202	9967	2200	9998	9967	9998	2202	2200
9	4590	4499	5856	9291	4499	9291	4590	5856
10	3366	2410	2618	1033	2410	1033	3360	2618
11	56399	75891	53697	25369	75891	25369	56399	23697
12	5698	3364	9435	7568	3364	7568	5698	9435

Write the following numbers in Ascending order.

1	46780	69282	76555	42003	42003	46780	69282	76555
2	6956	4230	7988	6654	6654	6956	4230	7988
3	25673	78221	45332	79221	79221	25673	78221	45332
4	9278	41357	8989	9896	9896	9278	41357	8989
5	3421	2954	5672	2844	2844	3421	2954	5672
6	75001	65221	75505	47642	47642	75001	65221	75505
7	23410	25267	28906	24027	24027	23410	25267	28906
8	50020	75999	34544	26927	26927	50020	75999	34544
9	44720	45835	44936	43825	43825	44720	45835	44936
10	5897	3465	7645	2619	2619	5897	3465	7645
11	8882	9998	7212	5396	5396	8882	9998	7212
12	46780	35410	77896	56980	56980	46780	35410	77896
13	430026	532061	153920	687422	687422	430026	532061	153920
14	98746	89476	45987	94866	94866	98746	89476	45987

### THE PLACE VALUE OF SIX DIGITS NUMBER

A tens is equal to ten units so ten units make a tens.

$$\begin{array}{c} \text{unit} \\ = \\ \text{1 tens} \end{array} = \begin{array}{c} \text{10 units} \end{array}$$

$$\begin{array}{c} \text{100 units} \\ = \\ \text{1 Hundred} \end{array} = \begin{array}{c} \text{10 tens} \end{array}$$

As we have read that a single number is called unit Ten item are called tens and Hundred things are known as hundred. As 10 hundreds are equal to one Thousand we write the thousand in symbol as 1000.

Thousand	Hundred	Tens	Units
1	0	0	0

Thousand is four digit number. In four digit number the greatest number is 9999, in which the adding only one it makes 10000, which is called the five digit number. In the place value of 10000, we write like this.

Ten Thousands	Thousands	Hundred	Tens	Units
1	0	0	0	0

The greatest number of five digits number is 99999, the adding of only one, it will becomes one Lac, which is six digits number and can be written in place value as 100000.

One Lac	Ten Thousands	Thousands	Hundred	Tens	Units
1	0	0	0	0	0

EXERCISE 1.4

According to the example. Write coming five numbers.

4005	4006	4007	4008	4009	4010
3022	3023	3024	3025	3026	3027
4247	4248	4249	5000	501	502
4030	4031	4032	4033	4034	4035
2013	2014	2015	2016	2017	2018
3224	3225	3226	3227	3228	3229

Fill in the blanks according to example.

29856	29857	29858	29859	29860	29861
44337	44338	44339	50000	5551	5552
55534	55535	55536	5537	5538	5539
99994	9995	9996	9997	9998	9999
77894	77895	77896	77897	77898	77899
66472	66473	66474	66475	66476	66477

According to the example write five numbers coming before each numbers.

1009	1008	1007	1006	1005	1004
3148	3137	3146	3145	3144	3143
2229	2228	2227	2226	2225	2224
5464	5463	5462	5461	5000	5060
4249	4248	4247	4246	4245	4244
3520	3519	3518	3517	3516	3515
1135	1134	1133	1132	1131	1130

CONCEPT OF FORTH COMMING NUMBER:

As we have read that

- 10 comes after of 9      ► 100 comes after of 99
- 1000 comes after of 999      ► 10000 comes after of 9999
- 100000 comes after of 99999 which is called one Lac.

Activity: According to the example read and write the numbers.

Statement	Ten Thousands	Thousands	Hundred	Tens	Units
Seventy two thousand two hundred two	7	2	2	0	2
Ninety one thousand six hundred seventy nine	9	1	6	7	9
Fifty two thousand Nine hundred sixty one	5	2	9	6	1
Ninety four thousand eight hundred sixty eight	9	4	8	6	8
Seventy thousand nine hundred eighty one	6	0	9	8	1
Eighty two thousand six hundred	8	2	6	0	0
Twenty eight thousand seven hundred eighty five	2	8	7	8	5
Seventy four thousand five hundred eighty two	7	4	5	8	2

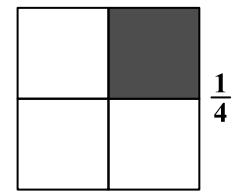
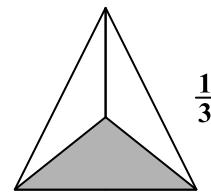
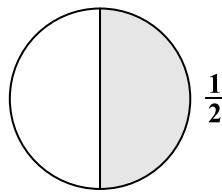
Activity: According to the example, write in words and fill in the blanks.

Number	In words	Ten Thousands	Thousands	Hundred	Tens	Unit
9877	Nine thousand eight hundred seventy seven.	0	9	8	7	7
69069	Sixty nine thousand and sixty nine	6	9	0	6	9
94764	Ninety four thousand seven hundred sixty four	9	4	7	6	4
16891	Sixty one thousand eight hundred ninety one	1	6	8	9	1
11588	Eleven thousand five hundred eighty eight	1	1	5	8	8
77877	Seventy seven thousand eight hundred seventy seven	7	7	8	7	7
85061	Eighty five thousand five hundred and eighty four	8	5	0	6	1
37584	Threety seven thousand five hundred eighty four	3	7	5	8	4

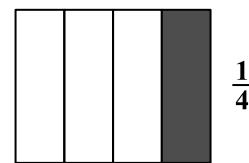
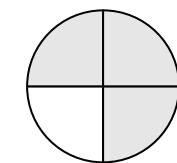
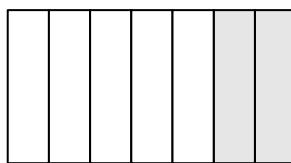
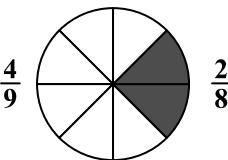
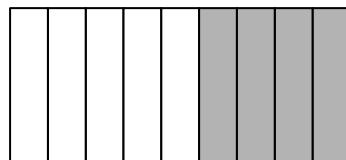
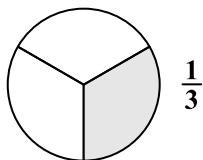
Chapter-2

# FRACTION

We have studied in previous classes about the concept of half, quarter, third part. Let's revise again.

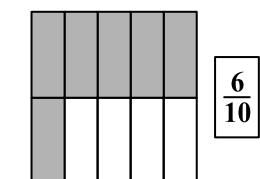
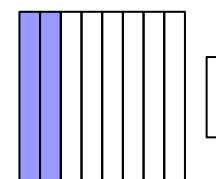
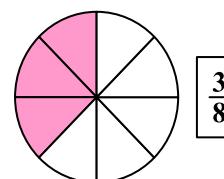
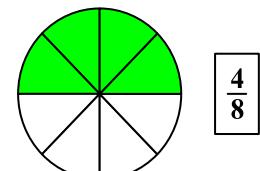
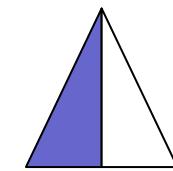
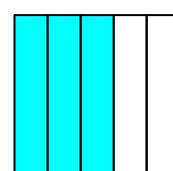
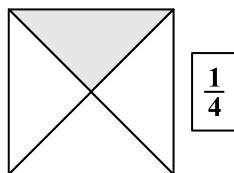
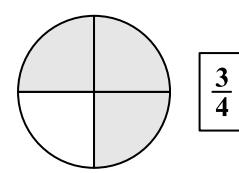
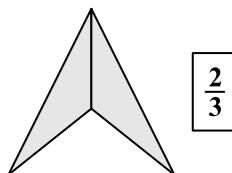


Observe more about fractions in following examples.

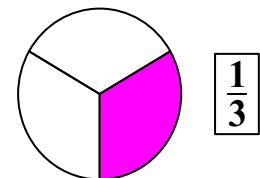
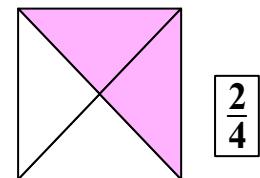
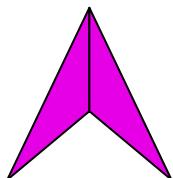
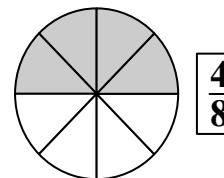


## EXERCISE 2.1

Colour the fractions of the given pictures.



● Write the fraction of the coloured part.



## Dividend and Divisor of Fraction

**Dividend:** It is the above number on the line also called Nominator.

**Divisor:** It is the below number under the line also called denominator.

In fraction  $\frac{3}{6}$ , 3 in dividend and 6 in divisor.

Same as in fraction  $\frac{5}{10}$ , 5 in dividend and 10 in divisor.

Nominator  
Denominator  $\frac{4}{8}$

### KINDS OF FRACTION:

**Direct fraction:** Such fraction whose dividend number is less than divisor is called direct fraction.

$$\frac{1}{2}, \frac{3}{5}, \frac{7}{9}, \frac{25}{36} \text{ etc}$$

**Inverse fraction:** Such fraction whose dividend number is greater than divisor number in called inverse fraction.

$$\frac{5}{3}, \frac{9}{5}, \frac{16}{5}, \frac{16}{15} \text{ etc}$$

**Congruent fraction:** Such fraction whose simplified forms are equal in values are called congruent fraction.

$$\text{i.e. } \frac{3}{6} = \frac{1}{2} \text{ OR } \frac{12}{24} = \frac{6}{12} = \frac{3}{6} = \frac{1}{2}$$

**Congruent divisor:** If divisor of any two or more fractions are same then these fraction divisors are called same divisors.

$$\text{i.e. } \frac{3}{5}, \frac{2}{5}$$

→ EXERCISE 2.2 →

● Write the Denominators and Nominators of the following fraction.

Fraction	Nominator	Denominator	Fraction	Nominator	Denominator
$\frac{2}{5}$	2	5	$\frac{6}{11}$	6	11
$\frac{5}{9}$	5	9	$\frac{2}{3}$	2	3
$\frac{15}{23}$	15	23	$\frac{11}{19}$	11	19
$\frac{7}{15}$	7	15	$\frac{14}{15}$	14	15

● Find the Dividend number of given fractions and write in blanks.

$\frac{4}{11}$	4	$\frac{7}{9}$	7	$\frac{15}{21}$	15
$\frac{24}{31}$	24	$\frac{55}{65}$	55	$\frac{61}{95}$	61
$\frac{11}{23}$	11	$\frac{23}{24}$	23	$\frac{31}{32}$	31

### ADDITION OF SAME DIVISOR FRACTION

In same divisor fractions only dividend values are added.

$$\frac{1}{4} + \frac{3}{4} = \frac{1+3}{4} = \frac{4}{4} = 1$$

$$\frac{7}{11} + \frac{3}{11} = \frac{7+3}{11} = \frac{10}{11}$$

→ EXERCISE 2.3 →

● Solve the following.

$$\begin{array}{l}
 \text{1. } \frac{5}{6} + \frac{6}{6} \\
 \text{Sol: } = \frac{5}{6} + \frac{6}{6} \\
 = \frac{5+6}{6} \\
 = \frac{11}{6} \text{ Ans}
 \end{array}
 \quad
 \begin{array}{l}
 \text{2. } \frac{8}{11} + \frac{7}{11} \\
 = \frac{8}{11} + \frac{7}{11} \\
 = \frac{8+7}{11} \\
 = \frac{15}{11} \text{ Ans}
 \end{array}
 \quad
 \begin{array}{l}
 \text{3. } \frac{8}{12} + \frac{7}{12} \\
 = \frac{8}{12} + \frac{7}{12} \\
 = \frac{8+7}{12} \\
 = \frac{15}{12} \text{ Ans}
 \end{array}$$

4  $\frac{5}{4} + \frac{3}{4}$  5  $\frac{7}{9} + \frac{3}{9}$  6  $\frac{9}{14} + \frac{10}{14}$

Sol:  $\frac{5}{4} + \frac{3}{4} = \frac{7}{9} + \frac{3}{9} = \frac{9}{14} + \frac{10}{14}$   
 $= \frac{5+3}{4} = \frac{7+3}{9} = \frac{9+10}{14}$   
 $= \frac{8}{4} = \frac{10}{9}$  Ans  $= \frac{19}{14}$  Ans  
 $= \frac{4}{2}$  or 2 Ans

7  $\frac{2}{5} + \frac{7}{5}$  8  $\frac{11}{10} + \frac{3}{10}$  9  $\frac{13}{15} + \frac{11}{15}$   
Sol:  $\frac{2}{5} + \frac{7}{5} = \frac{11}{10} + \frac{3}{10} = \frac{13}{15} + \frac{11}{15}$   
 $= \frac{2+7}{5} = \frac{11+3}{10} = \frac{13+11}{15}$   
 $= \frac{9}{5}$  Ans  $= \frac{14}{10}$   $= \frac{24}{15}$   
 $= \frac{7}{5}$  Ans  $= \frac{8}{5}$  Ans

10  $\frac{6}{3} + \frac{2}{3}$  11  $\frac{5}{8} + \frac{6}{8}$  12  $\frac{7}{13} + \frac{8}{13}$   
Sol:  $\frac{6}{3} + \frac{2}{3} = \frac{5}{8} + \frac{6}{8} = \frac{7}{13} + \frac{8}{13}$   
 $= \frac{6+2}{3} = \frac{5+6}{8} = \frac{7+8}{13}$   
 $= \frac{8}{3}$  Ans  $= \frac{11}{8}$  Ans  $= \frac{15}{13}$  Ans

13  $\frac{3}{2} + \frac{5}{2}$  14  $\frac{7}{7} + \frac{3}{7}$   
Sol:  $\frac{3}{2} + \frac{5}{2} = \frac{7}{7} + \frac{3}{7}$   
 $= \frac{3+5}{2} = \frac{7+3}{7}$   
 $= \frac{8}{2}$  4 Ans  $= \frac{10}{7}$  Ans

15  $\frac{4}{12} + \frac{6}{12}$   
Sol:  $\frac{4}{12} + \frac{6}{12} = \frac{4+6}{12}$   
 $= \frac{10}{12}$   
 $= \frac{5}{6}$  Ans

Q.2: Add the following.

1)  $\frac{1}{4}, \frac{5}{4}$

$$\begin{aligned} \text{Sol: } & \frac{1}{4} + \frac{5}{4} = \frac{21}{23} + \frac{22}{23} = \frac{13}{19} + \frac{18}{19} \\ & = \frac{1+5}{4} = \frac{21+22}{23} = \frac{13+18}{19} \\ & = \frac{36}{42} = \frac{43}{23} \text{ Ans} \quad = \frac{31}{19} \text{ Ans} \\ & = \frac{3}{2} \text{ Ans} \end{aligned}$$

2)  $\frac{21}{23}, \frac{22}{23}$

$$\begin{aligned} & = \frac{21}{23} + \frac{22}{23} \\ & = \frac{21+22}{23} \\ & = \frac{43}{23} \text{ Ans} \end{aligned}$$

3)  $\frac{13}{19}, \frac{18}{19}$

$$\begin{aligned} & = \frac{13}{19} + \frac{18}{19} \\ & = \frac{13+18}{19} \\ & = \frac{31}{19} \text{ Ans} \end{aligned}$$

4)  $\frac{7}{8}, \frac{5}{8}$

$$\begin{aligned} \text{Sol: } & \frac{7}{8} + \frac{5}{8} = \frac{19}{21} + \frac{15}{21} = \frac{3}{5} + \frac{11}{5} \\ & = \frac{7+5}{8} = \frac{19+15}{21} = \frac{3+11}{5} \\ & = \frac{12}{8} = \frac{34}{21} \text{ Ans} \quad = \frac{14}{5} \text{ Ans} \\ & = \frac{3}{2} \text{ Ans} \end{aligned}$$

5)  $\frac{19}{21}, \frac{15}{21}$

$$\begin{aligned} & = \frac{19}{21} + \frac{15}{21} \\ & = \frac{19+15}{21} \\ & = \frac{34}{21} \text{ Ans} \end{aligned}$$

6)  $\frac{3}{5}, \frac{11}{5}$

$$\begin{aligned} & = \frac{3}{5} + \frac{11}{5} \\ & = \frac{3+11}{5} \\ & = \frac{14}{5} \text{ Ans} \end{aligned}$$

7)  $\frac{2}{5}, \frac{4}{5}$

$$\begin{aligned} \text{Sol: } & \frac{2}{5} + \frac{4}{5} = \frac{3}{7} + \frac{1}{7} \\ & = \frac{2+4}{5} = \frac{3+1}{7} \\ & = \frac{6}{5} \text{ Ans} \quad = \frac{4}{7} \text{ Ans} \end{aligned}$$

8)  $\frac{3}{7}, \frac{1}{7}$

$$\begin{aligned} & = \frac{3}{7} + \frac{1}{7} \\ & = \frac{3+1}{7} \\ & = \frac{4}{7} \text{ Ans} \end{aligned}$$

## SUBTRACTION OF SAME DIVISOR FRACTIONS

Let's learn the subtraction of same divisor fraction.

$$\frac{4}{5} - \frac{3}{5} = \frac{4-3}{5} = \frac{1}{5}$$

$$\frac{6}{10} - \frac{4}{10} = \frac{6-4}{10} = \frac{2}{10} = \frac{1}{5}$$

### EXERCISE 2.4

Solve:

1)  $\frac{7}{3} - \frac{5}{3}$

$$\begin{aligned} \text{Sol: } & \frac{7}{3} - \frac{5}{3} = \frac{7}{9} - \frac{1}{9} = \frac{10}{19} - \frac{6}{19} \\ & = \frac{7-5}{3} = \frac{7-1}{9} = \frac{10-6}{19} \\ & = \frac{2}{3} \text{ Ans} \quad = \frac{8}{9} \text{ Ans} \quad = \frac{4}{19} \text{ Ans} \end{aligned}$$

4)  $\frac{9}{9} - \frac{6}{9}$

$$\begin{aligned} \text{Sol: } & \frac{9}{9} - \frac{6}{9} = \frac{7}{4} - \frac{2}{4} = \frac{11}{17} - \frac{7}{17} \\ & = \frac{9-6}{9} = \frac{7-2}{4} = \frac{11-7}{17} \\ & = \frac{3}{9} \quad = \frac{5}{4} \text{ Ans} \quad = \frac{4}{17} \text{ Ans} \\ & = \frac{1}{3} \text{ Ans} \end{aligned}$$

5)  $\frac{7}{4} - \frac{2}{4}$

$$\begin{aligned} & = \frac{7}{4} - \frac{2}{4} = \frac{11}{17} - \frac{7}{17} \\ & = \frac{7-2}{4} = \frac{5}{4} \text{ Ans} \quad = \frac{4}{17} \text{ Ans} \end{aligned}$$

6)  $\frac{11}{17} - \frac{7}{17}$

$$\begin{array}{lll}
 \textcircled{7} \quad \frac{10}{5} - \frac{7}{5} & \textcircled{8} \quad \frac{12}{4} - \frac{9}{4} & \textcircled{9} \quad \frac{21}{20} - \frac{19}{20} \\
 \text{Sol:} = \frac{10}{5} - \frac{7}{5} & = \frac{12}{4} - \frac{9}{4} & = \frac{21}{20} - \frac{19}{20} \\
 = \frac{10 - 7}{5} & = \frac{12 - 9}{4} & = \frac{21 - 19}{20} \\
 = \frac{3}{5} \text{ Ans} & = \frac{3}{4} \text{ Ans} & = \frac{1}{10} \text{ Ans}
 \end{array}$$

$$\begin{array}{lll}
 \textcircled{10} \quad \frac{11}{9} - \frac{3}{9} & \textcircled{11} \quad \frac{9}{10} - \frac{7}{10} & \textcircled{12} \quad \frac{14}{15} - \frac{10}{15} \\
 \text{Sol:} = \frac{11}{9} - \frac{3}{9} & = \frac{9}{10} - \frac{7}{10} & = \frac{14}{15} - \frac{10}{15} \\
 = \frac{11 - 3}{9} & = \frac{9 - 7}{10} & = \frac{14 - 10}{15} \\
 = \frac{8}{9} \text{ Ans} & = \frac{2}{5} \text{ Ans} & = \frac{4}{15} \text{ Ans} \\
 & = \frac{1}{5} \text{ Ans} &
 \end{array}$$

$$\begin{array}{lll}
 \textcircled{13} \quad \frac{7}{10} - \frac{5}{10} & \textcircled{14} \quad \frac{8}{9} - \frac{3}{9} & \textcircled{15} \quad \frac{14}{14} - \frac{8}{14} \\
 \text{Sol:} = \frac{7}{10} - \frac{5}{10} & = \frac{8}{9} - \frac{3}{9} & = \frac{14}{14} - \frac{8}{14} \\
 = \frac{7 - 5}{10} & = \frac{8 - 3}{9} & = \frac{14 - 8}{14} \\
 = \frac{2}{10} \text{ Ans} & = \frac{5}{9} \text{ Ans} & = \frac{6}{14} \text{ Ans} \\
 = \frac{1}{5} \text{ Ans} & & = \frac{3}{7} \text{ Ans}
 \end{array}$$

$$\begin{array}{lll}
 \textcircled{16} \quad \frac{9}{6} - \frac{6}{6} & \textcircled{17} \quad \frac{5}{4} - \frac{1}{4} \\
 \text{Sol:} = \frac{9}{6} - \frac{6}{6} & = \frac{5}{4} - \frac{1}{4} \\
 = \frac{9 - 6}{6} & = \frac{5 - 1}{4} \\
 = \frac{3}{6} & = \frac{4}{4} \\
 = \frac{1}{2} \text{ Ans} & = 1 \text{ Ans}
 \end{array}$$

$$\begin{array}{ll}
 \textcircled{18} \quad \frac{8}{10} - \frac{5}{10} \\
 \text{Sol:} = \frac{8}{10} - \frac{5}{10} \\
 = \frac{8 - 5}{10} \\
 = \frac{3}{10} \text{ Ans}
 \end{array}$$

## ALGEBRAIC FUNCTIONS

Algebraic functions on natural numbers mean addition, subtraction, multiplication and division of numbers. By using these functions there appeared one digit, two digit, three digit and more digit numbers. The symbols of algebraic functions are as under:

Division (÷), Multiplication (x), Subtraction (-), Addition (+)

The function of adding two or more than two things is called addition. This done by two ways.

### Addition of three or four digit numbers:

The method of three and four digit numbers adding is that units in units, tens in tens, hundreds in hundreds and thousands in thousands are added.

Thousands	Hundreds	Tens	Units
6	7	5	3
3	2	1	2
9	9	6	5

### EXERCISE 3.1

Solve:

1	3 1 5	2	5 3 5	3	2 3 7	4	4 5 7	5	7 6 5
	+ 4 8 3		+ 4 5 3		+ 4 5 2		+ 3 1 1		+ 1 3 2
	7 9 8		9 8 8		6 8 9		7 6 8		8 9 7

6	5 3 1 5	7	4 6 1 2	8	5 2 1 9	9	6 1 9 2	10	5 8 9 6
	+ 4 2 7 3		+ 2 0 6 2		+ 2 6 4 0		+ 3 4 0 6		+ 3 0 0 2
	9 5 8 8		6 6 7 4		7 8 5 9		9 5 9 8		8 8 9 8

11	1 6 7 8	12	6 4 2 1	13	1 2 3 4	14	4 6 0 9	15	6 7 2 1
	+ 7 2 1 0		+ 1 6 4 2		+ 5 4 3 2		+ 3 2 8 0		+ 3 1 6 4
	8 8 8 8		8 0 6 3		6 6 6 6		7 8 8 9		9 8 8 5

16	2 1 4 2	17	1 8 0 6	18	2 1 4 6	19	4 2 3 0	20	4 3 1 2
	3 1 2 1		2 1 6 1		4 3 2 1		3 5 1 1		2 3 3 1
	+ 4 7 3 6		+ 4 0 2 2		+ 3 2 3 2		+ 1 2 3 5		+ 1 3 2 4
	9 9 9 9		7 9 8 9		9 6 9 9		8 9 7 6		7 9 6 7

21	5 0 3 5	22	5 2 7 2	23	4 1 0 4	24	2 2 0 1	25	1 8 0 9
	2 3 0 2		3 1 2		2 4 0 1		1 0 2 1		1 0 3 0
	1 6 4 1		1 1 0		1 2 8 2		4 3 5 3		3 0 4 0
	+ 1 0 2 0		+ 2 0 4		+ 2 1 1 2		+ 2 3 2 4		+ 1 2 0
	9 9 9 8		5 8 9 8		9 8 9 9		9 8 9 9		5 9 9 9

### Addition of three, four and five numbers by one crossing method

Thousands	Hundred	Tens	Unit
1			
6	4	5	7
5	9	2	9
12	3	8	6

## EXERCISE 3.2

Solve:

1	4 9 5 6	2	5 9 7 9	3	6 7 7 5	4	7 5 1 0	5	6 9 9 6
+	7 5 1 8	+	6 5 7 9	+	3 3 3 5	+	3 6 9 5	+	7 9 7 5
	1 2 4 7 4		1 2 5 5 8		1 0 1 1 0		1 1 2 0 5		1 4 9 7 1
6	8 9 7 9	7	3 4 2 1	8	6 8 3 4	9	3 6 8 5	10	2 4 5 7
+	3 4 5 1	+	5 2 1 9	+	7 2 4 5	+	9 5 3 9	+	6 8 3 4
	1 2 4 3 0		8 6 4 0		1 4 0 7 9		1 3 2 2 4		9 2 9 1
11	3 6 2 9	12	5 3 2 7	13	2 4 3 5	14	7 2 4 5	15	2 3 5 6
+	4 9 7 6	+	7 2 3 5	+	3 5 4 7	+	2 4 2 9	+	5 4 3 9
	8 6 0 5		1 2 5 6 2		5 9 8 2		9 6 7 4		7 7 9 5
16	1 6 3 5	17	5 7 3 5	18	2 4 5 7	19	7 8 4 6	20	4 6 2 3
+	8 3 4 8	+	3 2 3 6	+	6 4 3 9	+	2 1 3 9	+	2 2 3 8
	9 9 8 3		8 9 7 1		8 8 9 6		9 9 8 5		6 8 6 1
21	7 2 8 6	22	8 3 4 8	23	3 4 7 8	24	3 2 7 5	25	8 5 4 8
+	2 5 3 9	+	1 5 9 7	+	3 4 4 6	+	5 6 4 8	+	1 2 6 4
	9 8 2 5		9 9 4 5		6 9 2 4		8 9 2 3		9 8 1 2
26	7 6 1 3	27	1 3 9 1	28	3 4 7 5	29	1 2 3 4	30	4 3 7 5
3 5 8 9	7 5 4 4		8 5 9 1		5 6 7 8		2 4 3 8		
+	1 5 2 1	+	6 6 7 5	+	1 2 5 6	+	9 2 1 0	+	4 2 8 2
	1 2 7 2 3		1 5 6 1 0		1 3 3 2 2		1 6 1 2 2		1 0 0 9 5

Add by using horizontal method.

1	7 6 5 4	+	6 4 7 5	=	1 4 1 4 9	2	3 9 3 9	+	4 2 8 1	=	8 2 2 0
3	3 2 9 1	+	2 4 9 6	=	6 7 8 7	4	7 5 3 2	+	9 5 5 6	=	1 7 0 8 8
5	3 4 9 5	+	2 7 5 2	=	6 1 4 7	6	3 2 9 1	+	2 4 9 6	=	5 7 8 7
7	8 7 6 5	+	4 3 2 7	=	1 3 0 9 2	8	9 6 4 3	+	3 4 6 9	=	1 3 1 1 2
9	8 9 7 5	+	5 7 9 8	=	1 4 7 7 3	10	7 5 6 7	+	7 7 5 4	=	1 5 3 2 1
11	3 6 5 7	+	4 3 8 2	=	8 0 4 0	12	6 3 6 1	+	5 7 8 9	=	1 2 1 5 0

## EXERCISE 3.3

Solve:

1 For the construction of a mosque Imtiaz paid Rs. 9475. Shahid paid Rs. 8785 and Imran paid Rs. 7459 rupees as donation. Find the total amount devoted by them.

$$\begin{array}{r}
 \text{①②①} \\
 9 4 7 5 \\
 8 7 8 5 \\
 + \quad \quad \quad \\
 \hline
 \end{array}$$

Ans: Total amount of donation is 25719

2 Prices of three vehicles are 65575, 84589 and 92769 respectively. Find the total price of three vehicles.

$$\begin{array}{r}
 \text{①②②} \\
 6 5 5 7 5 \\
 8 4 5 8 9 \\
 + \quad \quad \quad \\
 \hline
 \end{array}$$

Ans: Total price of three vehicles is 242933

3 The cost of a mangoes orchard is Rs. 64759, an olive orchard is Rs. 42478 and cost of a banana orchard is Rs. 57479. Find the total cost of three orchards.

$$\begin{array}{r}
 \text{①②②} \\
 6 4 7 5 9 \\
 4 2 4 7 9 \\
 + \quad \quad \quad \\
 \hline
 \end{array}$$

Ans: the cost of three orchard is 164717

4 For watching a cricket match, 42539 people came on first day 64469 on the second day, 29534 people on third day 85469 people on forth day. How much total people came on four days?

$$\begin{array}{r}
 \text{②②②②} \\
 1 6 4 7 1 6 \\
 4 2 5 3 9 \\
 6 4 4 6 9 \\
 + \quad \quad \quad \\
 \hline
 \end{array}$$

Ans: 301258 people came on four days.

Sol:

5) Find the sum of 42569, 64679 and 59572.

$$\begin{array}{r}
 \text{00000} \\
 42569 \\
 64679 \\
 + 59572 \\
 \hline
 \text{166820}
 \end{array}$$

Ans: the sum of 42569, 64679 and 59572 is 166820

6) Shahzad paid Rs. 69475 for Iron, Rs. 39585 for bricks and Rs. 25395 for the construction of a house. How much amount did he spend?

$$\begin{array}{r}
 \text{00000} \\
 69475 \\
 39585 \\
 + 25395 \\
 \hline
 \text{134455}
 \end{array}$$

Ans: The amount of construction is 134455

7) A school head master spent Rs.4795 for library furniture and Rs. 64592 for books. How much total amount did he spend?

$$\begin{array}{r}
 \text{00000} \\
 4795 \\
 + 64592 \\
 \hline
 \text{112542}
 \end{array}$$

Ans: The head master spent 11254 rupees.

8) Monthly income of four brothers is 4985, 5464, 7570 and 8445 respectively. Find the total income of four brothers.

$$\begin{array}{r}
 \text{0000} \\
 4985 \\
 5464 \\
 7570 \\
 + 8445 \\
 \hline
 \text{26464}
 \end{array}$$

Ans: The income of four brothers is Rs. 26464

## Subtraction of numbers:

Subtraction means to decrease. In the process of subtraction, units from units, tens from units, hundred from hundreds, thousands from thousands and ten thousands from ten thousands are subtracted. The symbol of subtraction “-” is used

Thousands	Hundreds	Tens	Units
9	7	6	5
- 8	1	5	4
1	6	1	1

## EXERCISE 3.4

Solve:

$$\begin{array}{r}
 \text{1} \quad 6574 \quad \text{2} \quad 8756 \quad \text{3} \quad 9897 \quad \text{4} \quad 7877 \quad \text{5} \quad 3985 \\
 - 5232 \quad - 3542 \quad - 2666 \quad - 5506 \quad - 2632 \\
 \hline
 \text{1342} \quad \text{5214} \quad \text{7231} \quad \text{2301} \quad \text{1353}
 \end{array}$$

$$\begin{array}{r}
 \text{6} \quad 4891 \quad \text{7} \quad 7624 \quad \text{8} \quad 5604 \quad \text{9} \quad 6574 \quad \text{10} \quad 4356 \\
 - 1520 \quad - 2301 \quad - 3203 \quad - 1342 \quad - 2143 \\
 \hline
 \text{3371} \quad \text{5303} \quad \text{2401} \quad \text{5232} \quad \text{2213}
 \end{array}$$

$$\begin{array}{r}
 \text{11} \quad 5671 \quad \text{12} \quad 8888 \quad \text{13} \quad 7543 \quad \text{14} \quad 9785 \quad \text{15} \quad 5749 \\
 - 3200 \quad - 5324 \quad - 3421 \quad - 5674 \quad - 2438 \\
 \hline
 \text{2471} \quad \text{3564} \quad \text{4122} \quad \text{4111} \quad \text{3311}
 \end{array}$$

$$\begin{array}{r}
 \text{16} \quad 8564 \quad \text{17} \quad 7516 \quad \text{18} \quad 2242 \quad \text{19} \quad 9013 \quad \text{20} \quad 7703 \\
 - 4340 \quad - 4214 \quad - 1230 \quad - 7594 \quad - 6595 \\
 \hline
 \text{4224} \quad \text{3302} \quad \text{1010} \quad \text{0510} \quad \text{1108}
 \end{array}$$

**Subtraction of numbers by one-crossing to method:**

If subtraction is greater than subtraction number then one tens is crossed to units and is added with unit as 10 units and then it is solved. Such that all digits like tens, hundreds and thousands are subtracted.

Thousands	Hundreds	Tens	Units
(8) 9 8	(14) 5 7	(13) 4 4	(12) 2 7
	7	9	5

→ EXERCISE 3.5 ←

Solve:

$$\begin{array}{r} 1 \quad 8596 \\ - 4369 \\ \hline 4227 \end{array} \quad \begin{array}{r} 2 \quad 9224 \\ - 7109 \\ \hline 2115 \end{array} \quad \begin{array}{r} 3 \quad 5865 \\ - 2437 \\ \hline 3428 \end{array} \quad \begin{array}{r} 4 \quad 6572 \\ - 3235 \\ \hline 3337 \end{array} \quad \begin{array}{r} 5 \quad 6475 \\ - 4327 \\ \hline 2148 \end{array}$$

$$\begin{array}{r} 6 \quad 8545 \\ - 6326 \\ \hline 2219 \end{array} \quad \begin{array}{r} 7 \quad 9546 \\ - 7237 \\ \hline 2309 \end{array} \quad \begin{array}{r} 8 \quad 5742 \\ - 2325 \\ \hline 3417 \end{array} \quad \begin{array}{r} 9 \quad 7124 \\ - 3016 \\ \hline 4108 \end{array} \quad \begin{array}{r} 10 \quad 8210 \\ - 1059 \\ \hline 7151 \end{array}$$

$$\begin{array}{r} 11 \quad 4740 \\ - 2533 \\ \hline 2207 \end{array} \quad \begin{array}{r} 12 \quad 6283 \\ - 3524 \\ \hline 2759 \end{array} \quad \begin{array}{r} 13 \quad 3524 \\ - 1759 \\ \hline 1865 \end{array} \quad \begin{array}{r} 14 \quad 7480 \\ - 3254 \\ \hline 4226 \end{array} \quad \begin{array}{r} 15 \quad 3945 \\ - 2168 \\ \hline 1777 \end{array}$$

$$\begin{array}{r} 16 \quad 5678 \\ - 4329 \\ \hline 1349 \end{array} \quad \begin{array}{r} 17 \quad 8334 \\ - 2117 \\ \hline 6217 \end{array} \quad \begin{array}{r} 18 \quad 6782 \\ - 4264 \\ \hline 2518 \end{array} \quad \begin{array}{r} 19 \quad 5856 \\ - 2747 \\ \hline 3109 \end{array} \quad \begin{array}{r} 20 \quad 7642 \\ - 2539 \\ \hline 5103 \end{array}$$

$$\begin{array}{r} 21 \quad 7060 \\ - 3859 \\ \hline 3201 \end{array} \quad \begin{array}{r} 22 \quad 9479 \\ - 4789 \\ \hline 4690 \end{array} \quad \begin{array}{r} 23 \quad 7705 \\ - 5929 \\ \hline 1776 \end{array} \quad \begin{array}{r} 24 \quad 5132 \\ - 3344 \\ \hline 1788 \end{array} \quad \begin{array}{r} 25 \quad 6352 \\ - 2564 \\ \hline 3788 \end{array}$$

$$\begin{array}{r} 26 \quad 8423 \\ - 2867 \\ \hline 5556 \end{array} \quad \begin{array}{r} 27 \quad 5968 \\ - 4289 \\ \hline 1679 \end{array} \quad \begin{array}{r} 28 \quad 5756 \\ - 3849 \\ \hline 1907 \end{array} \quad \begin{array}{r} 29 \quad 4273 \\ - 1888 \\ \hline 2385 \end{array} \quad \begin{array}{r} 30 \quad 8509 \\ - 3698 \\ \hline 4811 \end{array}$$

$$\begin{array}{r} 31 \quad 8132 \\ - 4384 \\ \hline 3748 \end{array} \quad \begin{array}{r} 32 \quad 4262 \\ - 1275 \\ \hline 2987 \end{array} \quad \begin{array}{r} 33 \quad 8003 \\ - 3024 \\ \hline 4979 \end{array} \quad \begin{array}{r} 34 \quad 5745 \\ - 2896 \\ \hline 2849 \end{array} \quad \begin{array}{r} 35 \quad 5438 \\ - 2659 \\ \hline 2779 \end{array}$$

$$\begin{array}{r} 36 \quad 8005 \\ - 5327 \\ \hline 2678 \end{array} \quad \begin{array}{r} 37 \quad 7426 \\ - 4548 \\ \hline 2878 \end{array} \quad \begin{array}{r} 38 \quad 7543 \\ - 6465 \\ \hline 1078 \end{array} \quad \begin{array}{r} 39 \quad 4536 \\ - 2658 \\ \hline 1878 \end{array} \quad \begin{array}{r} 40 \quad 6538 \\ - 3869 \\ \hline 2669 \end{array}$$

Subtract by using horizontal Method.

$$\begin{array}{r} 1 \quad 6542 - 2594 = 3948 \\ 2 \quad 5257 - 4130 = 1127 \\ 3 \quad 4839 - 2075 = 2704 \\ 4 \quad 9009 - 8275 = 734 \\ 5 \quad 8456 - 4237 = 4219 \\ 6 \quad 5629 - 3235 = 2394 \\ 7 \quad 9374 - 2139 = 7235 \\ 8 \quad 7007 - 4327 = 2680 \\ 9 \quad 5747 - 2359 = 3388 \\ 10 \quad 8545 - 6326 = 2219 \end{array}$$

EXERCISE 3.6

Solve the following.

1 There are 9675 books in a book store. Out of these 6351 are of English. How much remaining books at shop of others.

$$\begin{array}{r} 9675 \\ - 6351 \\ \hline 3324 \end{array}$$

2 Areeba has 6532 rupees, she gave 3213 in charity. How much rupees does she have.

$$\begin{array}{r} 6532 \\ - 3213 \\ \hline 3319 \end{array}$$

3 On the weekend 7535 people gathered on beach. From them 2435 people were enjoying into water and some were getting rest. How much people were in the rest?

$$\begin{array}{r} 7535 \\ - 2435 \\ \hline 5100 \end{array}$$

4 The monthly salary of Imran is Rs. 6564 and his expenses is Rs. 4542. Tell the monthly saving of Imran.

$$\begin{array}{r} 6564 \\ - 4542 \\ \hline 2022 \end{array}$$

5 For the donation of flood refuges. The school (A) collected Rs. 9432 rupees and the school (B) collected 6764 rupees. Which school collected more fund and how much?

$$\begin{array}{r} 9432 \\ - 6764 \\ \hline 2668 \end{array}$$

6 Zahid had Rs. 96574 He bought jewelry for Rs. 59765 and he deposited the remaining amount in bank. How much rupees did he deposite in bank.

$$\begin{array}{r} 96574 \\ - 59765 \\ \hline 36779 \end{array}$$

7 Mother has 1500 rupees. He gave 685 rupees as charity to baggars. How much rupees does she have?

$$\begin{array}{r} 1500 \\ - 685 \\ \hline 815 \end{array}$$

8 A factory prepared 8505 packets of coloured pencils. 7636 pocket were sold. How much pockets were remaining?

$$\begin{array}{r} 8505 \\ - 7636 \\ \hline 0809 \end{array}$$

9 A shopkeeper has goods of Rs. 68545. He sold goods of Rs. 59778. How much amount of goods. he has now.

$$\begin{array}{r} 68545 \\ - 59778 \\ \hline 08767 \end{array}$$

10 There are 4338 kg of Rice in a shop. The shop keeper sold 2365 kg in a Now how much amount of rice he has?

$$\begin{array}{r} 4338 \\ - 2365 \\ \hline 1973 \end{array}$$

11 In a government school there are 5925 students. Out of them 3211 are girls and remaining are boys. Find the total numbers of boys.

$$\begin{array}{r} 5925 \\ - 3211 \\ \hline 2714 \end{array}$$

12 Differentiate between 42464 and 34897?

$$\begin{array}{r} 42464 \\ - 32897 \\ \hline 09567 \end{array}$$

13 Anwar has two books, there are 575 pages in one book and 780 pages are in second book. How much pages are more is second book.

$$\begin{array}{r} 780 \\ - 575 \\ \hline 205 \end{array}$$

## MULTIPLICATION:

You know that the process of adding again and again on any number is called multiplication. Its symbol is “x” if any number is multiplied with zero the result becomes zero. Changing of number place the result will become same.

$$5 + 5 + 5 + 5 + 5 = 25, \quad 5, \quad 5 \times 5 = 25$$

$$7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 = 56, \quad 8, \quad 7 \times 8 = 56$$

### TWO OR THREE DIGIT NUMBERS MULTIPLICATION BY ONE DIGIT NUMBER

Two or three digit numbers multiplication is started from right side (unit) numbers.

Hundreds	Tens	Units
2 1 x	3 4	7 5
7	3	5

### EXERCISE 3.7

Solve:

1.  $909 \times 1 = 909$    2.  $139 \times 3 = 417$    3.  $541 \times 5 = 2705$    4.  $178 \times 2 = 356$    5.  $678 \times 6 = 4068$    6.  $909 \times 1 = 909$

7.  $798 \times 9 = 7182$    8.  $100 \times 0 = 000$    9.  $345 \times 5 = 1725$    10.  $678 \times 4 = 2712$    11.  $545 \times 7 = 3815$    12.  $596 \times 8 = 4768$

13.  $630 \times 7 = 4410$    14.  $838 \times 9 = 7542$    15.  $888 \times 2 = 1776$    16.  $999 \times 1 = 999$    17.  $777 \times 9 = 6993$    18.  $256 \times 9 = 2304$

19. $246 \times 6 = 1476$	20. $325 \times 7 = 2275$	21. $120 \times 3 = 360$	22. $167 \times 5 = 835$	23. $786 \times 7 = 5502$	24. $529 \times 6 = 3174$
25. $317 \times 7 = 2219$	26. $653 \times 9 = 5877$	27. $561 \times 4 = 2244$	28. $600 \times 6 = 3600$	29. $412 \times 8 = 3296$	30. $210 \times 2 = 420$
31. $333 \times 3 = 999$	32. $444 \times 1 = 444$	33. $131 \times 6 = 786$	34. $202 \times 5 = 1010$	35. $181 \times 3 = 543$	36. $434 \times 3 = 1302$
37. $681 \times 2 = 1362$	38. $451 \times 6 = 2706$	39. $345 \times 7 = 2415$	40. $333 \times 7 = 2331$	41. $555 \times 5 = 2775$	42. $444 \times 2 = 888$
43. $373 \times 4 = 1492$	44. $773 \times 7 = 5411$	45. $199 \times 1 = 199$	46. $412 \times 3 = 1236$	47. $525 \times 5 = 2625$	48. $229 \times 8 = 1832$

Fill in the blanks one number should be shown.

$\rightarrow \times 6 = 5550$	$\rightarrow \times 7 = 5684$	$\rightarrow \times 1 = 140$
$\rightarrow \times 1 = 925$	$\rightarrow \times 5 = 4060$	$\rightarrow \times 3 = 420$
$\rightarrow \times 4 = 3700$	$\rightarrow \times 2 = 1624$	$\rightarrow \times 0 = 0$
$\rightarrow \times 7 = 6475$	$\rightarrow \times 8 = 6496$	$\rightarrow \times 2 = 280$
$\rightarrow \times 9 = 8325$	$\rightarrow \times 9 = 7308$	$\rightarrow \times 9 = 1260$
$\rightarrow \times 3 = 2775$	$\rightarrow \times 3 = 2436$	$\rightarrow \times 4 = 560$

## NUMBER TABLE

11 Table
$11 \times 1 = 11$
$11 \times 2 = 22$
$11 \times 3 = 33$
$11 \times 4 = 44$
$11 \times 5 = 55$
$11 \times 6 = 66$
$11 \times 7 = 77$
$11 \times 8 = 88$
$11 \times 9 = 99$
$11 \times 10 = 110$

12 Table
$12 \times 1 = 12$
$12 \times 2 = 24$
$12 \times 3 = 36$
$12 \times 4 = 48$
$12 \times 5 = 60$
$12 \times 6 = 72$
$12 \times 7 = 84$
$12 \times 8 = 96$
$12 \times 9 = 108$
$12 \times 10 = 120$

13 Table
$13 \times 1 = 13$
$13 \times 2 = 26$
$13 \times 3 = 39$
$13 \times 4 = 52$
$13 \times 5 = 65$
$13 \times 6 = 78$
$13 \times 7 = 91$
$13 \times 8 = 104$
$13 \times 9 = 117$
$13 \times 10 = 130$

14 Table
$14 \times 1 = 14$
$14 \times 2 = 28$
$14 \times 3 = 42$
$14 \times 4 = 56$
$14 \times 5 = 70$
$14 \times 6 = 84$
$14 \times 7 = 98$
$14 \times 8 = 112$
$14 \times 9 = 126$
$14 \times 10 = 140$

15 Table
$15 \times 1 = 15$
$15 \times 2 = 30$
$15 \times 3 = 45$
$15 \times 4 = 60$
$15 \times 5 = 75$
$15 \times 6 = 90$
$15 \times 7 = 105$
$15 \times 8 = 120$
$15 \times 9 = 135$
$15 \times 10 = 150$

16 Table
$16 \times 1 = 16$
$16 \times 2 = 32$
$16 \times 3 = 48$
$16 \times 4 = 64$
$16 \times 5 = 80$
$16 \times 6 = 96$
$16 \times 7 = 112$
$16 \times 8 = 128$
$16 \times 9 = 144$
$16 \times 10 = 160$

**Multiplication of two or three number by two numbers**  
Any number is multiplied by the two digit number, first it is multiplied by unit and then tens. When it is multiplied by tens, the "0" is placed in the place of unit.

Hundreds	Tens	Units
$\times$	4	2
	1	4
1	6	8
4	2	0
5	8	8

### EXERCISE 3.8

Solve:

1	1 3	2	2 7	3	3 2	4	4 5	5	5 4
	$\times 12$		$\times 14$		$\times 19$		$\times 21$		$\times 26$
	2 6		1 0 8		2 8 8		4 5		3 2 4
	+ 1 3 $\times$		+ 2 7 $\times$		+ 3 2 $\times$		+ 9 0 $\times$		+ 1 0 8 $\times$
	1 5 6		3 7 8		6 0 8		9 4 5		1 4 0 4
6	7 0	7	8 3	8	4 4	9	2 5	10	6 7
	$\times 19$		$\times 28$		$\times 20$		$\times 20$		$\times 30$
	6 3 0		6 6 4		0 0		0 0		0 0
	+ 7 0 $\times$		+ 1 6 6 $\times$		+ 8 8 $\times$		+ 5 0 $\times$		+ 2 0 1 $\times$
	1 3 3 0		2 3 2 4		8 8 0		5 0 0		2 0 1 0
11	4 6	12	7 4	13	4 8	14	2 8	15	2 2
	$\times 30$		$\times 30$		$\times 40$		$\times 12$		$\times 18$
	0 0		0 0		0 0		5 6		1 7 6
	+ 1 3 8 $\times$		+ 2 2 2 $\times$		+ 1 9 2 $\times$		+ 2 8 $\times$		+ 2 2 $\times$
	1 3 8 0		2 2 2 0		1 9 2 0		3 3 6		3 9 6

<b>16</b>	99	<b>17</b>	58	<b>18</b>	78	<b>19</b>	54
	$\times 22$		$\times 24$		$\times 28$		$\times 32$
	<u>198</u>		<u>232</u>		<u>624</u>		<u>108</u>
	+ 198 $\times$		+ 116 $\times$		+ 156 $\times$		+ 162 $\times$
	<b>2178</b>		<b>1392</b>		<b>2184</b>		<b>1728</b>

<b>20</b>	69	<b>21</b>	33	<b>22</b>	64
	$\times 18$		$\times 14$		$\times 25$
	<u>552</u>		<u>132</u>		<u>320</u>
	+ 69 $\times$		+ 33 $\times$		+ 128 $\times$
	<b>1242</b>		<b>462</b>		<b>1600</b>

Thousands	Hundreds	Tens	Units
	3	6	3
	$\times$	1	5
1	8	1	5
3	6	3	0
5	4	4	5

Solve:

<b>1</b>	376	<b>2</b>	415	<b>3</b>	610	<b>4</b>	450	<b>5</b>	612	<b>6</b>	299
	$\times 22$		$\times 23$		$\times 34$		$\times 35$		$\times 12$		$\times 17$
	<u>752</u>		<u>1245</u>		<u>2440</u>		<u>2250</u>		<u>1224</u>		<u>2293</u>
	+ 752 $\times$		+ 830 $\times$		+ 1830 $\times$		+ 1350 $\times$		+ 612 $\times$		+ 299 $\times$
	<b>8272</b>		<b>9545</b>		<b>20740</b>		<b>15750</b>		<b>7344</b>		<b>5283</b>

<b>7</b>	614	<b>8</b>	314	<b>9</b>	294	<b>10</b>	904	<b>11</b>	231	<b>12</b>	445
	$\times 18$		$\times 13$		$\times 17$		$\times 12$		$\times 13$		$\times 19$
	<u>4912</u>		<u>942</u>		<u>2058</u>		<u>1808</u>		<u>693</u>		<u>4005</u>
	+ 614 $\times$		+ 314 $\times$		+ 294 $\times$		+ 904 $\times$		+ 231 $\times$		+ 445 $\times$
	<b>11052</b>		<b>4082</b>		<b>4998</b>		<b>10848</b>		<b>3003</b>		<b>8455</b>

<b>13</b>	176	<b>14</b>	884	<b>15</b>	261	<b>16</b>	666	<b>17</b>	305	<b>18</b>	705
	$\times 13$		$\times 10$		$\times 20$		$\times 11$		$\times 18$		$\times 17$
	<u>528</u>		<u>000</u>		<u>000</u>		<u>666</u>		<u>2440</u>		<u>4935</u>
	+ 176 $\times$		+ 884 $\times$		+ 522 $\times$		+ 666 $\times$		+ 305 $\times$		+ 705 $\times$
	<b>2288</b>		<b>8840</b>		<b>5220</b>		<b>7326</b>		<b>5490</b>		<b>11985</b>

19	1 0 1	20	2 0 6	21	4 2 4	22	3 3 3	23	2 2 4	24	7 4 2
	$\times 1 8$		$\times 1 6$		$\times 2 9$		$\times 3 3$		$\times 1 8$		$\times 4 2$
	<hr/>										
	8 0 8		1 2 3 6		3 8 1 6		9 9 9		1 7 9 2		1 4 8 4
	+ 1 0 1 $\times$		+ 2 0 6 $\times$		+ 8 4 8 $\times$		+ 9 9 9 $\times$		+ 2 2 4 $\times$		+ 2 9 6 8 $\times$
	<b>1 8 1 8</b>		<b>3 2 9 6</b>		<b>1 2 2 9 6</b>		<b>1 0 9 8 9</b>		<b>4 0 3 2</b>		<b>3 1 1 6 4</b>

25	1 0 0	26	9 9 9	27	6 2 5	28	4 2 0	29	8 8 2	30	1 4 1
	$\times 1 0$		$\times 1 1$		$\times 3 2$		$\times 3 0$		$\times 2 2$		$\times 4 1$
	<hr/>		<hr/>		<hr/>		<hr/>		<hr/>		<hr/>
	0 0 0		9 9 9		1 2 5 0		0 0 0		1 7 6 4		1 4 1
	+ 1 0 0 $\times$		+ 9 9 9 $\times$		+ 1 8 7 5 $\times$		+ 1 2 6 0 $\times$		+ 1 7 6 4 $\times$		+ 5 6 4 $\times$
	<b>1 0 0 0</b>		<b>1 0 9 8 9</b>		<b>2 0 0 0 0</b>		<b>1 2 6 0 0</b>		<b>1 9 4 0 4</b>		<b>5 7 8 1</b>

### Multiplication of three digit number by three digit numbers

The multiple three digit number by three digit number, firstly multiples with units, secondly multiples with tens and the place of unit “o” has been written. Same as when we multiple by hundred than “o” has been written in the places of units and tens.

#### EXERCISE 3.10

##### Multiplying the following.

1	8 7 6	2	8 7 0	3	6 2 5	4	3 6 9	5	5 6 9	6	7 6 5
	$\times 6 7 8$		$\times 2 7 6$		$\times 1 0 8$		$\times 2 4 6$		$\times 7 8 9$		$\times 3 6 9$
	<hr/>		<hr/>		<hr/>		<hr/>		<hr/>		<hr/>
	7 0 0 8		5 2 2 0		5 0 0 0		2 2 1 4		5 1 2 1		6 8 8 5
	6 1 3 2 $\times$		6 0 9 0 $\times$		0 0 0 $\times$		1 4 7 6 $\times$		4 5 5 2 $\times$		4 5 9 0 $\times$
	<b>5 9 3 9 2 8</b>		<b>2 4 0 1 2 0</b>		<b>6 7 5 0 0</b>		<b>9 0 7 7 4</b>		<b>4 4 8 9 4 1</b>		<b>2 8 2 2 8 5</b>

7	6 7 9	8	9 0 0	9	9 7 6	10	7 8 6	11	8 2 9	12	9 0 6
	$\times 2 4 9$		$\times 4 3 7$		$\times 3 4 5$		$\times 6 1 6$		$\times 4 6 2$		$\times 3 2 1$
	<hr/>		<hr/>		<hr/>		<hr/>		<hr/>		<hr/>
	6 1 1 1		6 3 0 0		4 8 8 0		4 7 1 6		1 6 5 8		9 0 6
	2 7 1 6 $\times$		2 7 0 0 $\times$		3 9 0 4 $\times$		7 8 6 $\times$		4 9 7 4 $\times$		1 8 1 2 $\times$
	<b>1 6 9 0 7 1</b>		<b>3 9 3 3 0 0</b>		<b>3 3 6 7 2 0</b>		<b>4 8 4 1 7 6</b>		<b>3 8 2 9 9 8</b>		<b>2 9 0 8 2 6</b>

13	8 6 9	14	5 5 5	15	8 0 9	16	8 2 4	17	8 9 6	18	8 7 2
	$\times 4 5 8$		$\times 3 3 4$		$\times 4 0 6$		$\times 6 9 2$		$\times 3 0 6$		$\times 7 2 7$
	<hr/>										
	6 9 5 2		2 2 2 0		4 8 5 4		1 6 4 8		5 3 7 6		6 1 0 4
	4 3 4 5 $\times$		1 6 6 5 $\times$		0 0 0 $\times$		7 4 1 6 $\times$		0 0 0 $\times$		1 7 4 4 $\times$
	<b>3 9 8 0 0 2</b>		<b>1 8 5 3 7 0</b>		<b>3 2 8 4 5 4</b>		<b>5 7 0 2 0 8</b>		<b>2 7 4 1 7 6</b>		<b>6 3 3 9 4 4</b>

19	672	20	517	21	325	22	834	23	465	24	555
× 150		× 375		× 233		× 145		× 340		× 366	
000		2585		975		4170		000		3330	
3360×		3619×		975×		3336×		1860×		3330×	
+ 672××		+ 1551××		+ 650××		+ 834××		+ 1395××		+ 1665××	
100800		193875		75725		120930		158100		203130	

25	820	26	231	27	757	28	625	29	980	30	872
× 335		× 182		× 105		× 203		× 100		× 557	
4100		462		3785		1875		000		6104	
2460×		1848×		000×		000×		000×		4360×	
+ 2460××		+ 231××		+ 757××		+ 1250××		+ 980××		+ 4360××	
274700		42042		79485		126875		98000		485704	

EXERCISE 3.11

Solve the following.

1 There are 365 days are in a year. How many days are there in 8 years?

$$\begin{array}{r}
 54 \\
 365 \\
 \times 8 \\
 \hline
 2920
 \end{array}$$

Ans: There are 2920 days in 8 years.

2 There are 63 students in a classroom. If 435 rupees are distributed among each student. How many rupees will be given to all students?

$$\begin{array}{r}
 435 \\
 \times 63 \\
 \hline
 1305 \\
 +2610 \\
 \hline
 27405
 \end{array}$$

Ans: 27405 rupees will be given to all students.

3 Ahmed has four friends. Each of his friend has 325 rupees. Find that how many rupees they have?

$$\begin{array}{r}
 325 \\
 \times 4 \\
 \hline
 1300
 \end{array}$$

Ans: They have 1300 rupees.

4 There are 30 days are in a month. How many days will be in four month?

$$\begin{array}{r}
 30 \\
 \times 4 \\
 \hline
 120
 \end{array}$$

Ans: There are 120 days in 4 months.

5 The cost of a sack of wheat is Rs. 970. How much cost will be 385 such sacks?

$$\begin{array}{r}
 970 \\
 \times 385 \\
 \hline
 4850 \\
 6860 \\
 +2910 \\
 \hline
 364450
 \end{array}$$

Ans: The cost of 385 sacks is 364450

6 One kilogram apples price is 50 rupees. Find how price will be the 45 kg apples.

$$\begin{array}{r}
 50 \\
 \times 45 \\
 \hline
 250 \\
 +200 \\
 \hline
 2250
 \end{array}$$

Ans: The price of 45kg of apples 2250

7 There are 271 sticks in a big match box. How many sticks will be in 72 such match boxes.

$$\begin{array}{r}
 271 \\
 \times 72 \\
 \hline
 542 \\
 +1897 \\
 \hline
 19512
 \end{array}$$

Ans: There are 19512 sticks in 72 match boxes.

8 There are 200 birds in a cage. How many birds are in 25 such cages?

$$\begin{array}{r}
 200 \\
 \times 25 \\
 \hline
 1000 \\
 +400 \\
 \hline
 5000
 \end{array}$$

Ans: There are 5000 birds in 25 cages.

9 The price of a book is Rs. 275. Find the price of 990 such books.

$$\begin{array}{r}
 275 \\
 \times 990 \\
 \hline
 000 \\
 2475 \\
 +2475 \times \\
 \hline
 272250
 \end{array}$$

Ans: The price of 990 books is 272250.

10 The price of a book is 130 rupees. How many cost will be of 12 books.

$$\begin{array}{r}
 130 \\
 \times 12 \\
 \hline
 260 \\
 +130 \times \\
 \hline
 1560
 \end{array}$$

Ans: The price of 12 books is 1560.

11 There are 232 pages in a book. How many pages will in 342 such books?

$$\begin{array}{r}
 232 \\
 \times 342 \\
 \hline
 464 \\
 928 \times \\
 +696 \times \times \\
 \hline
 79344
 \end{array}$$

Ans: There are 79344 pages in 342 books.

12 There are 20 students in a row. How many students will be in 10 rows.

$$\begin{array}{r}
 20 \\
 \times 10 \\
 \hline
 00 \\
 +20 \times \\
 \hline
 200
 \end{array}$$

Ans: There are 200 students in 10 rows.

13 Ali has 50 packets of pencils. There are 6 pencils in each pocket. How many pencils are in all pockets.

$$\begin{array}{r}
 50 \\
 \times 6 \\
 \hline
 300
 \end{array}$$

Ans: There are 300 pencils in all packets.

14 The expenditure of a shop is 233 rupees per day. Find the expenditure of 355 days.

$$\begin{array}{r}
 233 \\
 \times 355 \\
 \hline
 1165 \\
 1165 \times \\
 +699 \times \times \\
 \hline
 82715
 \end{array}$$

Ans: The expenditure of a shop for 355 days is 82715.

15 There are eight trees in an orchard, 36 apple in each tree. Find the total number of apples in orchard.

$$\begin{array}{r}
 36 \\
 \times 8 \\
 \hline
 288
 \end{array}$$

Ans: There are 288 apples in an orchard.

16 There are 500 mango trees in an orchard. How many mango trees are there in 25 orchards?

$$\begin{array}{r}
 500 \\
 \times 25 \\
 \hline
 2500 \\
 +000 \times \\
 \hline
 12500
 \end{array}$$

Ans: There are 12500 mango trees in 25 orchard.

17 There are 40 rows of plants in an orchard. If 37 plants are in each row then find the total of plants in all rows.

$$\begin{array}{r}
 40 \\
 \times 37 \\
 \hline
 280 \\
 +120 \times \\
 \hline
 1480
 \end{array}$$

Ans: There are 12500 mango trees in 25 orchards

18 The price of a mobile is Rs. 4640. How much price will be 35 such mobiles.

$$\begin{array}{r}
 4640 \\
 \times 35 \\
 \hline
 23200 \\
 +13920 \times \\
 \hline
 162400
 \end{array}$$

Ans: The cost of 35 mobiles is 162400

19 There are 68 pockets of Biscuits in a bag. 15 biscuits are in each packet. How many biscuits are there in a bag.

$$\begin{array}{r}
 68 \\
 \times 15 \\
 \hline
 340 \\
 +68 \times \\
 \hline
 1020
 \end{array}$$

Ans: There are 1020 biscuits in a bag.

20 Usama brings 281 litres milk in a day. Find that how much milk will be brought in 15 days?

$$\begin{array}{r}
 281 \\
 \times 15 \\
 \hline
 1405 \\
 +281 \times \\
 \hline
 4215
 \end{array}$$

Ans: There will be 4215 litres of milk in 15 days.

## DIVISION:

**Division means distribution :** Again and again of subtraction of a number is called Division. (÷) is the symbol of division. It is started from left side of number. The number that divides the given number is called divider the total value is called dividend and parts are called result.

**Example:**

$$2 \overline{)34} \begin{matrix} 17 \\ -2 \\ \hline 14 \\ -14 \\ \hline 00 \end{matrix}$$

$$2 \overline{)10} \begin{matrix} 5 \\ -10 \\ \hline 00 \end{matrix}$$

**Dividend:** Division an in-verse of multiplication divider and result are multiplied that dividend becomes the original number.

### EXERCISE 3.12

● Perform the division of the following.

1.  $5 \overline{)75} \begin{matrix} 15 \\ -5 \\ \hline 25 \\ -25 \\ \hline 00 \end{matrix}$

2.  $12 \overline{)144} \begin{matrix} 12 \\ -12 \\ \hline 24 \\ -24 \\ \hline 00 \end{matrix}$

3.  $10 \overline{)70} \begin{matrix} 7 \\ -70 \\ \hline 00 \end{matrix}$

4.  $2 \overline{)26} \begin{matrix} 13 \\ -2 \\ \hline 6 \\ -6 \\ \hline 0 \end{matrix}$

5.  $3 \overline{)33} \begin{matrix} 11 \\ -3 \\ \hline 3 \\ -3 \\ \hline 0 \end{matrix}$

6.  $6 \overline{)42} \begin{matrix} 7 \\ -42 \\ \hline 0 \end{matrix}$

7.  $5 \overline{)80} \begin{matrix} 16 \\ -5 \\ \hline 30 \\ -30 \\ \hline 00 \end{matrix}$

8.  $12 \overline{)72} \begin{matrix} 6 \\ -72 \\ \hline 00 \end{matrix}$

9.  $4 \overline{)88} \begin{matrix} 22 \\ -8 \\ \hline 8 \\ -8 \\ \hline 0 \end{matrix}$

10.  $7 \overline{)35} \begin{matrix} 5 \\ -35 \\ \hline 00 \end{matrix}$

11.  $5 \overline{)55} \begin{matrix} 11 \\ -5 \\ \hline 5 \\ -5 \\ \hline 0 \end{matrix}$

12.  $15 \overline{)25} \begin{matrix} 1.61 \\ -15 \\ \hline 10 \\ -90 \\ \hline 10 \end{matrix}$

13.  $12 \overline{)108} \begin{matrix} 9 \\ -108 \\ \hline 000 \end{matrix}$

14.  $9 \overline{)81} \begin{matrix} 9 \\ -81 \\ \hline 00 \end{matrix}$

15.  $8 \overline{)40} \begin{matrix} 5 \\ -40 \\ \hline 00 \end{matrix}$

16.  $11 \overline{)110} \begin{matrix} 10 \\ -110 \\ \hline 000 \end{matrix}$

### Divisor of three digit number by one or two digit numbers

In three digit number, division is started from left side if one digit is divided then second is place at remainder the least table is zero which is used for least number when remainder is least then third digits placed at unity remainder. After that process is started the remaining number of division is called remainder.

**For Example:**

$$\begin{array}{r} 56 \longrightarrow \text{Answer} \\ \text{Divider} \leftarrow 4 \quad \begin{array}{r} 225 \longrightarrow \text{Dividend} \\ 20 \\ \hline 25 \\ 24 \\ \hline 1 \end{array} \\ \text{Remainder} \leftarrow \end{array}$$

**Remember that:** Answer and divider are multiplied and remainder is added the result becomes equal to dividend.

### EXERCISE 3.13

● Find a remainder by using division method.

1.  $35 \overline{)686} \begin{matrix} 19 \\ -35 \\ \hline 336 \\ -315 \\ \hline 021 \end{matrix}$

2.  $50 \overline{)600} \begin{matrix} 12 \\ -50 \\ \hline 100 \\ -100 \\ \hline 000 \end{matrix}$

3.  $2 \overline{)468} \begin{matrix} 234 \\ -4 \\ \hline 6 \\ -6 \\ \hline 8 \end{matrix}$

4.  $5 \overline{)898} \begin{matrix} 179 \\ -5 \\ \hline 39 \\ -35 \\ \hline 48 \end{matrix}$

Ans: Remainder is 21.

Ans: Remainder is 0.

Ans: Remainder is 0.

Ans: Remainder is 3.



$$\begin{array}{r} 17 \sqrt{778} \\ \underline{-68} \\ 98 \\ \underline{-85} \\ 13 \end{array}$$

Ans: Remainder is 13.

$$\begin{array}{r} 11 \sqrt{239} \\ \underline{-22} \\ 19 \\ \underline{-11} \\ 08 \end{array}$$

Ans: Remainder is 08.

$$\begin{array}{r} 25 \sqrt{450} \\ \underline{-25} \\ 200 \\ \underline{-200} \\ \text{XXX} \end{array}$$

Ans: Remainder is 0.

$$\begin{array}{r} 7 \sqrt{963} \\ \underline{-7} \\ 26 \\ \underline{-21} \\ 53 \\ \underline{-49} \\ 04 \end{array}$$

Ans: Remainder is 04.

$$\begin{array}{r} 23 \sqrt{260} \\ \underline{-23} \\ 30 \\ \underline{-23} \\ 07 \end{array}$$

Ans: Remainder is 07.

$$\begin{array}{r} 32 \sqrt{826} \\ \underline{-64} \\ 186 \\ \underline{-160} \\ 16 \end{array}$$

Ans: Remainder is 16.

$$\begin{array}{r} 42 \sqrt{966} \\ \underline{-84} \\ 126 \\ \underline{-126} \\ 00 \end{array}$$

Ans: Remainder is 0.

$$\begin{array}{r} 5 \sqrt{540} \\ \underline{-50} \\ 40 \\ \underline{-40} \\ 00 \end{array}$$

Ans: Remainder is 0.

$$\begin{array}{r} 7 \sqrt{389} \\ \underline{-35} \\ 39 \\ \underline{-35} \\ 04 \end{array}$$

Ans: Remainder is 04.

$$\begin{array}{r} 12 \sqrt{287} \\ \underline{-24} \\ 47 \\ \underline{-36} \\ 11 \end{array}$$

Ans: Remainder is 11.

$$\begin{array}{r} 15 \sqrt{663} \\ \underline{-60} \\ 63 \\ \underline{-60} \\ 03 \end{array}$$

Ans: Remainder is 03.

$$\begin{array}{r} 15 \sqrt{229} \\ \underline{-15} \\ 79 \\ \underline{-75} \\ 04 \end{array}$$

Ans: Remainder is 04.

$$\begin{array}{r} 35 \sqrt{777} \\ \underline{-70} \\ 77 \\ \underline{-70} \\ 07 \end{array}$$

Ans: Remainder is 07.

$$\begin{array}{r} 5 \sqrt{875} \\ \underline{-5} \\ 37 \\ \underline{-35} \\ 25 \end{array}$$

Ans: Remainder is 00.

$$\begin{array}{r} 9 \sqrt{605} \\ \underline{-54} \\ 65 \\ \underline{-63} \\ 02 \end{array}$$

Ans: Remainder is 02.

$$\begin{array}{r} 5 \sqrt{538} \\ \underline{-50} \\ 38 \\ \underline{-35} \\ 03 \end{array}$$

Ans: Remainder is 03.

Solve the following.

1  $4425 \div 20 = 221.25$

2  $3559 \div 25 = 142.36$

3  $7596 \div 26 = 292.15384$

4  $9696 \div 15 = 646.4$

5  $7486 \div 18 = 415.88888$

6  $4223 \div 14 = 301.64285$

7  $8695 \div 16 = 543.4375$

8  $8392 \div 22 = 38.145454$

9  $7295 \div 27 = 270.18518$

10  $6919 \div 19 = 304.15789$

11  $6285 \div 28 = 224.46428$

12  $9968 \div 17 = 586.35294$

13  $9189 \div 13 = 706.84615$

14  $9562 \div 26 = 367.76923$

15  $2435 \div 13 = 187.30769$

EXERCISE 3.14

Solve the following.

1 Aslam has 70 pictures, if he pastes 5 pictures on one page of an album then how many pages will require?

2 There are 1928 chairs in a hall. If 8 chairs are in a row then how many rows will form?

$$\begin{array}{r} 5 \sqrt{70} \\ \underline{-5} \\ 20 \\ \underline{-20} \\ \text{XX} \end{array}$$

Ans: 14 pages will require.

$$\begin{array}{r} 8 \sqrt{1928} \\ \underline{-16} \\ 32 \\ \underline{-32} \\ 008 \\ \underline{-8} \\ 0 \end{array}$$

Ans: 242 rows will form.

3 One kilogram of rice cost is Rs. 68. How many kilogram of rice can be purchased in Rs. 1568.

$$\begin{array}{r}
 68 \overline{)1568} (23.0588233 \\
 -136 \\
 \hline
 208 \\
 -204 \\
 \hline
 400 \\
 -340 \\
 \hline
 600 \\
 -544 \\
 \hline
 560 \\
 -544 \\
 \hline
 160 \\
 -136 \\
 \hline
 240 \\
 -204 \\
 \hline
 36
 \end{array}$$

4 There are 960 pages in a book. If 16 pages are read daily. How many days will require to read the book.

$$\begin{array}{r}
 16 \overline{)960} (60 \\
 -960 \\
 \hline
 \text{xx}
 \end{array}$$

Ans: 16 days will require to read 960 pages.

6 There are 969 students in a school. They want to go for a picnic. If 19 vans are available then. How many student will sit in per vans.

$$\begin{array}{r}
 19 \overline{)969} (51 \\
 -95 \\
 \hline
 19 \\
 -19 \\
 \hline
 \text{xx}
 \end{array}$$

Ans: 51 students will sit in per van.

7 A work man gets Rs. 994 rupees in a week. Find his daily wage.  
→ We know that:  
There are 7 days in a week.

$$\begin{array}{r}
 7 \overline{)994} (142 \\
 -7 \\
 \hline
 29 \\
 -28 \\
 \hline
 14 \\
 -14 \\
 \hline
 \text{xx}
 \end{array}$$

Ans: The daily wage of work man is 142 rupees.

8 If a car covers a distance of 225 is 3 hours. Find the average distance per hour.

$$\begin{array}{r}
 3 \overline{)225} (75 \\
 -21 \\
 \hline
 15 \\
 -15 \\
 \hline
 \text{xx}
 \end{array}$$

Ans: The distance of per hour is 75.

9 Aisha gave Rs. 5957 rupees to Nadia for buying books. Nadia bought 23 books. Find the price of one book.

$$\begin{array}{r}
 23 \overline{)5957} (259 \\
 -46 \\
 \hline
 135 \\
 -115 \\
 \hline
 207 \\
 -207 \\
 \hline
 \text{xxx}
 \end{array}$$

Ans: The price of one book is 259 rupees.

10 The cost of 5 watches is Rs. 1725. Find the cost of one watch.

$$\begin{array}{r}
 5 \overline{)1725} (345 \\
 -15 \\
 \hline
 22 \\
 -20 \\
 \hline
 25 \\
 -25 \\
 \hline
 00
 \end{array}$$

Ans: The cost of one watch is 345.

11 There are 6 apples in a bag. How many bags are required for 84 apples?

$$\begin{array}{r}
 6 \overline{)84} (14 \\
 -6 \\
 \hline
 24 \\
 -24 \\
 \hline
 \text{xx}
 \end{array}$$

Ans: 14 bags are required for 84 apples.

12 There are 72 passengers in a bus. They paid Rs. 2520 for hire. Find out how much hire each passengers gave?

$$\begin{array}{r}
 72 \overline{)2520} (35 \\
 -216 \\
 \hline
 360 \\
 -360 \\
 \hline
 \text{xxx}
 \end{array}$$

Ans: Each passenger will hire 35 rupees.

13 There are 672 pages in four same books. Find the pages in each book?

$$\begin{array}{r}
 5 \overline{)672} (134.4 \\
 -5 \\
 \hline
 17 \\
 -15 \\
 \hline
 22 \\
 -20 \\
 \hline
 20 \\
 -20 \\
 \hline
 \text{xx}
 \end{array}$$

Ans: There are 134.4 pages in each book.

14) On the birth day of Fatima, there are 4939 biscuits were prepared and there were 28 guests. How many biscuits are eaten by each guest and how many biscuits were remained.

$$\begin{array}{r} 28 \sqrt{4939} \\ \underline{-28} \\ 213 \\ \underline{-196} \\ 179 \\ \underline{-168} \\ 11 \end{array}$$

Ans: Each guest ate 176 biscuits and 11 were remained.

16) 925 bananas are packed in 5 boxes. How many bananas are in a box?

$$\begin{array}{r} 5 \sqrt{925} \\ \underline{-5} \\ 42 \\ \underline{-40} \\ 25 \\ \underline{-25} \\ \text{xx} \end{array}$$

Ans: There are 185 bananas in each box.

15) The price of 28 pens is 1036. Find the price of each pen.

$$\begin{array}{r} 28 \sqrt{1036} \\ \underline{-84} \\ 196 \\ \underline{-196} \\ 000 \end{array}$$

Ans: The price of each pen is 37 rupees.

17) 9999 musk melons are distributed in 33 groups. How many musk melon are given to each group?

$$\begin{array}{r} 33 \sqrt{9999} \\ \underline{-990} \\ 99 \\ \underline{-99} \\ \text{xx} \end{array}$$

Ans: There are 303 musk melons in each group.

## Multiplication and Division:

### EXERCISE 3.15

Solve:

1)  $\boxed{4} \times \boxed{6} = \boxed{24}$     $\boxed{24} \div \boxed{4} = \boxed{6}$     $\boxed{24} \div \boxed{6} = \boxed{4}$

2)  $\boxed{5} \times \boxed{7} = \boxed{35}$     $\boxed{30} \div \boxed{5} = \boxed{6}$     $\boxed{28} \div \boxed{7} = \boxed{4}$

3)  $\boxed{8} \times \boxed{6} = \boxed{48}$     $\boxed{48} \div \boxed{8} = \boxed{6}$     $\boxed{24} \div \boxed{6} = \boxed{4}$

4)  $\boxed{14} \times \boxed{4} = \boxed{56}$     $\boxed{24} \div \boxed{4} = \boxed{6}$     $\boxed{84} \div \boxed{14} = \boxed{4}$

5)  $\boxed{9} \times \boxed{7} = \boxed{63}$     $\boxed{54} \div \boxed{9} = \boxed{6}$     $\boxed{28} \div \boxed{7} = \boxed{4}$

6)  $\boxed{16} \times \boxed{6} = \boxed{96}$     $\boxed{36} \div \boxed{6} = \boxed{6}$     $\boxed{64} \div \boxed{16} = \boxed{4}$

7)  $\boxed{8} \times \boxed{9} = \boxed{72}$     $\boxed{48} \div \boxed{8} = \boxed{6}$     $\boxed{36} \div \boxed{9} = \boxed{4}$

8)  $\boxed{14} \times \boxed{5} = \boxed{70}$     $\boxed{30} \div \boxed{5} = \boxed{6}$     $\boxed{56} \div \boxed{14} = \boxed{4}$

9)  $\boxed{7} \times \boxed{6} = \boxed{42}$     $\boxed{42} \div \boxed{7} = \boxed{6}$     $\boxed{24} \div \boxed{6} = \boxed{4}$

10)  $\boxed{12} \times \boxed{7} = \boxed{84}$     $\boxed{72} \div \boxed{12} = \boxed{6}$     $\boxed{28} \div \boxed{7} = \boxed{4}$

11)  $\boxed{15} \times \boxed{8} = \boxed{120}$     $\boxed{90} \div \boxed{15} = \boxed{6}$     $\boxed{32} \div \boxed{8} = \boxed{4}$

12)  $\boxed{16} \times \boxed{5} = \boxed{80}$     $\boxed{96} \div \boxed{16} = \boxed{6}$     $\boxed{20} \div \boxed{5} = \boxed{4}$

13)  $\boxed{9} \times \boxed{10} = \boxed{90}$     $\boxed{54} \div \boxed{9} = \boxed{6}$     $\boxed{40} \div \boxed{10} = \boxed{4}$

## MEASUREMENT

We need of different things in our life. When we go to bazar to purchase our needs, the shopkeeper measures the thing according to need and gives us. For example; Clothes is measured in meter vegetable and other agricultural things are measured with grams. Liquid objects are measured in litres like (oil, milk, petrol).

**Measurement of Length:** Meter is the basic unit of length, least unit is centimeter and biggest unit is kilometer (km) is used for centimeter (m) for meter and (k.m) for kilometer.

### Conversion of substance according to their length:

Length units could be changed into each other easily: Meter is converted into 100 centimeter such as kilometer is converted into 1000 meters. Same as centimeters are multiplied with meter and we can find centimeters of kilometer. For example.

$$100 \text{ centimeter} = 1 \text{ meter} \text{ and } 1000 \text{ meters} = 1 \text{ kilometer}$$

### Addition of length units

In it same units are added. Centimeter is added with centimeter and meter is added with meter..

For example

Meter —— Centimeter

$$\begin{array}{r} 3 \\ + 1 \\ \hline 4 \end{array} \quad \begin{array}{r} 45 \\ 21 \\ \hline 66 \end{array}$$

Meter —— Centimeter

$$\begin{array}{r} 7 \\ + 2 \\ \hline 9 \end{array} \quad \begin{array}{r} 36 \\ 52 \\ \hline 88 \end{array}$$

Example: Convert the 5 meter and 35 centimeters into centimeter.

$$\begin{aligned} 5\text{m} &= 5 \times 100\text{cm} \\ &= 500\text{cm} \end{aligned}$$

$$5\text{m} + 35\text{cm} = 500\text{cm} + 35\text{cm}$$

$$= 535\text{cm}$$

### EXERCISE 4.1

#### Add the following.

1 Meter —— Centi meter

$$\begin{array}{r} 6 \\ + 3 \\ \hline 9 \end{array} \quad \begin{array}{r} 81 \\ 15 \\ \hline 96 \end{array}$$

2 Meter —— Centi meter

$$\begin{array}{r} 8 \\ + 3 \\ \hline 11 \end{array} \quad \begin{array}{r} 48 \\ 25 \\ \hline 73 \end{array}$$

3 Meter —— Centi meter

$$\begin{array}{r} 2 \\ + 3 \\ \hline 5 \end{array} \quad \begin{array}{r} 43 \\ 23 \\ \hline 66 \end{array}$$

4 Meter —— Centi meter

$$\begin{array}{r} 9 \\ + 6 \\ \hline 15 \end{array} \quad \begin{array}{r} 65 \\ 26 \\ \hline 91 \end{array}$$

5 Meter —— Centi meter

$$\begin{array}{r} 5 \\ + 4 \\ \hline 9 \end{array} \quad \begin{array}{r} 30 \\ 12 \\ \hline 40 \end{array}$$

6 Meter —— Centi meter

$$\begin{array}{r} 9 \\ + 3 \\ \hline 12 \end{array} \quad \begin{array}{r} 99 \\ 25 \\ \hline 124 \end{array}$$

7 Meter —— Centi meter

$$\begin{array}{r} 7 \\ + 3 \\ \hline 10 \end{array} \quad \begin{array}{r} 55 \\ 33 \\ \hline 88 \end{array}$$

8 Meter —— Centi meter

$$\begin{array}{r} 8 \\ + 6 \\ \hline 15 \end{array} \quad \begin{array}{r} 81 \\ 51 \\ \hline 32 \end{array}$$

9 Meter —— Centi meter

$$\begin{array}{r} 5 \\ + 6 \\ \hline 12 \end{array} \quad \begin{array}{r} 76 \\ 25 \\ \hline 01 \end{array}$$

10 Meter —— Centi meter

$$\begin{array}{r} 7 \\ + 5 \\ \hline 12 \end{array} \quad \begin{array}{r} 51 \\ 15 \\ \hline 66 \end{array}$$

11 Meter —— Centi meter

$$\begin{array}{r} 9 \\ + 4 \\ \hline 13 \end{array} \quad \begin{array}{r} 28 \\ 59 \\ \hline 87 \end{array}$$

12 Meter —— Centi meter

$$\begin{array}{r} 5 \\ + 8 \\ \hline 13 \end{array} \quad \begin{array}{r} 55 \\ 19 \\ \hline 74 \end{array}$$

### Subtraction of Length of objects:

During the process of subtraction of length of Objects, centimeters are subtracted from centimeters, meters from meters and kilometers from kilometers.

Example: meter - centimeter

$$\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 9 \quad \quad 85 \\ - 7 \quad \quad 44 \\ \hline 2 \quad \quad 41 \end{array}$$

$$\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 72 \quad \quad 15 \\ - 63 \quad \quad 49 \\ \hline 8 \quad \quad 66 \end{array}$$

→ EXERCISE 4.2 ←

Solve:

1.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 7 \quad \quad 55 \\ - 3 \quad \quad 33 \\ \hline 4 \quad \quad 22 \end{array}$

2.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 8 \quad \quad 81 \\ - 6 \quad \quad 51 \\ \hline 2 \quad \quad 30 \end{array}$

3.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 9 \quad \quad 99 \\ - 3 \quad \quad 25 \\ \hline 6 \quad \quad 74 \end{array}$

4.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 5 \quad \quad 76 \\ - 3 \quad \quad 25 \\ \hline 2 \quad \quad 51 \end{array}$

5.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 8 \quad \quad 95 \\ - 4 \quad \quad 77 \\ \hline 4 \quad \quad 18 \end{array}$

6.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 5 \quad \quad 45 \\ - 3 \quad \quad 12 \\ \hline 2 \quad \quad 33 \end{array}$

7.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 8 \quad \quad 85 \\ - 4 \quad \quad 97 \\ \hline 3 \quad \quad 88 \end{array}$

8.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 9 \quad \quad 57 \\ - 6 \quad \quad 64 \\ \hline 2 \quad \quad 93 \end{array}$

9.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 8 \quad \quad 48 \\ - 3 \quad \quad 25 \\ \hline 5 \quad \quad 23 \end{array}$

10.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 8 \quad \quad 85 \\ - 4 \quad \quad 76 \\ \hline 4 \quad \quad 09 \end{array}$

11.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 9 \quad \quad 65 \\ - 6 \quad \quad 26 \\ \hline 3 \quad \quad 39 \end{array}$

12.  $\begin{array}{r} \text{Meter} \quad \text{Centi} \\ \text{meter} \\ 9 \quad \quad 89 \\ - 8 \quad \quad 70 \\ \hline 1 \quad \quad 10 \end{array}$

**STANDARDS OF MEASUREMENTS:**

The basic unit of mass is kilogram, we use (kg) for kilogram and (gm) for grams. One kilogram is equal to (1000) gram. We use following standards for weighing.

**Conversion of kilogram into grams:** We know that one kilogram is equal to 1000 gram so that we multiply with gram then are added with grams.

**Example:** 2 kilogram and 465 grams into gram.

$$1 \text{ kg} = 1000 \text{ gm}$$

$$\begin{aligned} 2 \text{ kg} &= 2 \times 1000 \text{ gm} \\ &= 2000 \text{ gm} \end{aligned}$$

**Conversion of gram in to kilograms:**

In kilogram, 1000 gram are present so that total gram are divided by 1000 gram that result becomes kilograms and remaining grams are added in decimal fraction.

**Activity:**

Fill in the blanks.

$$\begin{aligned} 1 \text{ kg} &= \boxed{1000} \text{ gm} \quad 5075 \text{ gm} = \boxed{\frac{203}{40}} \text{ kg} \quad 1240 \text{ gm} = \boxed{\frac{31}{25}} \text{ kg} \\ 3000 \text{ gm} &= \boxed{3} \text{ kg} \quad 8000 \text{ gm} = \boxed{8} \text{ kg} \quad 5 \text{ kg} = \boxed{5000} \text{ gm} \end{aligned}$$

Addition and subtraction of kilograms and grams. The process of subtractions and addition of kilograms and grams is same as in meters and centimeters it means grams are added with kilograms are added with kilograms. If sum of grams is more than 1000 then it is added with kilogram and it is counted as one kilograms.

**Example:**

$$\begin{array}{r} \text{Gram} \quad \text{Kilogram} \\ 72 \quad \quad 563 \\ + 6 \quad \quad 411 \\ \hline 78 \quad \quad 974 \end{array}$$

$$\begin{array}{r} \text{Gram} \quad \text{Kilogram} \\ 28 \quad \quad 450 \\ + 11 \quad \quad 395 \\ \hline 39 \quad \quad 845 \end{array}$$

**EXERCISE 4.3**

**Solve:**

1 Kilogram —— Gram

2 Kilogram —— Gram

3 Kilogram —— Gram

$$\begin{array}{r} 44 \quad 378 \\ + 29 \quad 235 \\ \hline 73 \quad 613 \end{array}$$

$$\begin{array}{r} 90 \quad 171 \\ + 47 \quad 375 \\ \hline 137 \quad 546 \end{array}$$

$$\begin{array}{r} 15 \quad 275 \\ + 19 \quad 134 \\ \hline 34 \quad 409 \end{array}$$

4 Kilogram —— Gram

5 Kilogram —— Gram

6 Kilogram —— Gram

$$\begin{array}{r} 6 \quad 475 \\ + 11 \quad 526 \\ \hline 18 \quad 001 \end{array}$$

$$\begin{array}{r} 29 \quad 451 \\ + 23 \quad 679 \\ \hline 53 \quad 130 \end{array}$$

$$\begin{array}{r} 10 \quad 591 \\ + 41 \quad 538 \\ \hline 52 \quad 129 \end{array}$$

7 Kilogram —— Gram

8 Kilogram —— Gram

9 Kilogram —— Gram

$$\begin{array}{r} 52 \quad 725 \\ + 42 \quad 255 \\ \hline 94 \quad 980 \end{array}$$

$$\begin{array}{r} 82 \quad 456 \\ + 17 \quad 267 \\ \hline 99 \quad 723 \end{array}$$

$$\begin{array}{r} 38 \quad 320 \\ + 16 \quad 615 \\ \hline 54 \quad 935 \end{array}$$

10 Kilogram —— Gram

11 Kilogram —— Gram

12 Kilogram —— Gram

$$\begin{array}{r} 28 \quad 450 \\ + 12 \quad 472 \\ \hline 40 \quad 922 \end{array}$$

$$\begin{array}{r} 45 \quad 985 \\ + 91 \quad 319 \\ \hline 137 \quad 304 \end{array}$$

$$\begin{array}{r} 71 \quad 591 \\ + 16 \quad 538 \\ \hline 88 \quad 129 \end{array}$$

At the time of subtraction gram are subtracted from grams and kilogram are subtracted from kilogram, if subtracted value of grams is more than that of upper volume then one kilogram or 1000 gram are added with upper volume of grams.

**Example:**

$$\begin{array}{r} \text{Kilogram} \quad \text{Gram} \\ 57 \quad 395 \\ - 41 \quad 314 \\ \hline 16 \quad 081 \end{array}$$

$$\begin{array}{r} \text{Kilogram} \quad \text{Gram} \\ 53 \quad 401 \\ - 29 \quad 395 \\ \hline 24 \quad 006 \end{array}$$

**EXERCISE 4.4**

**Subtract the following.**

1 Kilogram —— Gram

2 Kilogram —— Gram

3 Kilogram —— Gram

$$\begin{array}{r} 35 \quad 375 \\ - 18 \quad 900 \\ \hline 16 \quad 475 \end{array}$$

$$\begin{array}{r} 75 \quad 265 \\ - 74 \quad 750 \\ \hline 00 \quad 515 \end{array}$$

$$\begin{array}{r} 14 \quad 151 \\ - 7 \quad 271 \\ \hline 6 \quad 880 \end{array}$$

4 Kilogram —— Gram

5 Kilogram —— Gram

6 Kilogram —— Gram

$$\begin{array}{r} 25 \quad 105 \\ - 21 \quad 745 \\ \hline 03 \quad 360 \end{array}$$

$$\begin{array}{r} 20 \quad 700 \\ - 14 \quad 667 \\ \hline 06 \quad 167 \end{array}$$

$$\begin{array}{r} 20 \quad 300 \\ - 10 \quad 200 \\ \hline 10 \quad 100 \end{array}$$

7 Kilogram —— Gram

8 Kilogram —— Gram

9 Kilogram —— Gram

$$\begin{array}{r} 6 \quad 309 \\ - 4 \quad 249 \\ \hline 2 \quad 060 \end{array}$$

$$\begin{array}{r} 15 \quad 454 \\ - 7 \quad 395 \\ \hline 8 \quad 59 \end{array}$$

$$\begin{array}{r} 53 \quad 021 \\ - 11 \quad 451 \\ \hline 41 \quad 570 \end{array}$$

**Instruments for measurement of liquid:**

All flowing objects are known as liquids. For example Milk, Petrol and Oil etc. Liter is used to measure the liquids. The least unit of liter is milk milliliters. One liter is equal to 1000 milliliters.

**Conversion of objects according to their capacity:**

We use the method of conversion of capacity as the method of grams and kilograms. We convert the liters into milliliter as, so that 1000 milliliters are multiplied with liter.

**Addition and subtraction of value:**

In the addition of value milliliters subtracted with milliliters and liters are subtracted with liters. As both units one added same way.

EXERCISE 4.5

**Add the following:**

1 Liter ——— Milliliter

$$\begin{array}{r}
 64 \quad 426 \\
 + 32 \quad 165 \\
 \hline
 96 \quad 591
 \end{array}$$

2 Liter ——— Milliliter

$$\begin{array}{r}
 62 \quad 290 \\
 + 37 \quad 429 \\
 \hline
 99 \quad 719
 \end{array}$$

3 Liter ——— Milliliter

$$\begin{array}{r}
 67 \quad 170 \\
 + 29 \quad 290 \\
 \hline
 96 \quad 460
 \end{array}$$

4 Liter ——— Milliliter

$$\begin{array}{r}
 74 \quad 550 \\
 + 25 \quad 490 \\
 \hline
 100 \quad 40
 \end{array}$$

5 Liter ——— Milliliter

$$\begin{array}{r}
 62 \quad 345 \\
 + 37 \quad 475 \\
 \hline
 99 \quad 820
 \end{array}$$

6 Liter ——— Milliliter

$$\begin{array}{r}
 47 \quad 290 \\
 + 26 \quad 365 \\
 \hline
 73 \quad 655
 \end{array}$$

7 Liter ——— Milliliter

$$\begin{array}{r}
 63 \quad 263 \\
 + 45 \quad 954 \\
 \hline
 109 \quad 217
 \end{array}$$

8 Liter ——— Milliliter

$$\begin{array}{r}
 25 \quad 638 \\
 + 45 \quad 292 \\
 \hline
 70 \quad 930
 \end{array}$$

9 Liter ——— Milliliter

$$\begin{array}{r}
 56 \quad 575 \\
 + 26 \quad 125 \\
 \hline
 82 \quad 700
 \end{array}$$

EXERCISE 4.6

**Subtract the following:**

1 Liter ——— Milliliter 2 Liter ——— Milliliter 3 Liter ——— Milliliter

$$\begin{array}{r}
 15 \quad 676 \\
 - 7 \quad 435 \\
 \hline
 8 \quad 241
 \end{array}
 \begin{array}{r}
 99 \quad 105 \\
 - 95 \quad 125 \\
 \hline
 03 \quad 980
 \end{array}
 \begin{array}{r}
 54 \quad 585 \\
 - 50 \quad 471 \\
 \hline
 04 \quad 114
 \end{array}$$

4 Liter ——— Milliliter 5 Liter ——— Milliliter 6 Liter ——— Milliliter

$$\begin{array}{r}
 83 \quad 545 \\
 - 49 \quad 239 \\
 \hline
 34 \quad 306
 \end{array}
 \begin{array}{r}
 21 \quad 570 \\
 - 11 \quad 548 \\
 \hline
 10 \quad 22
 \end{array}
 \begin{array}{r}
 76 \quad 214 \\
 - 66 \quad 209 \\
 \hline
 10 \quad 005
 \end{array}$$

7 Liter ——— Milliliter 8 Liter ——— Milliliter 9 Liter ——— Milliliter

$$\begin{array}{r}
 15 \quad 770 \\
 - 12 \quad 250 \\
 \hline
 03 \quad 520
 \end{array}
 \begin{array}{r}
 78 \quad 690 \\
 - 54 \quad 870 \\
 \hline
 23 \quad 820
 \end{array}
 \begin{array}{r}
 92 \quad 247 \\
 - 78 \quad 475 \\
 \hline
 13 \quad 772
 \end{array}$$

10 Liter ——— Milliliter 11 Liter ——— Milliliter 12 Liter ——— Milliliter

$$\begin{array}{r}
 54 \quad 640 \\
 - 39 \quad 870 \\
 \hline
 14 \quad 770
 \end{array}
 \begin{array}{r}
 85 \quad 900 \\
 - 69 \quad 875 \\
 \hline
 16 \quad 25
 \end{array}
 \begin{array}{r}
 81 \quad 280 \\
 - 67 \quad 590 \\
 \hline
 13 \quad 690
 \end{array}$$

13 Liter ——— Milliliter 14 Liter ——— Milliliter 15 Liter ——— Milliliter

$$\begin{array}{r}
 42 \quad 350 \\
 - 29 \quad 675 \\
 \hline
 12 \quad 675
 \end{array}
 \begin{array}{r}
 29 \quad 240 \\
 - 15 \quad 170 \\
 \hline
 14 \quad 170
 \end{array}
 \begin{array}{r}
 71 \quad 680 \\
 - 58 \quad 970 \\
 \hline
 12 \quad 710
 \end{array}$$

## EXERCISE 4.7

### Solve the following:

1 Aslam went to his friend's home at distance of 9 km, 80 m, then he went to school at a distance of 5 km 725m. How much distance he covered?

$$\begin{array}{r}
 9 \text{ km} \quad 80 \text{ m} \\
 + 5 \text{ km} \quad 725 \text{ m} \\
 \hline
 14 \text{ km} \quad 805 \text{ m}
 \end{array}$$

Ans: Aslam covered 14 km and 805 m distance.

2 Two friends participate in a race, one friend covered a distance of 98 m which other covered a distance 69 m and 85 centimeter. How much more distance did cover the first.

$$\begin{array}{r}
 98 \text{ m} \\
 - 69 \text{ m} \\
 \hline
 28 \text{ m}
 \end{array}
 \quad
 \begin{array}{r}
 00 \text{ m} \\
 85 \text{ m} \\
 \hline
 15 \text{ m}
 \end{array}$$

Ans: First friend covered 28 km and 15 cm more distance than second friend.

3 Aamir bought 5.800 kilogram of potatoes. 12.600 kg of onions and 9.750 kg of pulse. How many kilograms did he buy?

$$\begin{array}{r}
 5.800 \text{ kilograms} \\
 9.750 \text{ kilograms} \\
 + 12.600 \text{ kilograms} \\
 \hline
 28.150 \text{ kilograms}
 \end{array}$$

Ans: Amir bought 28.150 kilograms.

5 Imran filled 5.675 liter petrol in his motorcycle and went to office and on the return he had 2.325 liter petrol. How much petrol has consumed.

$$\begin{array}{r}
 5.675 \text{ litres} \\
 - 2.325 \text{ litres} \\
 \hline
 3.35 \text{ litres}
 \end{array}$$

Ans: 3.35 litres of petrol is consumed.

4 How much sugar is added with 3.250 kg to make 9 kg of sugar.

$$\begin{array}{r}
 9.000 \text{ kilograms} \\
 - 3.250 \text{ kilograms} \\
 \hline
 5.750 \text{ kilograms}
 \end{array}$$

Ans: 5.750kg sugar is added in 3.250 kg to make 9 kg of sugar.

6 Asif bought 20 kg sack of flour. At the end of a week 17.800 kg of flour were used. How much flour he had.

$$\begin{array}{r}
 20.000 \text{ litres} \\
 + 17.800 \text{ litres} \\
 \hline
 2.200 \text{ litres}
 \end{array}$$

Ans: Asif had 2.200 kg of flour.

7 Akhtar filled 4.250 liter of petrol in his motorcycle, his brother filled 2.750 liter of petrol in his motorcycle and his father filled 19.400 liters petrol in his motorcycle. How many liters of petrol were filled by all?

$$\begin{array}{r}
 4.250 \text{ litres} \\
 2.750 \text{ litres} \\
 + 19.400 \text{ litres} \\
 \hline
 26.400 \text{ litres}
 \end{array}$$

Ans: 26.400 litres petrol were filled by all.

8 The tank is filled with 500 liter of water. 29.750 liters of water is used to wash the van. How much water remained in Tank.

$$\begin{array}{r}
 500.000 \text{ litres} \\
 - 29.750 \text{ litres} \\
 \hline
 470.250 \text{ litres}
 \end{array}$$

Ans: 470.250 litres of water is remained in a tank.

9 The volume of a pail is 9.250 liters and the volume of other pail is 7.900 liters. Find the total volume of both pails?

$$\begin{array}{r}
 9.250 \text{ litres} \\
 + 7.900 \text{ litres} \\
 \hline
 17.150 \text{ litres}
 \end{array}$$

Ans: The volume of both pails is 17.150 litres.

10 The weight of Naveed's father is 75.300 kg and weight of his sister is 34.350 kg. Find the total weight of all.

$$\begin{array}{r}
 75.300 \text{ litres} \\
 + 34.350 \text{ litres} \\
 \hline
 109.650 \text{ litres}
 \end{array}$$

Ans: The total weight of all is 109.650kg

11 Majid's weight is 83.400 kg, his brother's weight is 57.650 kg and his sister's weight is 46.925 kg. Find the total weight of all.

$$\begin{array}{r}
 83.400 \text{ kg} \\
 57.650 \text{ kg} \\
 + 46.925 \text{ kg} \\
 \hline
 187.975 \text{ kg}
 \end{array}$$

Ans: Total of weight of all is 187.975 kg.

$$\begin{array}{r}
 395.400 \text{ km} \\
 - 117.215 \text{ km} \\
 \hline
 278.185 \text{ km}
 \end{array}$$

Ans: The train covered 278.185km more distance than car.

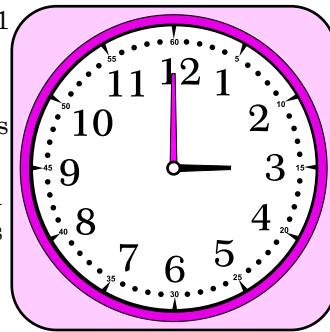
## TIME:

The instrument which is used to measure the time is called clock. On the dial of clock the number from 1 to 12 are shown, commonly two needles are fixed, one is larger and other is shorter, the larger needle shows minutes and shorter needle shows hours. Some clock consists of three hands, the third hand is thinner and larger that shows seconds. Time can be measured by following ways.

$$60 \text{ sec} = 1 \text{ minute}$$

$$60 \text{ minutes} = 1 \text{ hour or } 1 \text{ degree}$$

$$24 \text{ hours} = \text{One day}$$



The distance of two digits is of 5 minutes. The needles of clock move from right to left, the larger needle moves two digits the time is 5 minutes, but shorter needle two digits and shows one hours, when larger hand complete one cycle then shorter needle shows one hour, while one cycle of shorter needle shows 12 hours. In day and night shorter hand completes two cycles that is equal to day and night or 24 hours.

### Watch and tell the time



### The rules of conversion of seconds, minutes, hours and days.

The rules of conversion of all units in each other are under:

- 1 If second are converted into minutes then second is divided by 60
- 2 If minutes is converted into seconds then minutes are multiplied by 60.

- 3 If minutes are converted into hours then minutes are divided by 60.
- 4 If hours is converted into minutes then hours are multiplied by 60.
- 5 If days are converted into hours then days are multiplied by 24.
- 6 If hours are converted into days then hours are divided by 24.

### Usage of A.M and P.M

There are 24 hours are in days and night.

Which are divided into two equal parts.

First half of day is and second half of night is shown as (A.M) means after morning and second half night is shown as (P.M) past morning.



### Example:

4: O clock of morning is called as 4:00 a.m

10: O'clock of night is called as 10:00 p.m



### Addition and subtraction of seconds, minutes and hours:

In the addition of seconds, minutes and hours, seconds are added with seconds, minutes are added with minutes and hours are added with hours. Same as in subtraction, seconds are subtracted from seconds, minutes are subtracted from minutes and hours are subtracted from hours. If the seconds to be subtracted are greater than 60, then 60 seconds are taken. Same as if the minutes to be subtracted are greater than 60, so the one hour means 60 minutes are taken and the function of subtraction is being done.

EXERCISE 5.1

Add the following:

1	Hours — Minutes — Seconds	2	Hours — Minutes — Seconds	3	Hours — Minutes — Seconds
	12 — 40 — 45		16 — 45 — 55		9 — 24 — 15
	+ 8 — 30 — 29		+ 24 — 55 — 22		+ 3 — 29 — 40
	21 11 14		41 41 17		12 53 55
4	Hours — Minutes — Seconds	5	Hours — Minutes — Seconds	6	Hours — Minutes — Seconds
	35 — 44 — 50		9 — 16 — 18		24 — 36 — 49
	+ 18 — 24 — 55		+ 4 — 24 — 32		+ 29 — 38 — 42
	54 9 05		13 40 50		54 15 31
7	Hours — Minutes — Seconds	8	Hours — Minutes — Seconds	9	Hours — Minutes — Seconds
	32 — 18 — 35		55 — 64 — 37		92 — 54 — 59
	+ 15 — 25 — 49		+ 20 — 12 — 23		+ 8 — 35 — 45
	47 44 14		76 17 00		101 30 44
10	Hours — Minutes — Seconds	11	Hours — Minutes — Seconds	12	Hours — Minutes — Seconds
	37 — 65 — 40		38 — 73 — 84		12 — 35 — 25
	+ 30 — 23 — 56		+ 33 — 23 — 12		+ 15 — 27 — 40
	68 17 36		72 37 36		28 03 05
13	Hours — Minutes — Seconds	14	Hours — Minutes — Seconds	15	Hours — Minutes — Seconds
	12 — 9 — 48		40 — 28 — 51		24 — 45 — 49
	+ 10 — 29 — 35		+ 84 — 49 — 52		+ 72 — 48 — 54
	22 39 23		125 18 43		97 34 43

EXERCISE 5.2

Subtract the following:

1	Hours — Minutes — Seconds	2	Hours — Minutes — Seconds	3	Hours — Minutes — Seconds
	54 — 49 — 40		72 — 54 — 12		88 — 42 — 55
	- 15 — 55 — 52		- 48 — 59 — 34		- 76 — 58 — 27
	38 53 48		23 54 38		11 44 28
4	Hours — Minutes — Seconds	5	Hours — Minutes — Seconds	6	Hours — Minutes — Seconds
	55 — 48 — 21		92 — 42 — 29		59 — 22 — 28
	- 27 — 59 — 40		- 84 — 54 — 52		- 54 — 29 — 48
	27 48 41		7 47 37		04 52 40
7	Hours — Minutes — Seconds	8	Hours — Minutes — Seconds	9	Hours — Minutes — Seconds
	56 — 27 — 42		24 — 45 — 54		42 — 54 — 59
	- 51 — 39 — 54		- 12 — 24 — 32		- 12 — 32 — 29
	04 87 48		12 21 22		30 22 30
10	Hours — Minutes — Seconds	11	Hours — Minutes — Seconds	12	Hours — Minutes — Seconds
	33 — 14 — 25		45 — 19 — 23		13 — 25 — 43
	- 29 — 18 — 37		- 14 — 27 — 45		- 9 — 33 — 48
	03 55 48		30 51 38		3 51 55
13	Hours — Minutes — Seconds	14	Hours — Minutes — Seconds	15	Hours — Minutes — Seconds
	30 — 33 — 60		23 — 24 — 55		36 — 47 — 32
	- 10 — 11 — 20		- 12 — 20 — 36		- 10 — 23 — 20
	20 22 40		11 04 19		26 24 12

## EXERCISE 5.3

### Solve the following:

1) Nadia reads a Urdu book in 25 hours and a story book in 10 hours. In how much time, does she read both books.

**25 hours**

**+ 10 hours**

**35 hours**

Ans: she reads both books is 35 hours.

3) Athar complete a work in 3 hours and 35 minutes, but he had given 8 hours for that work. How much time he has saved.

**8 hours : 00 min**

**-3 hours : 35 min**

**4 hours : 25 min**

Ans: Athar saved 4 hours and 25 min.

5) Aslam spends his 4:35 hours time in college daily. Find his total hours in college if he goes 8 days.

### FIRST METHOD

For 1st day = 4 hours 35 minutes  
 For 2nd day = 4 hours 35 minutes  
 For 3rd day = 4 hours 35 minutes  
 For 4th day = 4 hours 35 minutes  
 For 5th day = 4 hours 35 minutes  
 For 6th day = 4 hours 35 minutes  
 For 7th day = 4 hours 35 minutes  
 For 8th day = 4 hours 35 minutes

**Total 34 80 minutes**

### SECOND METHOD

**4 . 35**

**x 8**

**34.80**

Ans: He does to school for 34.90 hours in 80 days.

Or He goes to school for school for 35 hours and 20 minutes.

2) If 3 days are required to travel from Lahore to Karachi. Then. how many hours will be needed for travel?

We know that there are 24 hours in one day.

the. **24 hours**      Second method.

**24 hours**      **24**

**+ 24 hours**      **x3**

**72 hours**      **72**

Ans: 72 hours will be needed for travel.

4) Rizwan watches T.V 3 hours and 27 minutes on Thursday and Friday he watches T.V for 8 hours. How much time does watches T.V on both days.

**3 hours : 27 min**

**+ 8 hours : 00 min**

**11 hours : 27 min**

Ans: He watcher Tv 11 hours and 27 minutes on both days.

6) Noman and Imran go to watch a match. Match starts at 8 O'clock in the morning and finished at 2:35. Afternoon. How much time the match was played.

**8 : 00**

**-2 : 35**

**5 : 25**

The match was played 5 hours and 25 minutes.

7) Waseem makes a wall in 68 hours while Hyder makes same wall in 59 hours. How much time do they take to make both work.

$$\begin{array}{r}
 68 \text{ hours} \\
 + 59 \text{ hours} \\
 \hline
 127 \text{ hours}
 \end{array}$$

Ans: They both make walls in 127 hours.

8) Train spends the time of 6:43:18 hours from Lahore to reach Rawal Pindi then it reach Peshawar after 4:08:49 hours. How much time does the train take to reach Peshawar comparatively Lahore.

$$\begin{array}{r}
 6 \text{ hours : 43 minutes : 18 Seconds} \\
 - 4 \text{ hours : 08 minutes : 49 Seconds} \\
 \hline
 2 \text{ hours : 34 minutes : 29 Seconds}
 \end{array}$$

Ans: The train takes 2 hours, 34 minutes and 29 Seconds to teach Peshawar comparatively Lahore.

9) Amjad reads Bag -e- Dara in 18 hours 20 minutes and 11 seconds while he reads reads Bal -e- Jibreel in 13:31:36 hours what is the total time is required to read both books.

$$\begin{array}{r}
 18 \text{ hours : 20 minutes : 11 Seconds} \\
 - 13 \text{ hours : 31 minutes : 36 Seconds} \\
 \hline
 31 \text{ hours : 51 minutes : 47 Seconds}
 \end{array}$$

Ans: 31 hours :51 minutes and 47 seconds time is required to read both books.

10) A bus reaches in 06:45:35 hours from Lahore to Multan. Which takes 03:53:41 hours from Multan to Sahiwal. Tell how much more time does it take to Multan?

$$\begin{array}{r}
 6 \text{ hours : 45 minutes : 35 Seconds} \\
 - 3 \text{ hours : 53 minutes : 41 Seconds} \\
 \hline
 2 \text{ hours : 51 minutes : 54 Seconds}
 \end{array}$$

Ans: The train takes 2 hours, 51 minutes and 54 second, more time to Multan.

11) The total time is required to reach the Lahore by train is 48 hours and by Bus is 24 hours. How many Hours are required to reach the Lahore in both bus and train.

$$\begin{array}{r}
 48 \text{ hours} \\
 + 24 \text{ hours} \\
 \hline
 72 \text{ hours}
 \end{array}$$

Ans: 72 hours are required to reach the Lahore in both bus and train.

12) Aisha works on computer for 01:25:40 hours on Sunday 02:15:11 hours on Monday. Tell how much time does she work on computer on both days.

$$\begin{array}{r}
 1 \text{ hours : 25 minutes : 40 Seconds} \\
 + 2 \text{ hours : 25 minutes : 11 Seconds} \\
 \hline
 3 \text{ hours : 50 minutes : 51 Seconds}
 \end{array}$$

Ans: She works 3 hours, 50 minutes and 51 seconds on both days.

## CURRENCY

Every country has its own currency, which is used by people to exchange the things. The country is responsible to save the currency. Pakistan has own currency. The name of Pakistan currency is Rupee.

**Addition and substraction of currency:** The addition and substraction of currency is as natural number.

**For example:** Rs 60 is added with Rs. 30 the addition is Rs. 90 same as substraction of Rs. 80 and Rs. 40 is Rs. 40.

### EXERCISE 6.1

**Add the following:**

1. Rs: 523	2. Rs: 250	3. Rs: 211	4. Rs: 420
+ Rs: 132	+ Rs: 224	+ Rs: 142	+ Rs: 235
_____	_____	_____	_____
Rs: 655	Rs: 474	Rs: 353	Rs: 655

5. Rs: 461	6. Rs: 312	7. Rs: 262	8. Rs: 114
+ Rs: 301	+ Rs: 451	+ Rs: 152	+ Rs: 210
_____	_____	_____	_____
Rs: 762	Rs: 763	Rs: 414	Rs: 324

9. Rs: 449	10. Rs: 378	11. Rs: 651	12. Rs: 568
+ Rs: 520	+ Rs: 121	+ Rs: 246	+ Rs: 301
_____	_____	_____	_____
Rs: 969	Rs: 499	Rs: 897	Rs: 869

13. Rs: 443	14. Rs: 215	15. Rs: 249	16. Rs: 108
+ Rs: 211	+ Rs: 283	+ Rs: 210	+ Rs: 670
_____	_____	_____	_____
Rs: 654	Rs: 498	Rs: 459	Rs: 778

### EXERCISE 6.2

**Subtract the following:**

1. Rs: 781	2. Rs: 625	3. Rs: 845	4. Rs: 724
- Rs: 480	- Rs: 220	- Rs: 632	- Rs: 512
_____	_____	_____	_____
Rs: 301	Rs: 405	Rs: 213	Rs: 212

5. Rs: 981	6. Rs: 978	7. Rs: 989	8. Rs: 894
- Rs: 251	- Rs: 731	- Rs: 767	- Rs: 261
_____	_____	_____	_____
Rs: 730	Rs: 247	Rs: 222	Rs: 633

9. Rs: 675	10. Rs: 564	11. Rs: 659	12. Rs: 477
- Rs: 164	- Rs: 431	- Rs: 421	- Rs: 256
_____	_____	_____	_____
Rs: 111	Rs: 133	Rs: 238	Rs: 221

13. Rs: 861	14. Rs: 769	15. Rs: 526	16. Rs: 576
- Rs: 201	- Rs: 342	- Rs: 315	- Rs: 224
_____	_____	_____	_____
Rs: 600	Rs: 427	Rs: 211	Rs: 352

17. Rs: 350	18. Rs: 795	19. Rs: 515	20. Rs: 568
- Rs: 234	- Rs: 216	- Rs: 321	- Rs: 312
_____	_____	_____	_____
Rs: 116	Rs: 559	Rs: 194	Rs: 256

21. Rs: 464	22. Rs: 627	23. Rs: 491	24. Rs: 389
- Rs: 150	- Rs: 353	- Rs: 251	- Rs: 241
_____	_____	_____	_____
Rs: 314	Rs: 274	Rs: 240	Rs: 148

## EXERCISE 6.3

Solve the following:

1 Imtiaz has 85805 rupees, from these, he gave 17297 in Zakat. How many rupees he has remained?

$$\begin{array}{r} \text{Rs: 85805} \\ - \text{Rs: 17297} \\ \hline \text{Rs: 68508} \end{array}$$

Ans: He has remained Rs. 68508.

2 Mariam had Rs. 55000. She purchased jewelry of Rs 39580. How many rupees she has remained?

$$\begin{array}{r} \text{Rs: 55000} \\ - \text{Rs: 39580} \\ \hline \text{Rs: 15420} \end{array}$$

Ans: She has remained Rs. 15420.

3 Usman had Rs. 39000. He gave Rs. 15200 to Rizwan and Rs. 12680 to Aamir. How many rupees he has remained?

First add the Rs.15200 and Rs.12680.

$$\begin{array}{r} \text{Rs: 15200} \\ - \text{Rs: 12680} \\ \hline \text{Rs: 27880} \end{array}$$

New subtract 27880 from 39000.

$$\begin{array}{r} \text{Rs: 39000} \\ - \text{Rs: 27880} \\ \hline \text{Rs: 11120} \end{array}$$

Ans: He has remained Rs. 11120.

5 Aslam had 8510, his father gave him Rs.4560. Find the total amount of Aslam.

$$\begin{array}{r} \text{Rs: 8510} \\ + \text{Rs: + 4560} \\ \hline \text{Rs: 13070} \end{array}$$

Ans: His total amount is 13070.

7 Anwar has Rs.23500, he gave Rs.7000 to his friend Akhtar as loan. Find the remaining amount of Anwar?

$$\begin{array}{r} \text{Rs: 23500} \\ - \text{Rs: -7000} \\ \hline \text{Rs: 16500} \end{array}$$

Ans: The remained amount of Answer is 16500.

8 Find the total of Akbar, Majid and Waqas, if they have Rs. 875, Rs 385 and Rs. 490 respectively.

$$\begin{array}{r} \text{Rs: 875} \\ \text{Rs: 385} \\ + \text{Rs: +490} \\ \hline \text{Rs: 1750} \end{array}$$

Ans: The total amount of Akbar, Majid, and Waqas is Rs. 1750.

9 Find the total of Akram, Tanveer, Asif and Abdul Ali. If they have Rs. 300, Rs 250, Rs. 200 and Rs. 150 respectively.

$$\begin{array}{r} \text{Rs: 300} \\ \text{Rs: 250} \\ \text{Rs: 200} \\ + \text{Rs: +150} \\ \hline \text{Rs: 900} \end{array}$$

Ans: The total amount of Akram, Tanveer, Asif and Abdul Ali is Rs. 900.

10 The rate of rain was 1100 ml on Monday, 1500 ml on Tuesday 1300ml on Wednesday and 1400 ml on Thursday. Find the total milliliters of rain.

$$\begin{array}{r} \text{Rs: 1100ml} \\ \text{Rs: 1500ml} \\ \text{Rs: 1300ml} \\ + \text{Rs: + 1400ml} \\ \hline \text{Rs: 5300ml} \end{array}$$

Ans: The total rate of rain is 5300ml

11 There are 96 trees in an orchard. From these 56 trees are of apples and remaining are of olive trees. Find the number of olive trees.

$$\begin{array}{r} \text{Rs: 96} \\ - \text{Rs: -56} \\ \hline \text{Rs: 40} \end{array}$$

Ans: There are 40 olive trees in an orchard.

12 Shahzad has R. 25900, he gave Rs. 12885 to Shakeel. How many rupees Shahzad has remained?

$$\begin{array}{r} \text{Rs: 25900} \\ - \text{Rs: -12885} \\ \hline \text{Rs: 13015} \end{array}$$

Ans: Shahzad has remained Rs.13015.

13) Shazia has Rs. 8000 for house expensives, from these, she bought some item of Rs. 1500, clothes of Rs. 3000 and other items of Rs. 1000. How many rupees he has remained.  
First add the Rs.1500, Rs.3000 and Rs.1000.

$$\begin{array}{r} \text{Rs: 1500} \\ \text{Rs: 3000} \\ + \text{Rs: 1000} \\ \hline \text{Rs: 5500} \end{array}$$

New subtract 5500 from 8000.

$$\begin{array}{r} \text{Rs: 8000} \\ - \text{Rs: 5500} \\ \hline \text{Rs: 2500} \end{array}$$

Ans: He has remained Rs. 2500.

14) Jahangir has Rs. 4500. He distributed 3440 in the poor people. Tell about his remaining amount.

$$\begin{array}{r} \text{Rs: 4500} \\ \text{Rs: } -3440 \\ \hline \text{Rs: 1060} \end{array}$$

Ans: The remaining amount of Jahangir is Rs.1060.

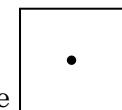
15) Ali purchased the ice cream for Rs:30, Chocolate for Rs:25 and cold drink for Rs:45. Tell that how much amount did he spend?

$$\begin{array}{r} \text{Rs: 30} \\ \text{Rs: 25} \\ + \text{Rs: 45} \\ \hline \text{Rs: 100} \end{array}$$

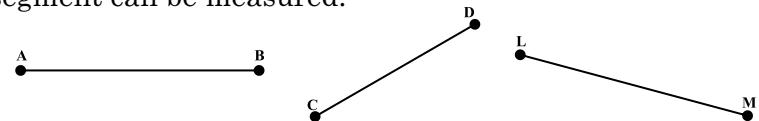
Ans: Ali spend Rs. 100.

## GEOMETRY

**Point:** Such shorter sign having no length and width is called Point (.). Line starts a point.



**Line segment:** The group of points having no face but have two tail from both ends is called line segment, line segment can be measured.



**The way of drawing of line segment:** Draw a point on a white paper and draw an other point on some distance. Now join both points the total group of points is line segment.

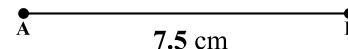
**Ray:** The group of points having a face and a tail is called ray. It is denoted by arrow as  $\overrightarrow{AB}$ .



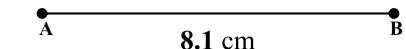
### EXERCISE 7.1

**Activity:** Draw the line segments in the help of foot scale.

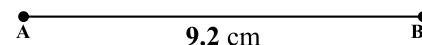
1) 7.5 cm



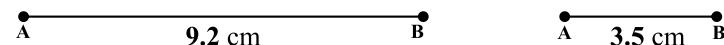
2) 8.1 cm



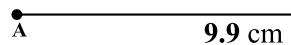
3) 9.2 cm



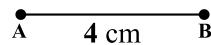
4) 3.5 cm



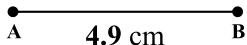
5 9.9 cm



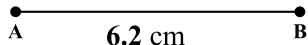
6 4 cm



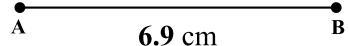
7 4.9 cm



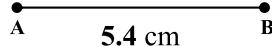
8 6.2 cm



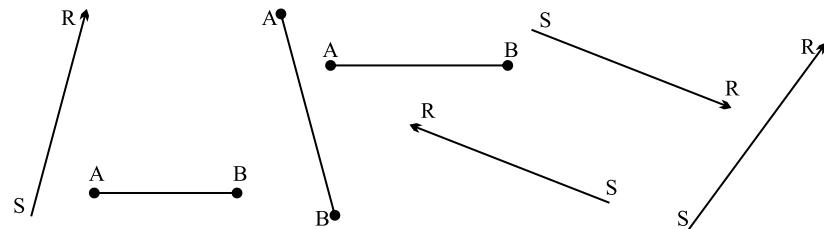
9 6.9 cm



10 5.4 cm

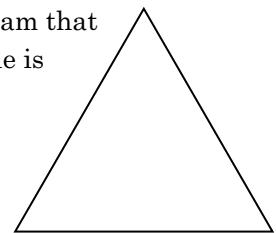


**Activity:** Recognize the line segment and ray.

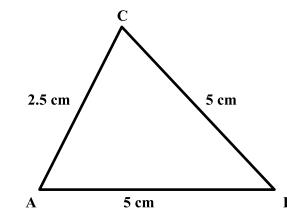
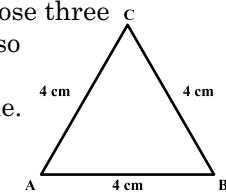


**Triangle:** Such three points that are not in same path the joining line segments of three points make a diagram that is named triangle the three sides of triangle is called side. Triangle is denoted by “ $\Delta$ ” and is known as  $\Delta ABC$ .

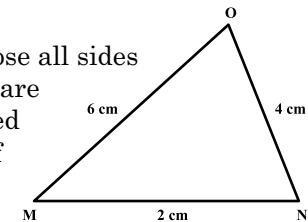
**Kinds of triangle:** There are 6 kinds of a triangle with respect to sides.



1 **Equilateral triangle:** Such triangle whose three sides are congruent and all angles are also congruent is called equilateral triangle. This is the diagram of equilateral triangle.



2 **Isosceles triangle:** Such triangle whose a pair of sides is congruent and one side is different in length but two angles are also congruent is called Isosceles triangle. This is diagram is of Isosceles triangle.



3 **Scalene triangle:** Such triangle whose all sides are different in length and all angles are also different in measurement is called scalene triangle. This is diagram is of scalene triangle.

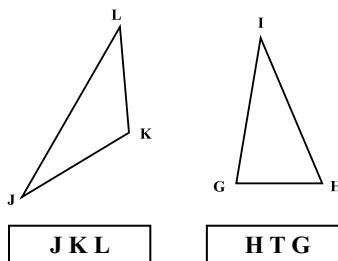
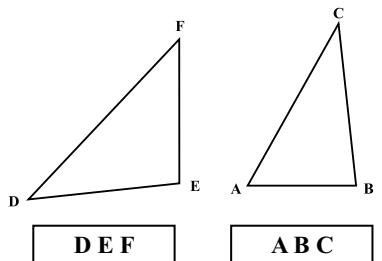
4 Right angled Triangle.

5 Acute Triangle.

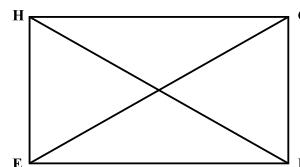
6 Obtuse Triangle.

## Activity:

Measure the length of sides of all triangle and write in centimeter and name it.

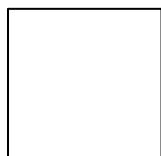
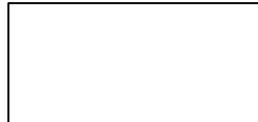


**Quadrilateral:** Any diagram having four sides is called Quadrilateral. The all sides and angles of quadrilateral is called ross and the line segment that joins opposite angles of quadrilateral is called diagonal. All angles of quadrilateral of  $90^{\circ}$ .



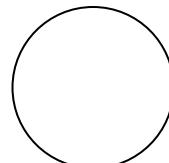
**Way to make the quadrilateral:** Draw any four point on a white paper. Such as no one point is on same line. Now join all the points the diagram is quadrilateral.

**Rectangle:** The quadrilateral whose opposite sides are congruent and all angle are right angles is called rectangle. This is the diagram of rectangle.



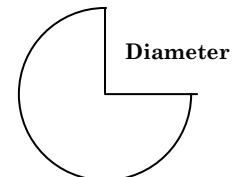
**Square:** Such quadrilateral whose all sides are congruent and all angles are right angles is called square. This is diagram of square.

**Circle:** A geometrical shape having no side but is round shape is called circle

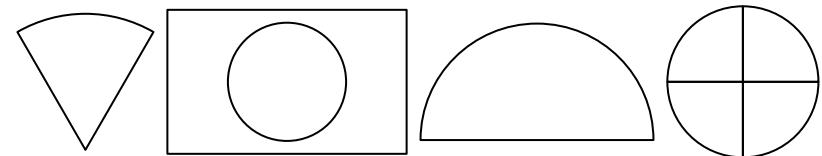


**Circle:** Place a glass on white paper. Now draw a line around the glass, this diagram is of circle.

**Diameter:** Cut the circle into two equal parts the central line segment is called diameter. It is also called half circle.

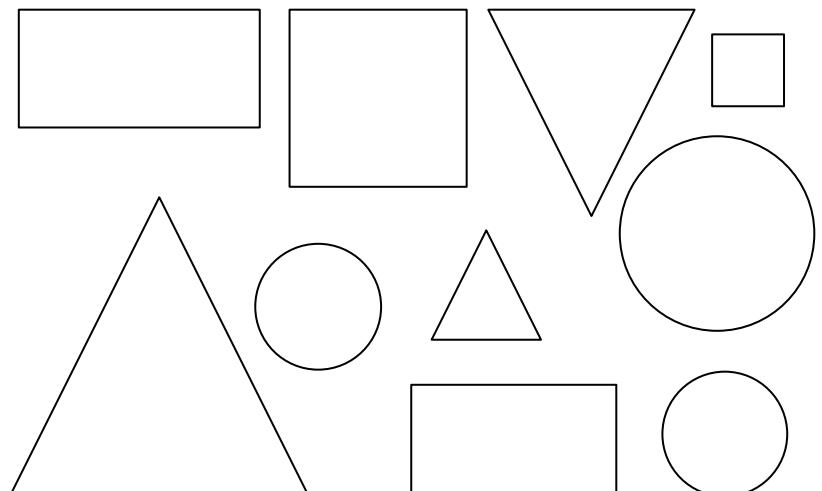


**Center of circle:** Wrap up the circle paper into four layers. When you open it a point shows in center and two line intersect each other on that point. This point is center of circle.



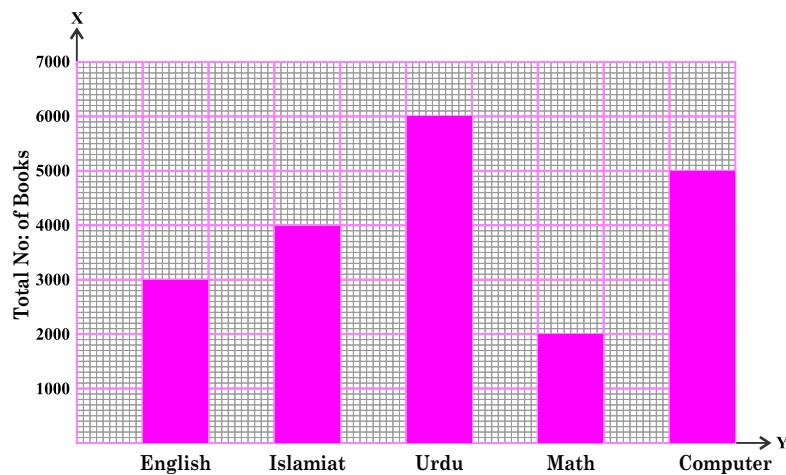
**Radius of circle:** The distance between center of circle and any point of circumference is called radius or half diameter and denoted by  $r = \frac{d}{2}$ .

**Activity:** Identify the diagrams and give the name.



## GRAPH

We have learnt in class two that the information of any value or thing by line or diagram is called graph. Now in class three we read about its an other type which is called bar graph. There are two types of line graph the verticle lines are called line graph and horizontal lines are called bar graph the distance of all lines is same and their width is also equal. For example: On the book shop we show all books in line graph.



A block of graph shows 100 little boxes. Answer the questions by watching graph given above:

1 How many books of computer are there in shop?

**Ans:** There are 5000 computer in shop.

2 Which subject is the more in number?

**Ans:** Urdu subject is the more in numbers.

3 Which subject is less in numbers.

**Ans:** English subject is less in numbers.

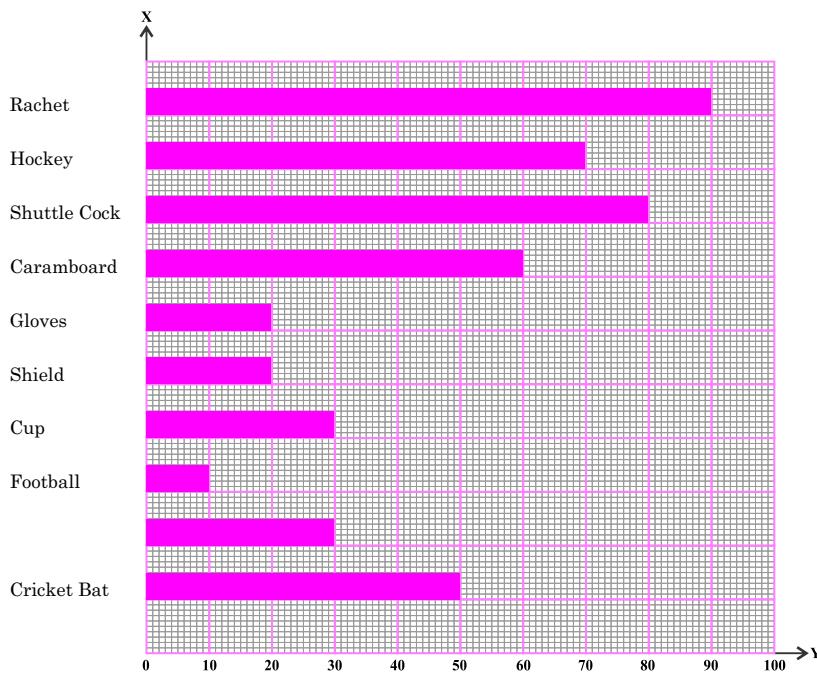
4 How many books are there in shop of all subjects?

**Ans:** There are 20000 book of all subject in shop.

5 What is the numbers of Islamiyat books?

**Ans:** There are 4000 Islamiyat books.

The sport articles of a sport shop shown on a horizontal bar graph. Answer the question by watching bar graph.



1 How many article are there in shop?

**Ans:** There are 460 articles in shop.

2 Which thing is more in number?

**Ans:** The racket is more in numbers.

3 Which thing is in less number?

**Ans:** The football is less in number.

4 What is the total number of cricket bat?

**Ans:** There are 50 cricket bat.

5 Which articles are equal in numbers.

**Ans:** The gloves and shields are equal in numbers.

6 Tell the number of racket and shuttle cock in the shop?

**Ans:** There are 90 rackets and 80 shuttle cock in the shop.