MATHEMATICS 2

For Class Two

Balochistan Textbook Board, Quetta.

Mathematics

2

Balochistan Textbook Board, Quetta.

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Chairman

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CONTENTS

UNIT 1

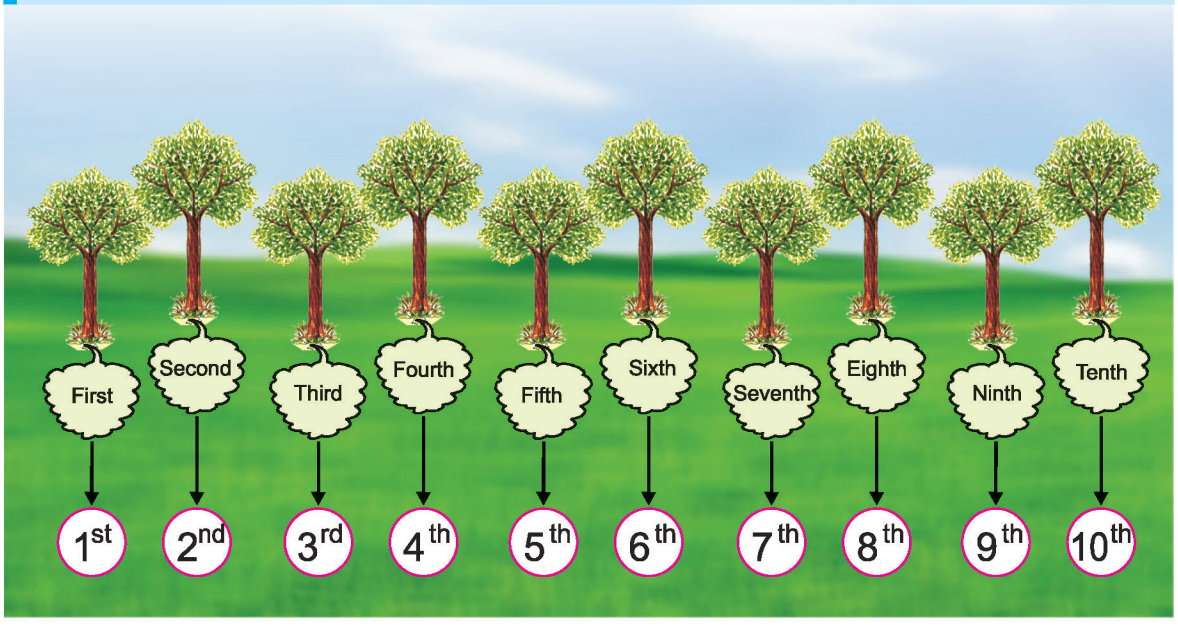
NUMBERS

After Learning this unit, the students will be able to:

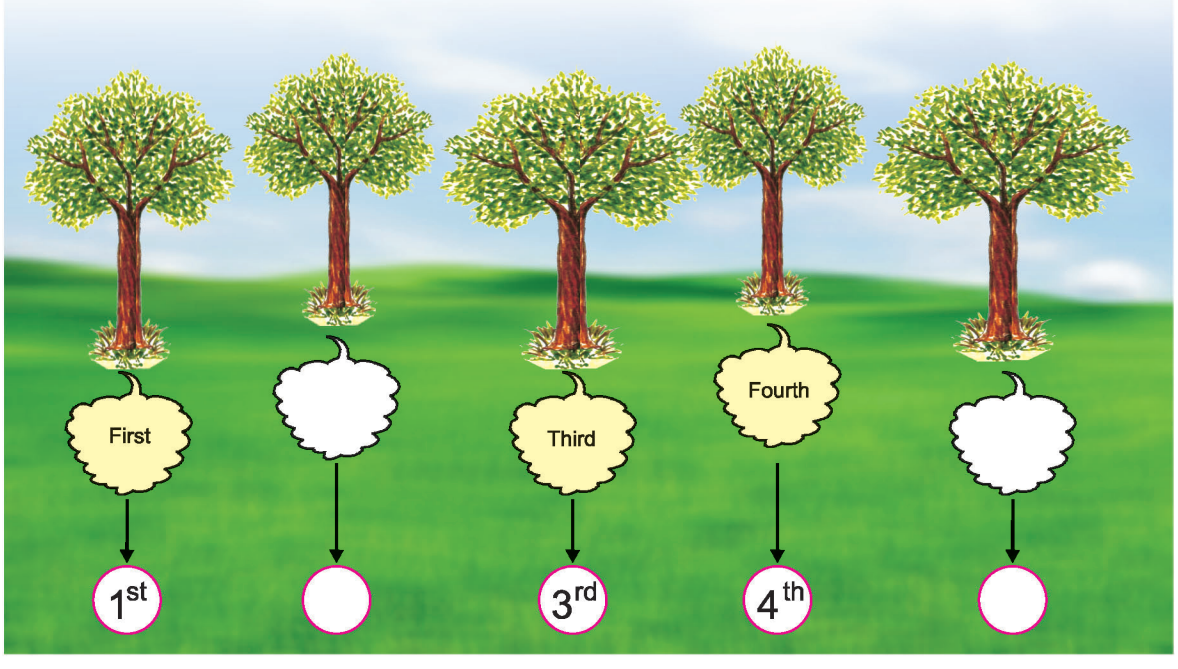
- Write ordinal numbers from first to twentieth.
- Write number 1 -100 in words.
- Recognize the place value of a 3-digit number.
- Identify the place value of a specific digit in a 3-digit number.
- Compare 2-digit or 3-digit numbers (hundreds, tens and ones)
- Read numbers up to 999.
- Write numbers up to 999 in numerals.
- Identify numbers given in ascending or descending order.
- Count backward ten step down from any given number.
- Arrange numbers up to 999 written in mixed from, in increasing or decreasing order.
- Count and write in 10s (e.g. 10, 20, 30, ...).
- Count and write in 100s (e.g. 100, 200, 300, ...).
- Identify the smallest /largest number in a given set of number.
- Recognize that 1000 is one more than 999 and the first four digit number.
- Recognize fraction as equal parts of a whole.
- Identify half, one third and quarter with the help of object and figures (without writing $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$).
- Represent half, one third and quarter in numerical from as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$.
- Shade the equal parts of a given figure to match a given fraction.
- Recognize and name unit fractions up to $\frac{1}{12}$.
- Recognize fractions like two third, three fourth, four fifth and so on using $\frac{2}{3}$, $\frac{1}{4}$, ...

Ordinal Numbers

Read the position of trees from left to right

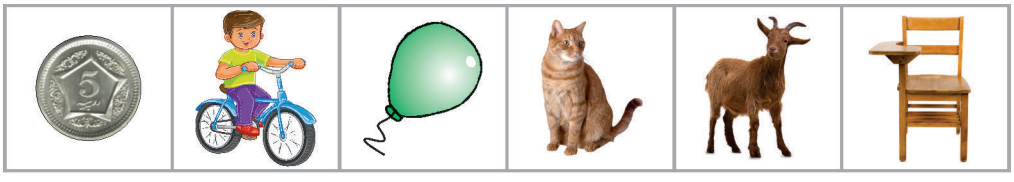


Identify the “Seventh” and “Tenth” position of trees

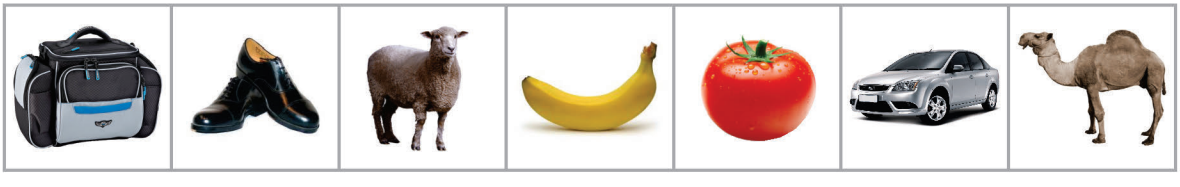


Read the position of each objects from 1st to 20th

First	Second	Third	Fourth	Fifth	Sixth	Seventh
1st	2nd	3rd	4th	5th	6th	7th

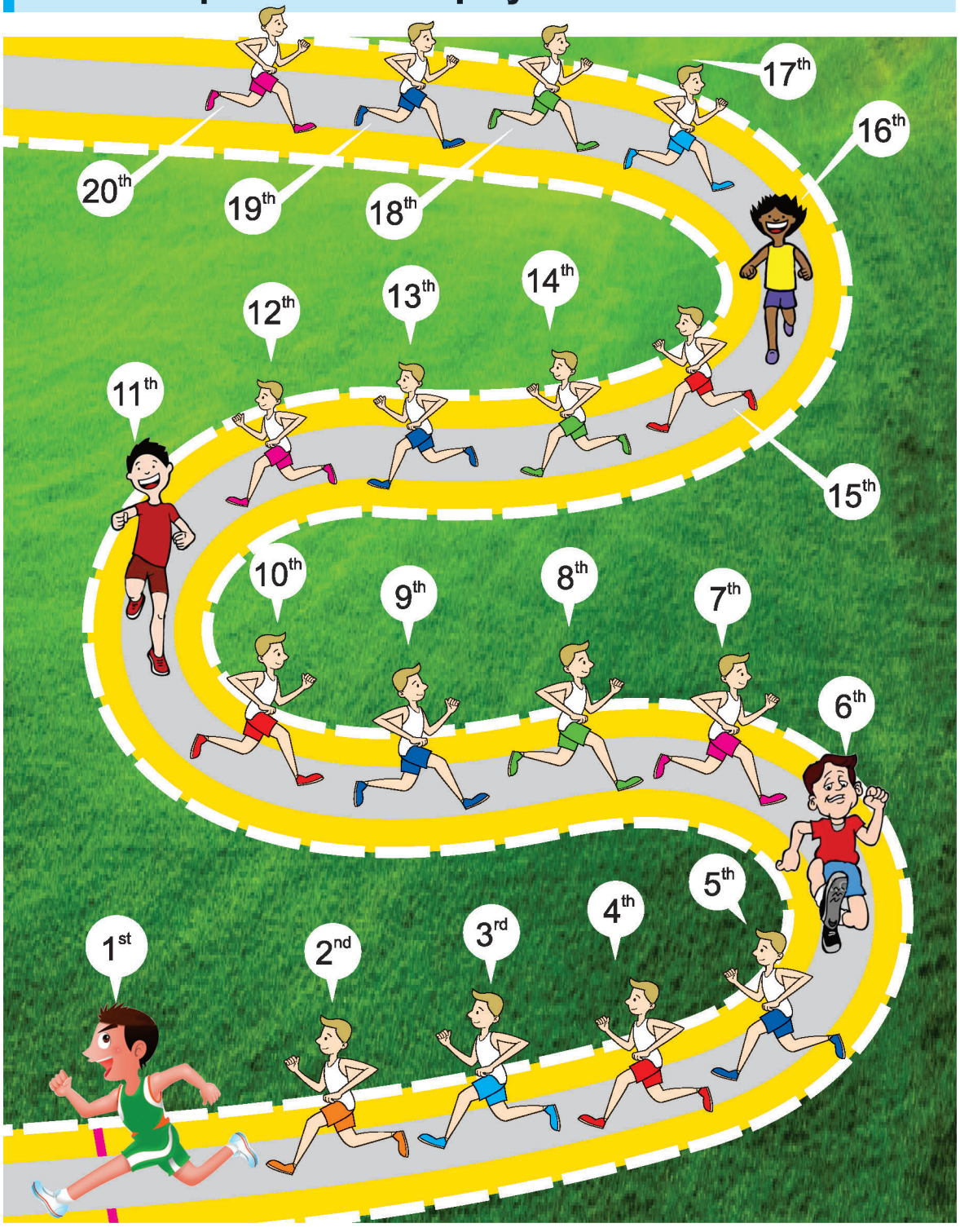


Eighth	Ninth	Tenth	Eleventh	Twelfth	Thirteenth
8th	9th	10th	11th	12th	13th

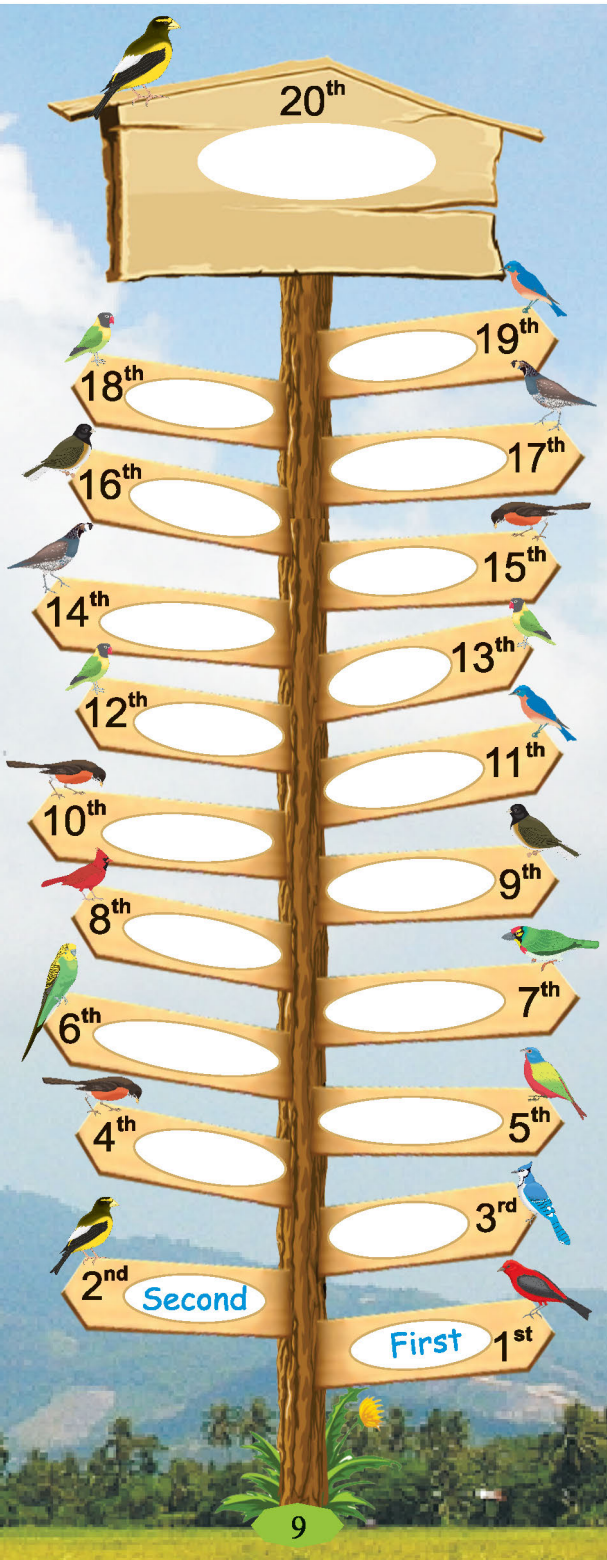


Fourteenth	Fifteenth	Sixteenth	Seventeenth	Eighteenth	Nineteenth	Twentieth
14th	15th	16th	17th	18th	19th	20th

Read the position of the players from 1st to 20th



Write the position of the birds in words.



Write the position of English alphabets in the blank box

A	B	C	D	E
1st		3rd		

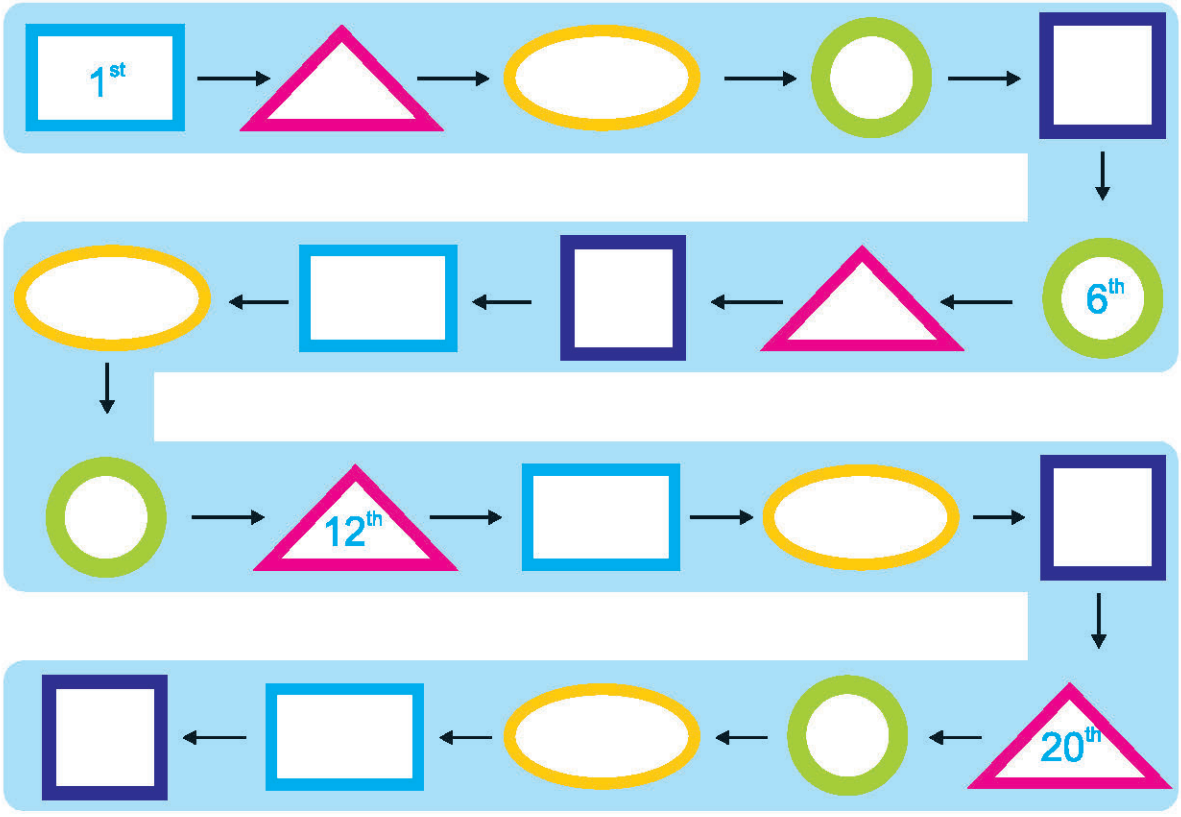
F	G	H	I	J
6th			9th	

K	L	M	N	O
11th			14th	

P	Q	R	S	T
		18th		20th

NOTE: To write the position in digits, write "st" with 1 "nd" with 2, "rd" with 3, and th with 4 to 20.

Write the position of "Shapes"



Write the position of symbols in words in the blank box

6th Sixth	9th	11th
14th	16th	17th
18th	19th	20th

Read numbers in words from 1 to 50

Numbers	Words
1	one
2	two
3	three
4	four
5	five
6	six
7	seven
8	eight
9	nine
10	ten
11	eleven
12	twelve
13	thirteen
14	fourteen
15	fifteen
16	sixteen
17	seventeen
18	eighteen
19	nineteen
20	twenty
21	twenty one
22	twenty two
23	twenty three
24	twenty four
25	twenty five

Numbers	Words
26	twenty six
27	twenty seven
28	twenty eight
29	twenty nine
30	thirty
31	thirty one
32	thirty two
33	thirty three
34	thirty four
35	thirty five
36	thirty six
37	thirty seven
38	thirty eight
39	thirty nine
40	forty
41	forty one
42	forty two
43	forty three
44	forty four
45	forty five
46	forty six
47	forty seven
48	forty eight
49	forty nine
50	fifty

Read numbers in words from 51 to 100

Numbers	Words
51	fifty one
52	fifty two
53	fifty three
54	fifty four
55	fifty five
56	fifty six
57	fifty seven
58	fifty eight
59	fifty nine
60	sixty
61	sixty one
62	sixty two
63	sixty three
64	sixty four
65	sixty five
66	sixty six
67	sixty seven
68	sixty eight
69	sixty nine
70	seventy
71	seventy one
72	seventy two
73	seventy three
74	seventy four
75	seventy five

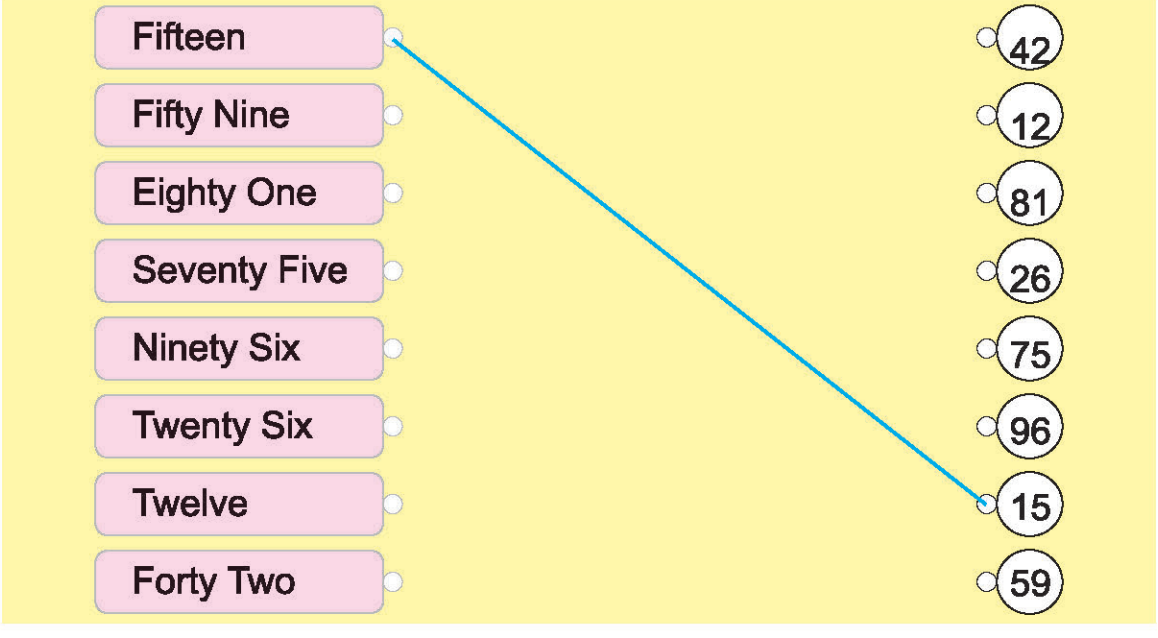
Numbers	Words
76	seventy six
77	seventy seven
78	seventy eight
79	seventy nine
80	eighty
81	eighty one
82	eighty two
83	eighty three
84	eighty four
85	eighty five
86	eighty six
87	eighty seven
88	eighty eight
89	eighty nine
90	ninety
91	ninety one
92	ninety two
93	ninety three
94	ninety four
95	ninety five
96	ninety six
97	ninety seven
98	ninety eight
99	ninety nine
100	hundred

Write the numbers in words in the blank box

16	Sixteen
32	
35	
46	
60	
53	
61	
65	
72	
75	

71	
78	
82	
83	
87	
90	
93	
94	
96	
100	

Match the numbers



Write in numbers

Numbers	Words	Numbers	Words
82	eighty two		fifty four
	seventy five		sixty
	ninety two		fifty eight
	twenty six		sixty one
	twenty one		sixty four

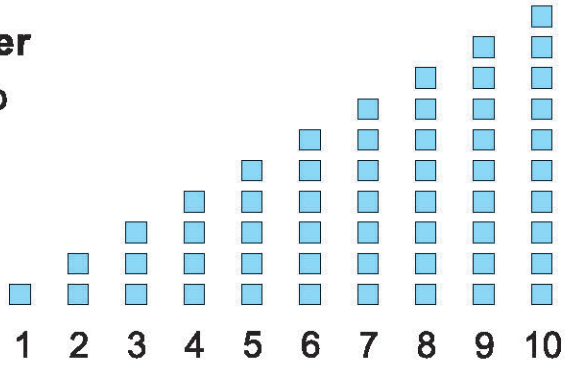
Write in words

15	fifteen	50	
19		75	
29		82	
35		56	
62		49	

Numbers up to 1000

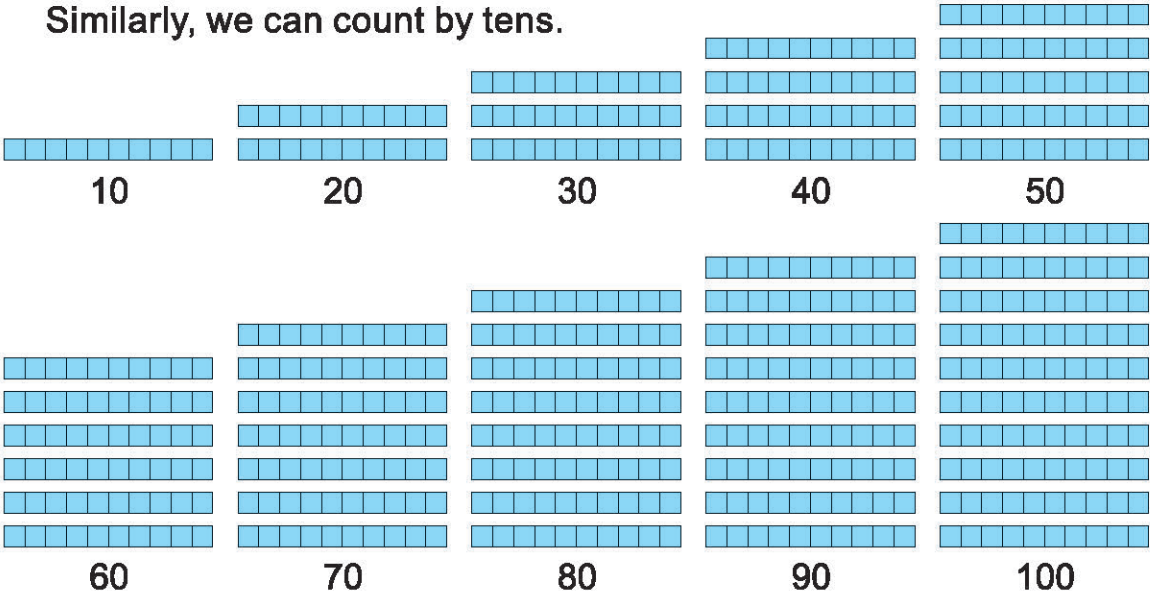
Place value of 3-digit number

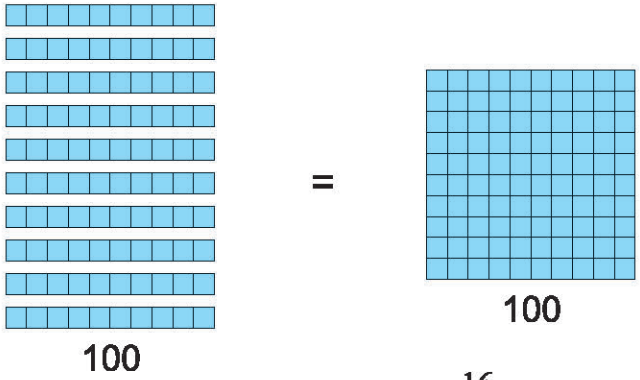
We have learnt numbers up to 100 in grade-I,



10 ones = 1 Ten

Similarly, we can count by tens.





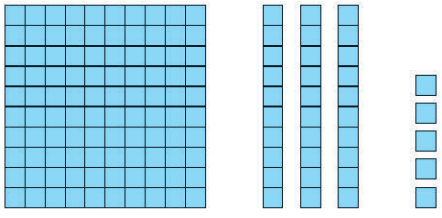
10 Tens = 100

Similarly, there are **100 ones,** therefore we can write **100 Ones = 100**

Where "100" is a three digit number, in which.

Hundred	Tens	Ones
1	0	0

Count and write number

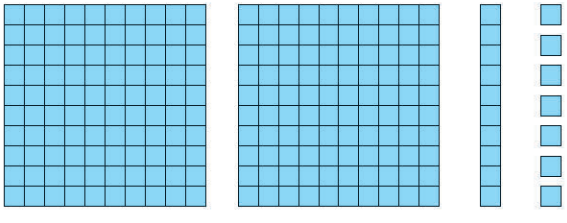


Hundred	Tens	Ones
1	3	5

Number
135

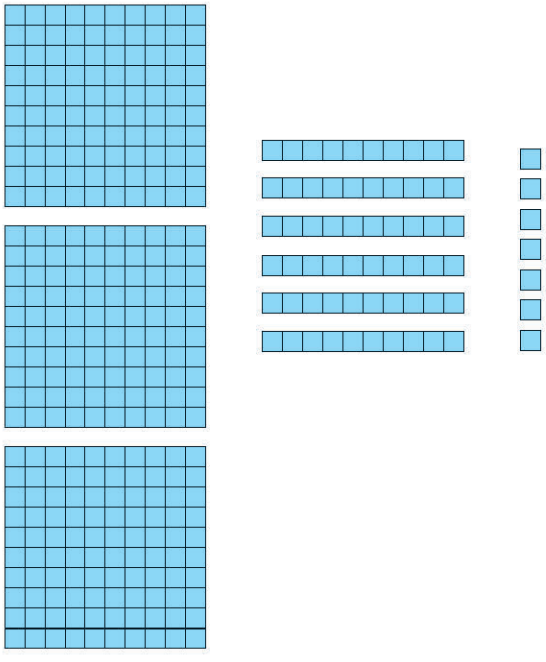
EXERCISE

Count and write number.



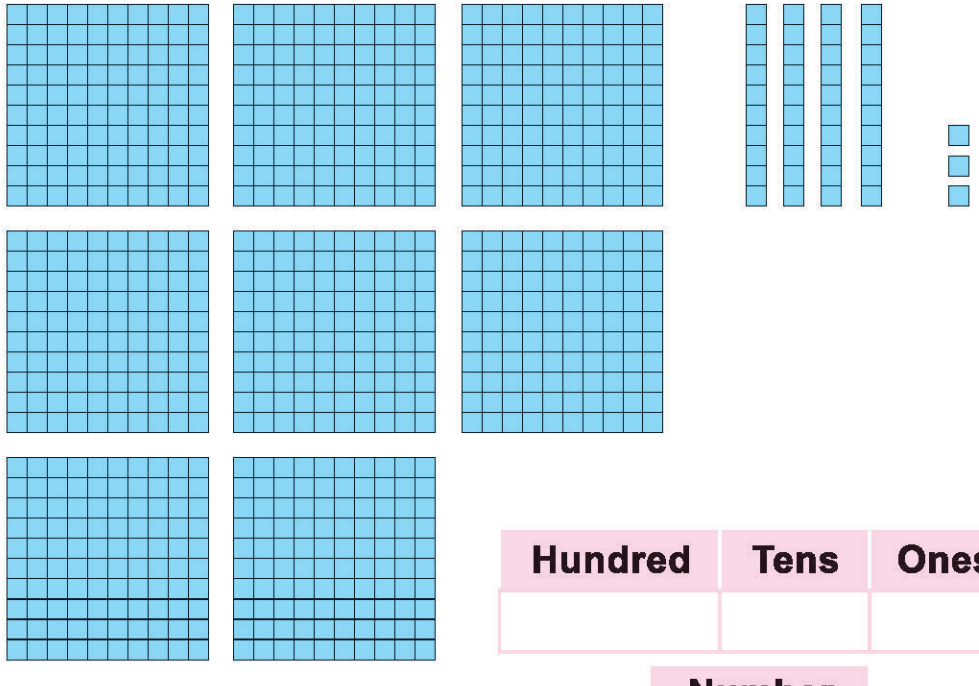
H	T	O
2	1	7

Number



Hundred	Tens	Ones

Number



Hundred	Tens	Ones

Number

Read and write numbers

	Hundreds	Tens	Ones	
One Hundred and Eighty Two	1	8	2	182
Four Hundred and Sixty				
Six Hundred and Two				
Three hundred and twenty nine				
Seven Hundred and Ten				
Eight Hundred and Fifty Five				
Nine Hundred and Eighteen				
Two Hundred and Forty Nine				
Five Hundred and Sixty One				

Write the place value of numbers

Numbers	Hundreds	Tens	Ones
2 3 5	2	3	5
4 0 6			
5 0 0			
5 3 9			
5 9 6			
7 0 9			
6 1 0			
7 7 7			
4 1 9			
5 4 3			

Read and write the numbers

Hundreds	Tens	Ones	Numbers
4	5	0	4 5 0
3	9	7	
6	7	8	
2	4	5	
9	0	7	
6	1	0	
5	0	9	
9	8	6	
7	4	9	
5	9	4	

Fill in the blanks

239	= 2	H	+ 3	T	+ 9	O	=	200 + 30 + 9
256	= 2	H	+ 5	T	+ 6	O		
296	= 2	H	+ 9	T	+ 6	O		
456	= 4	H	+ 5	T	+ 6	O		
548	= 5	H	+ 4	T	+ 8	O		
600	= 6	H	+ 0	T	+ 0	O		
625	= 6	H	+ 2	T	+ 5	O		
775	= 7	H	+ 7	T	+ 5	O		
789	= 7	H	+ 8	T	+ 9	O		
870	= 8	H	+ 7	T	+ 0	O		

Identify the place value of the encircled digit in the following three digit number

Numbers	Hundreds	Tens	Ones
2 1 (8)			8
2 (8) 8			
(3) 1 5			
9 (2) 5			
(9) 9 9			

Write the smaller number in the blank box

580	480	480	650	660	
55	65		75	73	
105	108		450	650	

Write the greater number in the blank box

405	705	705	65	66	
38	35		310	325	
405	445		670	570	

Read the numbers from 101 to 300

101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200
201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290
291	292	293	294	295	296	297	298	299	300

Read the numbers from 501 to 700

501	502	503	504	505	506	507	508	509	510
511	512	513	514	515	516	517	518	519	520
521	522	523	524	525	526	527	528	529	530
531	532	533	534	535	536	537	538	539	540
541	542	543	544	545	546	547	548	549	550
551	552	553	554	555	556	557	558	559	560
561	562	563	564	565	566	567	568	569	570
571	572	573	574	575	576	577	578	579	580
581	582	583	584	585	586	587	588	589	590
591	592	593	594	595	596	597	598	599	600
601	602	603	604	605	606	607	608	609	610
611	612	613	614	615	616	617	618	619	620
621	622	623	624	625	626	627	628	629	630
631	632	633	634	635	636	637	638	639	640
641	642	643	644	645	646	647	648	649	650
651	652	653	654	655	656	657	658	659	660
661	662	663	664	665	666	667	668	669	670
671	672	673	674	675	676	677	678	679	680
681	682	683	684	685	686	687	688	689	690
691	692	693	694	695	696	697	698	699	700

Read the numbers from 801 to 999

801	802	803	804	805	806	807	808	809	810
811	812	813	814	815	816	817	818	819	820
821	822	823	824	825	826	827	828	829	830
831	832	833	834	835	836	837	838	839	840
841	842	843	844	845	846	847	848	849	850
851	852	853	854	855	856	857	858	859	860
861	862	863	864	865	866	867	868	869	870
871	872	873	874	875	876	877	878	879	880
881	882	883	884	885	886	887	888	889	890
891	892	893	894	895	896	897	898	899	800
901	902	903	904	905	906	907	908	909	910
911	912	913	914	915	916	917	918	919	920
921	922	923	924	925	926	927	928	929	930
931	932	933	934	935	936	937	938	939	940
941	942	943	944	945	946	947	948	949	950
951	952	953	954	955	956	957	958	959	960
961	962	963	964	965	966	967	968	969	970
971	972	973	974	975	976	977	978	979	980
981	982	983	984	985	986	987	988	989	990
991	992	993	994	995	996	997	998	999	

EXERCISE

Read and write the missing numbers

100	101	102			105	106		108		110
200		202			205		207	208		
300	301		303		305					
400		402		404		406		408		410
500	501		503		505		507	508		510
600		602		604		606		608		
700	701	702			705	706			709	
800	801	802	803				807	808		

Read and write the missing numbers

200	199	198	197	196	195	194	193	192	191
325	324	323			320		318		316
400	399		397		395		393		391
430	429			426	425			422	
450			447	446		444	443		
650	649			646			643		
800		798				794			791
940	939			936			933		931

Write the missing numbers from top to bottom

540	750	630	165	989
539				
538				
537				
536				
535				
534				
533				
532				
531				

Tick (✓) the greater number

201	405	526 ✓	501	403	304
608	603	200	400	241	242
334	343	601	701	890	809

Cross (X) the smaller number

241 X	314	908	809	415	416
555	333	403	304	338	431
665	565	108	208	682	285

Circle the smallest number

i)	345	201	305	608	322	205
ii)	108	180	190	192	195	183
iii)	760	660	560	460	360	260
iv)	889	989	481	362	531	646
v)	459	388	202	405	309	588
vi)	701	420	503	403	809	909
vii)	999	309	689	201	893	666

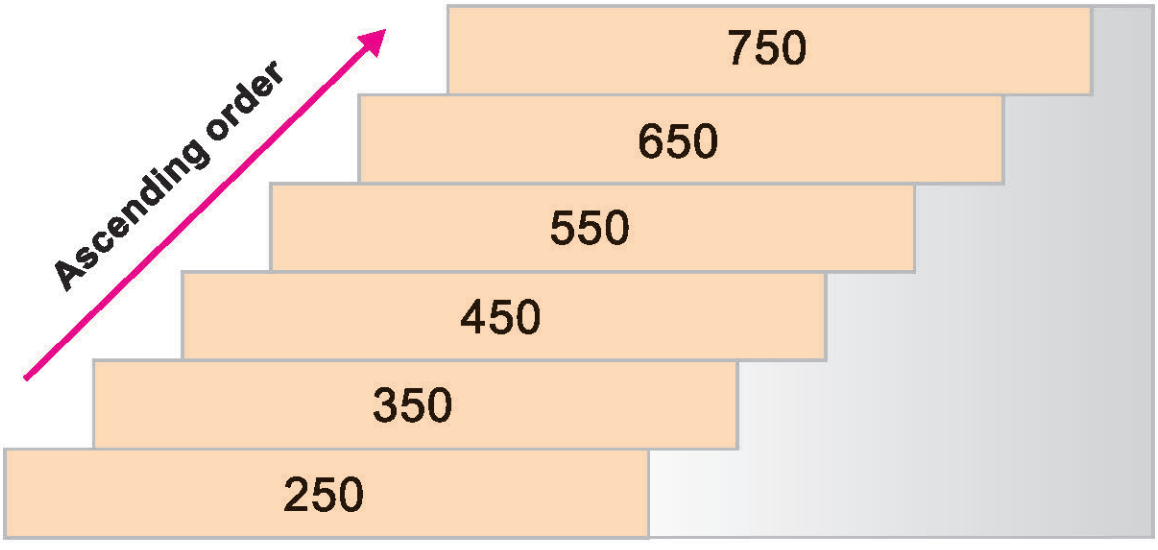
Circle the greatest number

i)	532	588	599	560	566	544
ii)	891	732	632	750	880	690
iii)	341	202	909	203	606	702
iv)	581	221	117	175	666	321
v)	321	231	123	321	213	301
vi)	888	777	666	333	999	555
vii)	890	312	563	775	791	223

Ascending and descending order of numbers

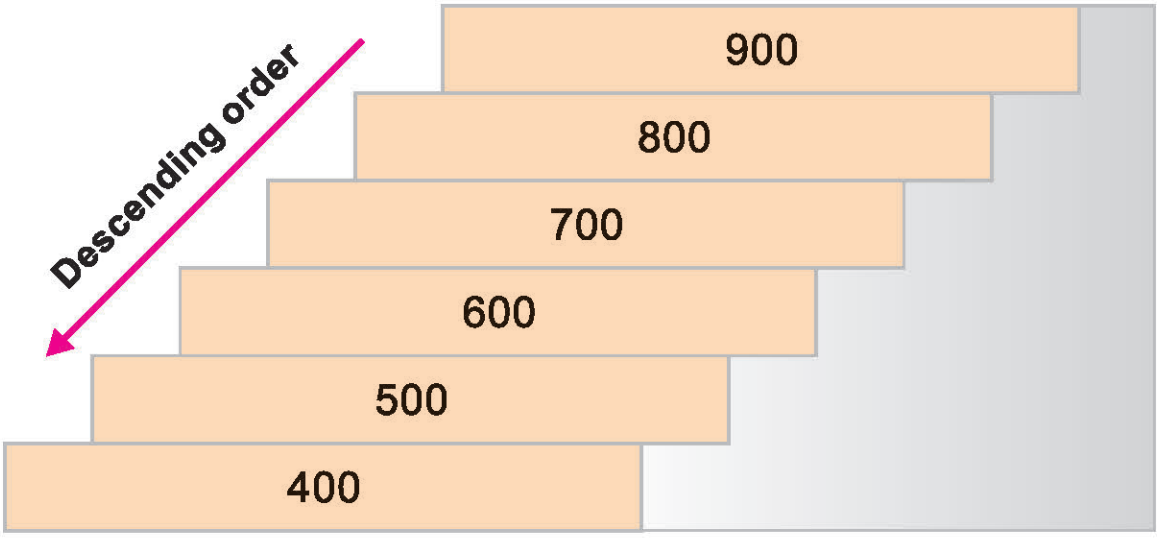
Ascending order of numbers

250, 350, 450, 550, 650, 750



Descending order of numbers

900, 800, 700, 600, 500, 400



EXERCISE

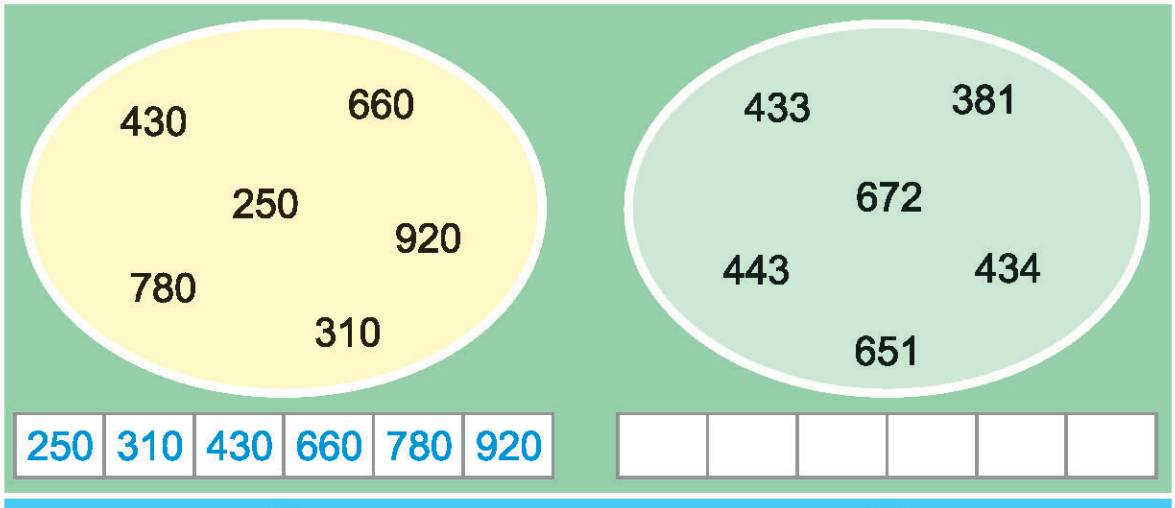
Write the missing numbers in ascending order

111	112	113	114	115	116	117	118	119	120
251									
320									
421									
520									
635									
765									
865									
875									
980									

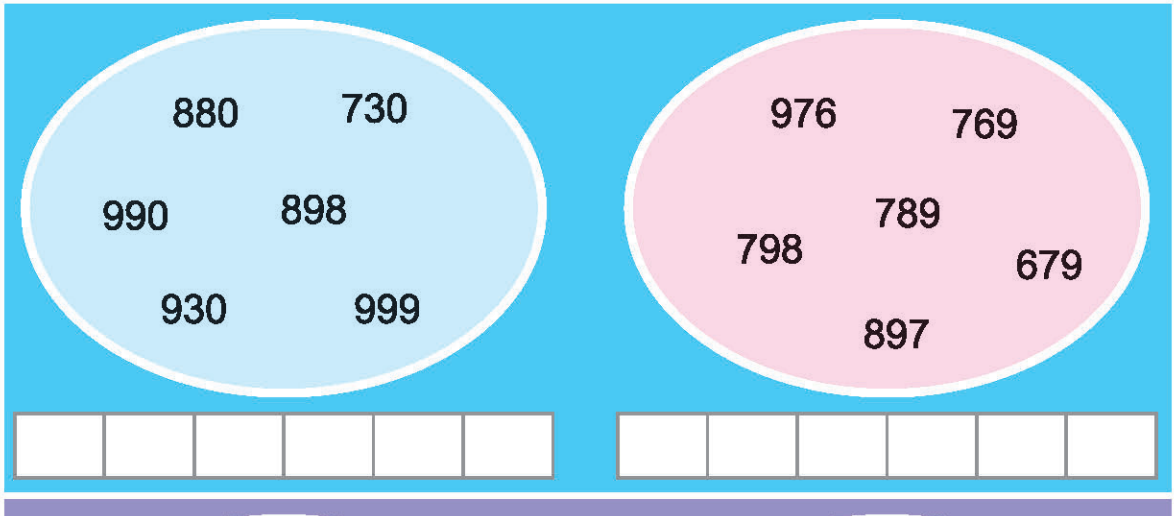
Write the missing numbers in descending order

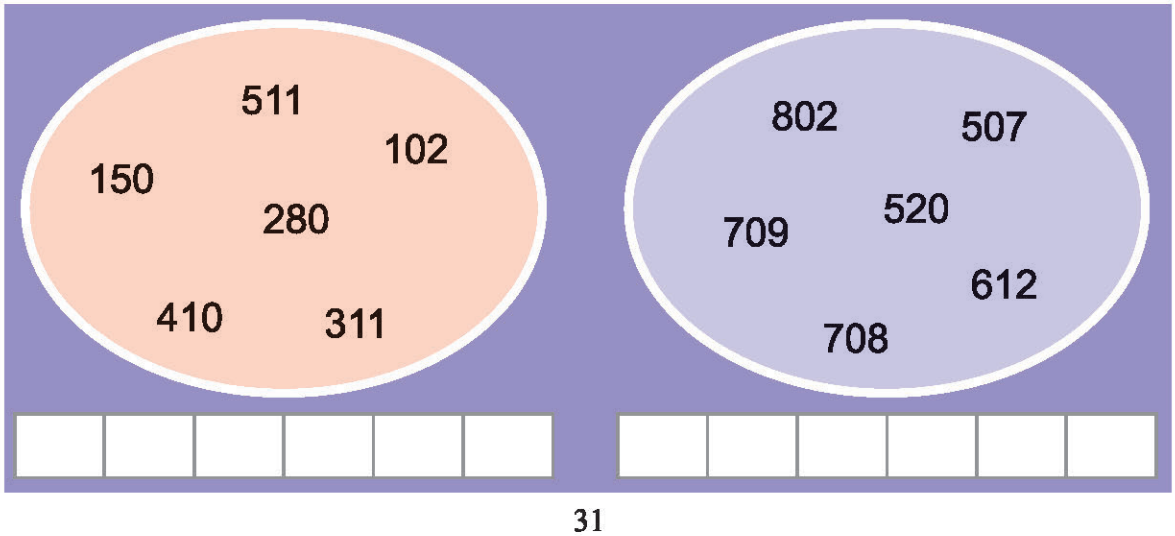
451	450	449	448	447	446	445	444	443	442
300									
525									
611									
651									
620									
780									
881									
801									
945									

Write the number in ascending order

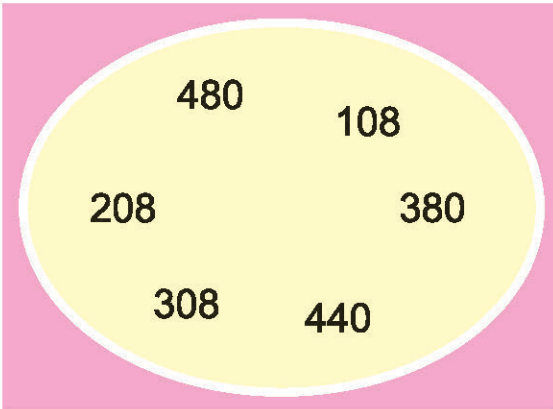


250	310	430	660	780	920

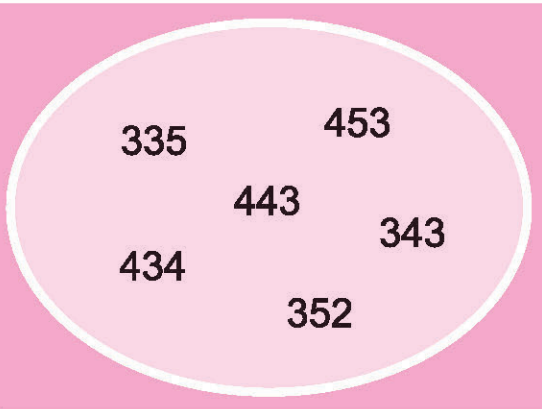


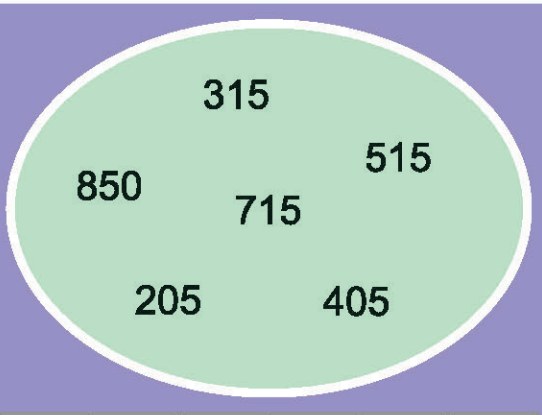


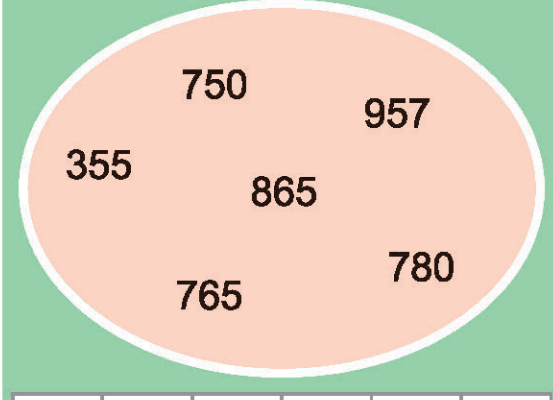
Write the missing numbers in descending order

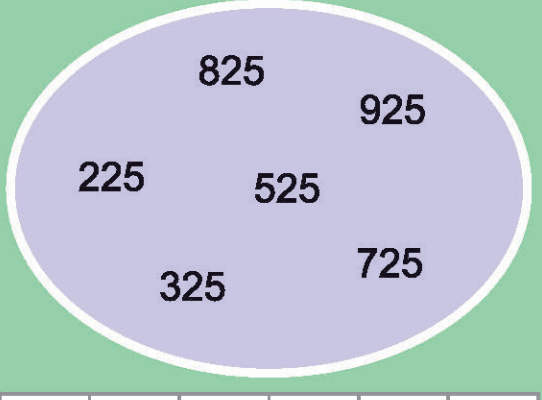


480	440	380	308	208	108



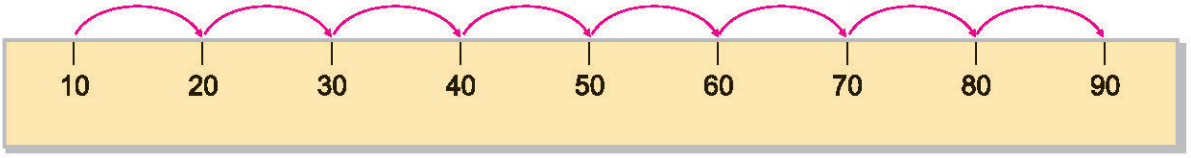






Count in hundreds and tens

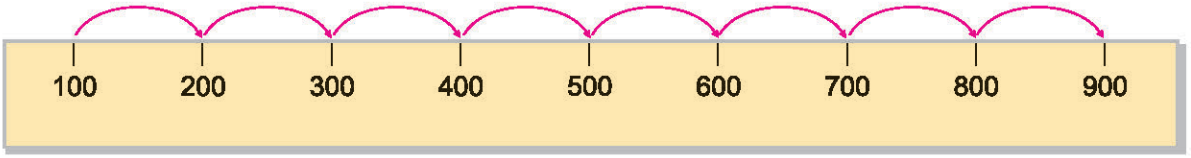
Count in tens



The numbers by 10s are.

10, 20, 30, 40, 50, 60, 70, 80, 90,

Count in hundreds



The numbers by 100s are.

100, 200, 300, 400, 500, 600, 700, 800, 900

Count in Tens and write missing box

10	20			50				90	
210	220	230					280		
310				350			380		400
410		430					480		
510	520				560			590	
		530		550			580		600
610			640			670		690	
710		730			760				800
		830		850			880		900

Count and tick (✓) the numbers in 10's

101	102	103	104	105	106	107	108	109	110 ✓
111	112	113	114	115	116	117	118	119	120
300	305	310 ✓	315	320 ✓	325	330	335	340	345
350	355	360	365	370	375	380	385	390	395
650	655	660 ✓	665	.670	675	680	685	690	695
700	705	710	715	720	725	730	735	740	745
750	755	760 ✓	765	770	775	780	785	790	795
800	805	810	815	820	825	830	835	840	845
850	855	860	865	870 ✓	875	880	885	890	895
905	910	915	920	925	930	935	940	945	950

Write the missing numbers

i. 310, 320, 330, 340, 350, 360, 370,

ii. 850, 750, 650, 550, 450, 350, 250,

iii. 300, 400, 500, _____, _____, _____, _____,

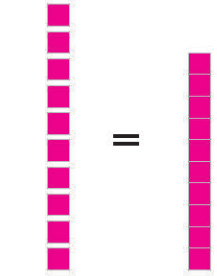
iv. 100, 200, 300, _____, _____, _____, _____,

v. 550, 540, 530, _____, _____, _____, _____,

vi. 610, 620, 630, _____, _____, _____, _____,

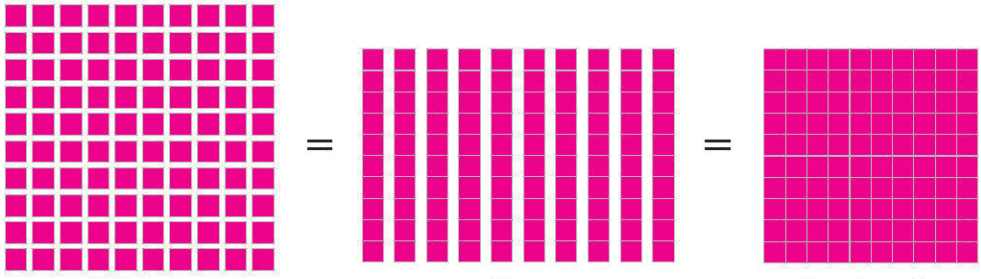
vii. 710, 720, 730, _____, _____, _____, _____,

Concept of 1000 as first four digit number



10 Ones = 1 Ten

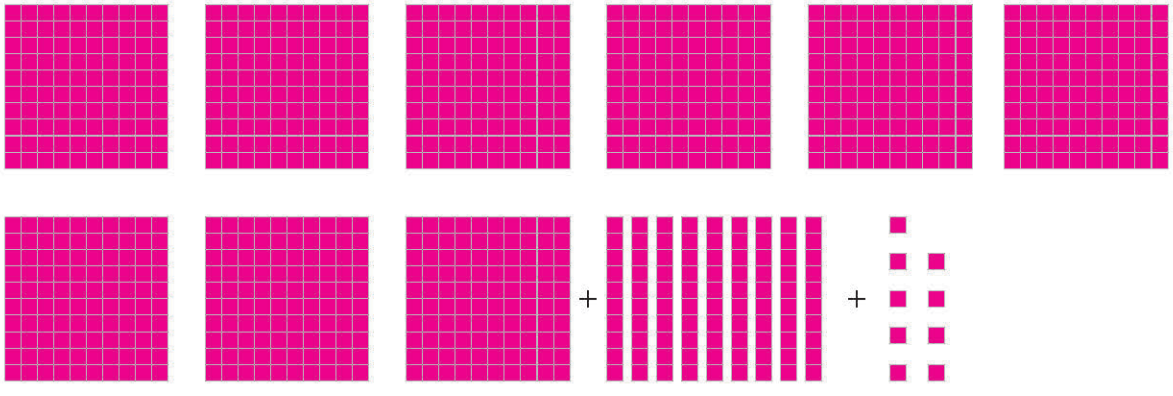
10 Ones 1 Ten



100 Ones 10 tens One hundred

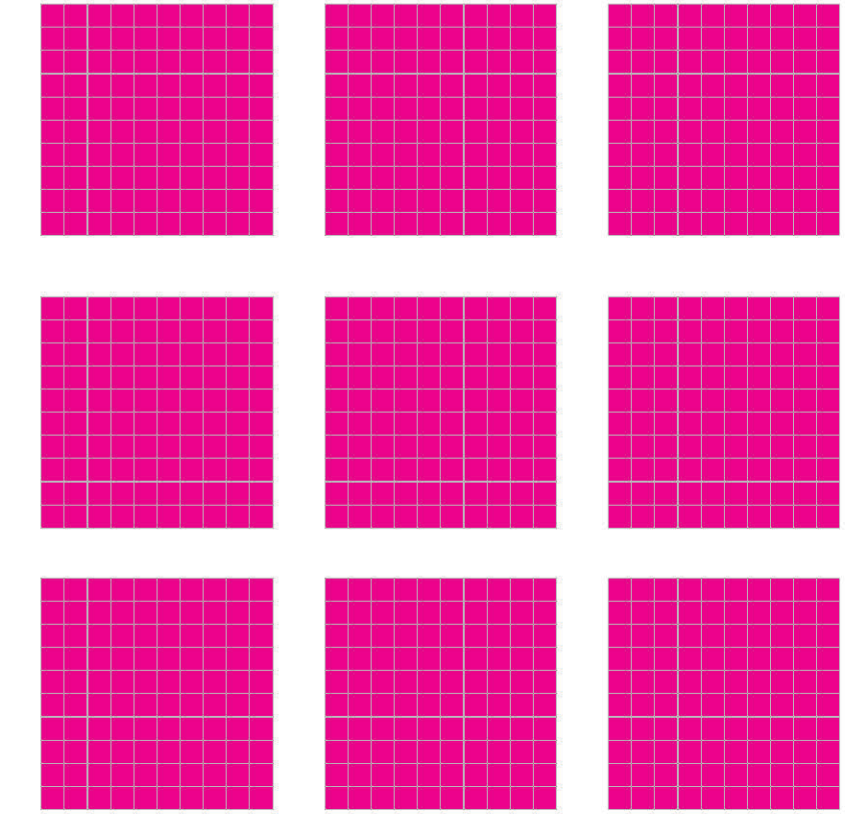
100 Ones = 10 tens = One hundred

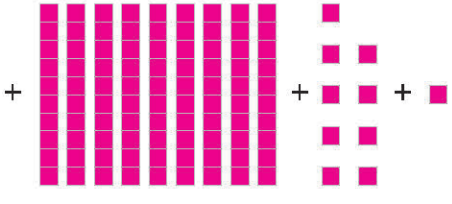
We know the numbers from 100 to 999, where 999 means 9 hundreds, 9 tens and 9 ones.



9 hundred + 9 tens + 9 one = **999**

If we add one in 999 we get one thousand, and written as1000





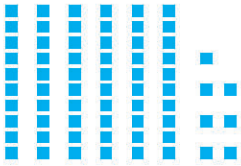
9 hundreds + 9 tens + 9 ones + one = 10 hundreds

10 hundreds = one thousand = 1000

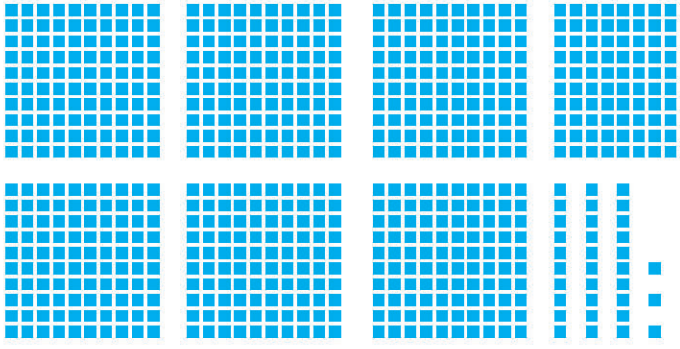
1000 is the first four digit number, we can say

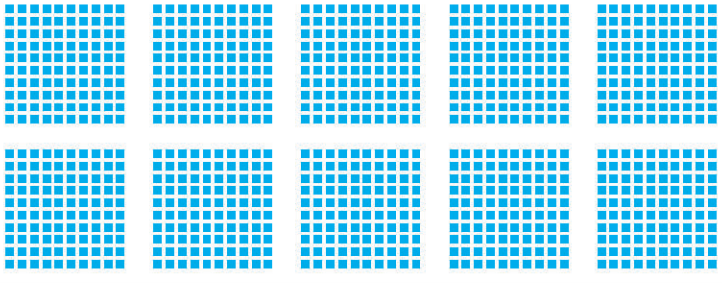
1000 = 1 thousand + 0 hundred + 0 tens + 0 ones

Write the numbers

i 

67

ii 

iii 

Fill in the blanks

1- 10 Tens = ...

2- 10 Hundreds = ...

3- 10 Ones = ...

4- Two digit largest number is ..... .

5- Three digit largest number is ..... .

6- Four digit first number is ..... .

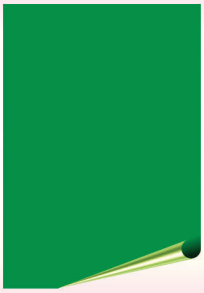
7- Two digit smallest number is ..... .

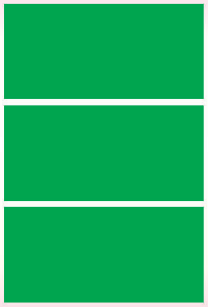
8- Three digit smallest number is ..... .

FRACTIONS

In our daily life we divide things into two or more equal parts.
Out of these one or all parts are called fractions, of the whole.

Take an apple. Cut it into two equal parts. Each part is a fraction of the apple.



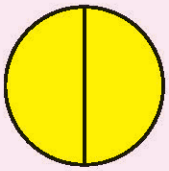


Take a paper sheet.
Cut it into three equal pieces.
Each piece will be $\frac{1}{3}$ of the total paper sheet.

Take a round bread. Cut it into four equal pieces. Each piece is $\frac{1}{4}$ of the bread. Every part is called fraction.

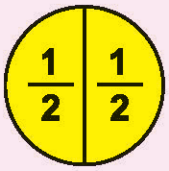
Concept of half

Take a circle and cut it into two equal parts.

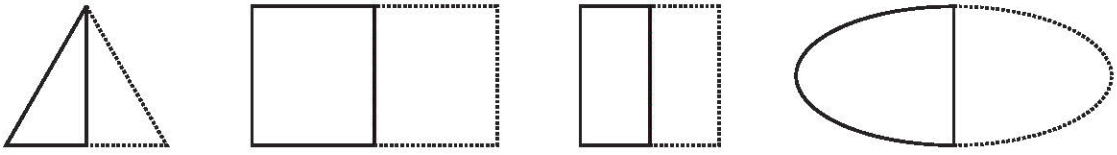


Each part is one half of the circle.

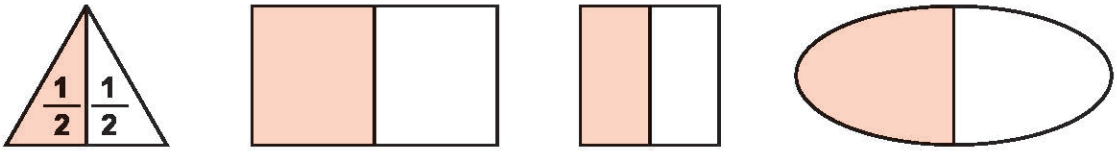
We write one half as $\frac{1}{2}$



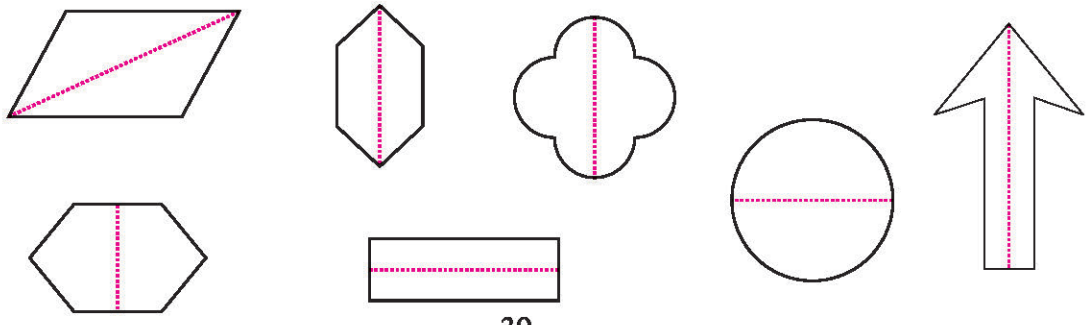
Colour one half of the following figures



Write the numerical form of half in each



Colour $\frac{1}{2}$ part of each figure



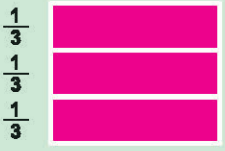
Concept of one third

Take a rectangle as shown in figure,

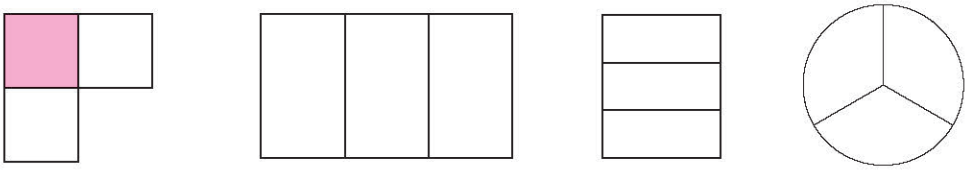
and cut into three equal parts.

Each part is one third of the rectangle.

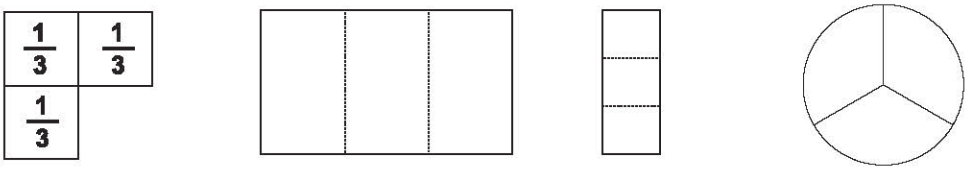
We write one third as $\frac{1}{3}$.



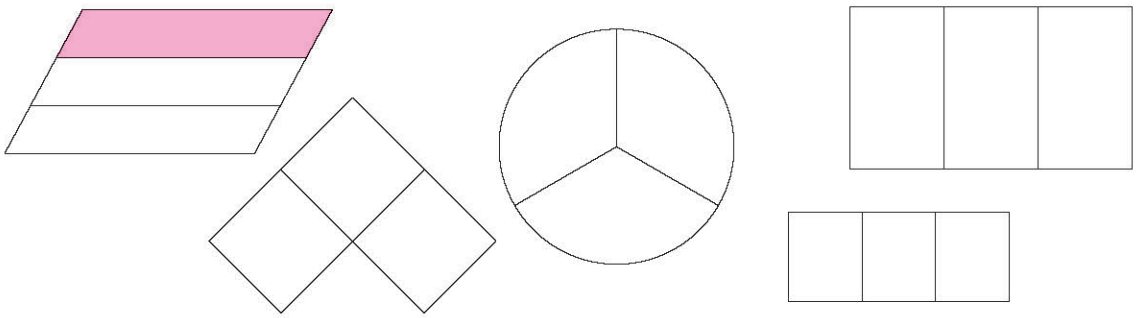
Colour one third of each of following figures



Write the numerical form of one third

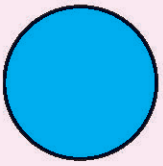


Colour $\frac{1}{3}$ part of each figure

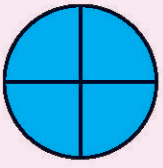


Concept of quarter

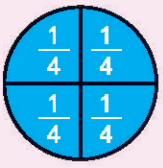
Take a circle and cut it into four equal parts.



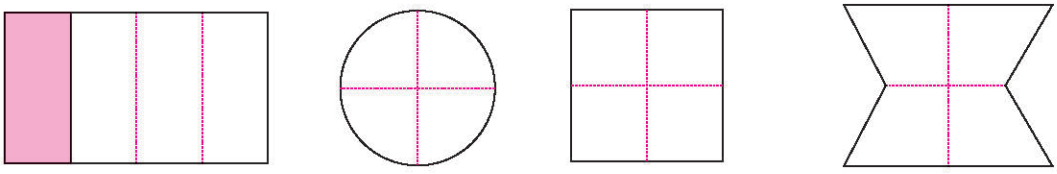
Each part is one fourth or quarter of the circle.



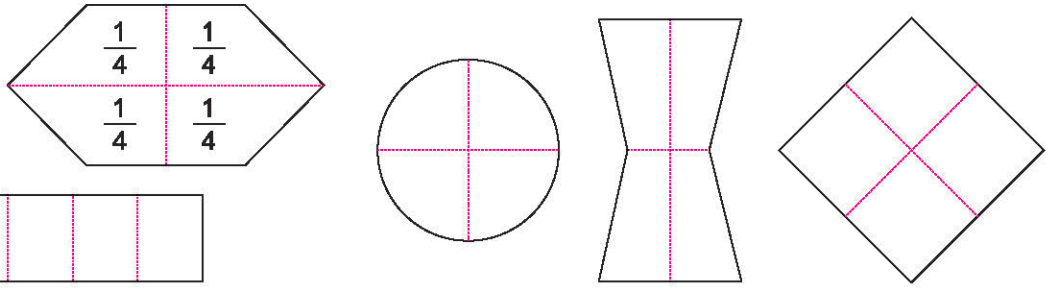
We write one fourth as $\frac{1}{4}$.



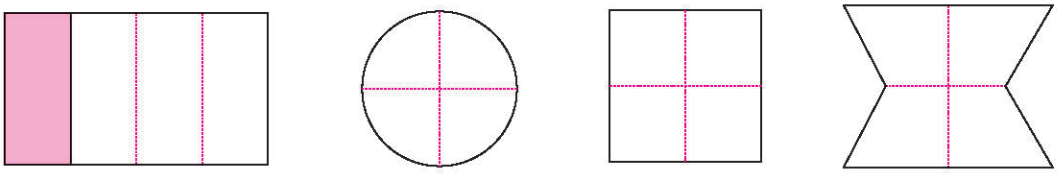
Colour one quarter of each of following figures



Write the numerical from one quarter in each part

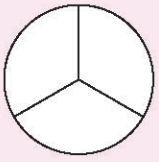


Colour in $\frac{1}{4}$ part of each figure



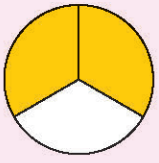
Concept of two third

Take a circle. Cut into three equal parts.

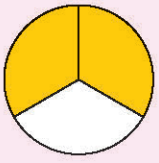


Two parts are two third of the circle.

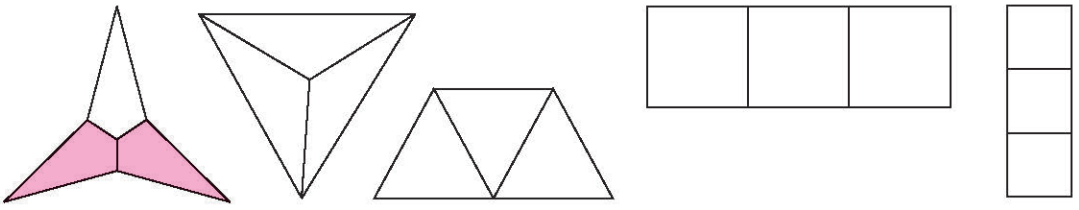
We write two third as $\frac{2}{3}$.



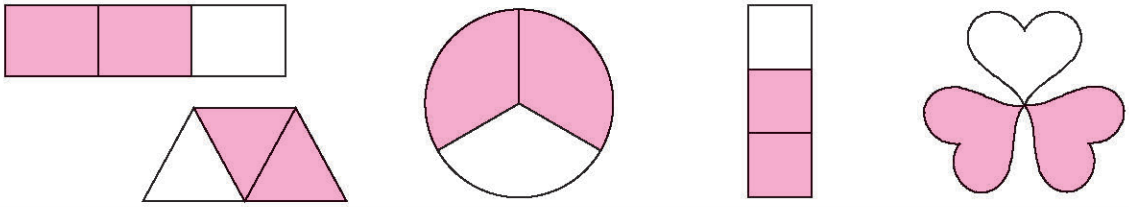
The numerical form of two third is $\frac{2}{3}$.



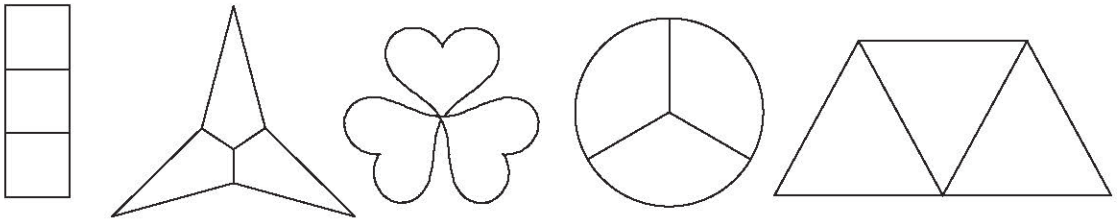
Colour two-third of each of following figures



Write the numerical form of two-third

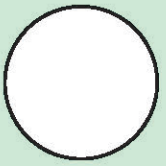


Colour $\frac{2}{3}$ part of figure

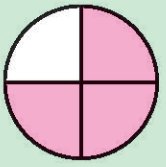


Concept of three fourth

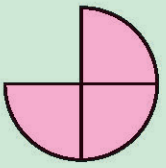
Take a circle. Cut it into four equal parts.



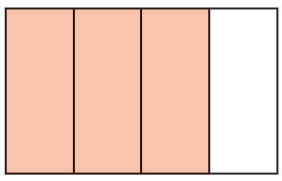
Three parts are three fourth of the circle.

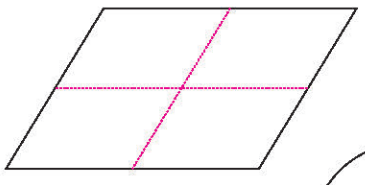


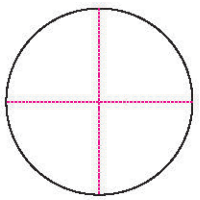
We write the three fourth as $\frac{3}{4}$.

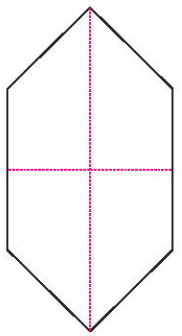


Colour three fourth of each of following figures

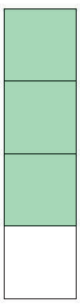




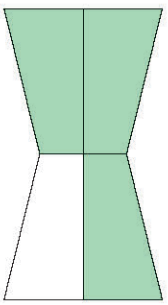


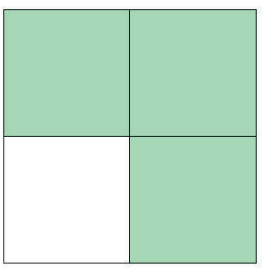


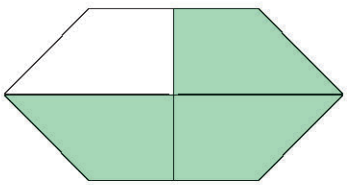
Write the numerical form of three fourth shaded in each figures



$\frac{3}{4}$



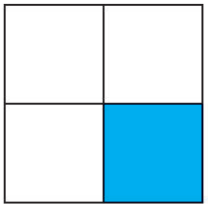


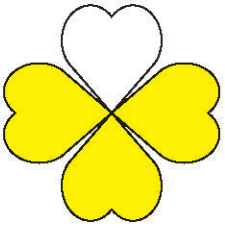


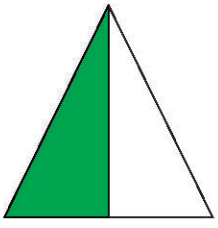
EXERCISE

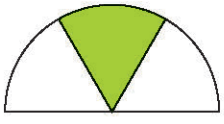
Write the coloured part of the figure is in words?

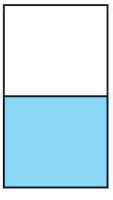
One Third

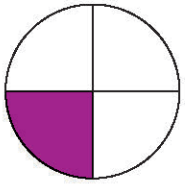




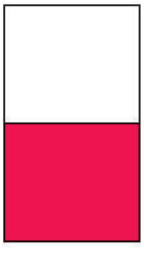




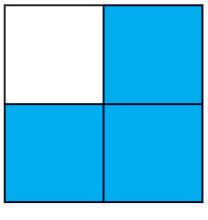


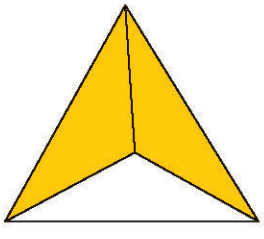


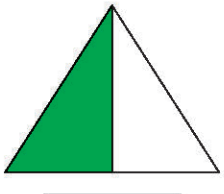
Write the coloured part of the figures in numerical form.

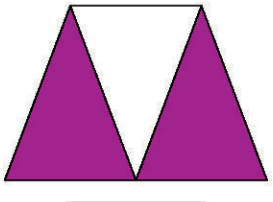


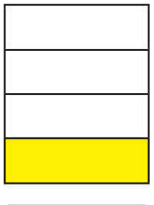
$\frac{1}{2}$

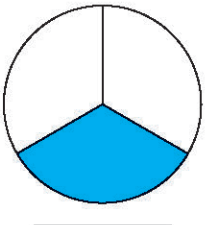




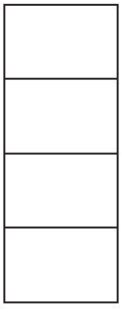




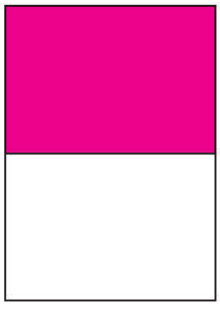




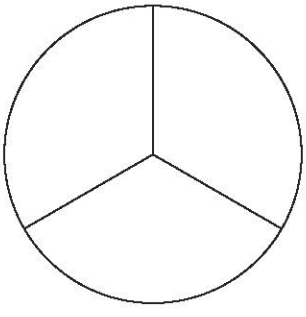
Colour the figure according to fractions.



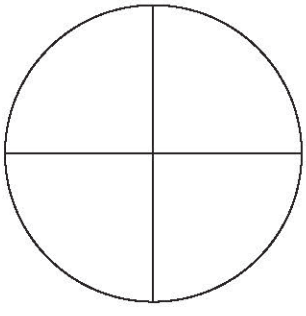
$\frac{3}{4}$



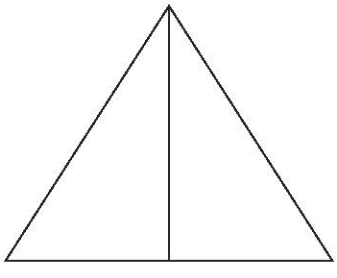
$\frac{1}{2}$



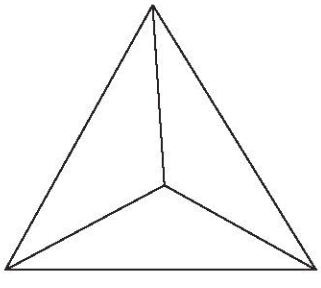
$\frac{1}{3}$



$\frac{1}{4}$



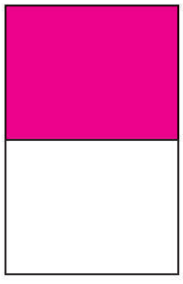
$\frac{1}{2}$



$\frac{2}{3}$

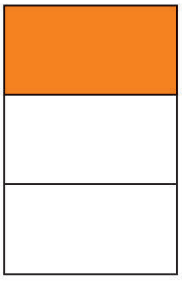
Unit fractions up to $\frac{1}{12}$

One part of the whole is called "unit fraction"



1 part out of 2 equal parts

$\frac{1}{2}$



1 part out of 3 equal parts

$\frac{1}{3}$

1 part out of 4 equal parts

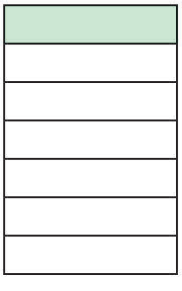
$\frac{1}{4}$

1 part out of 5 equal parts

$\frac{1}{5}$

1 part out of 6 equal parts

$\frac{1}{6}$



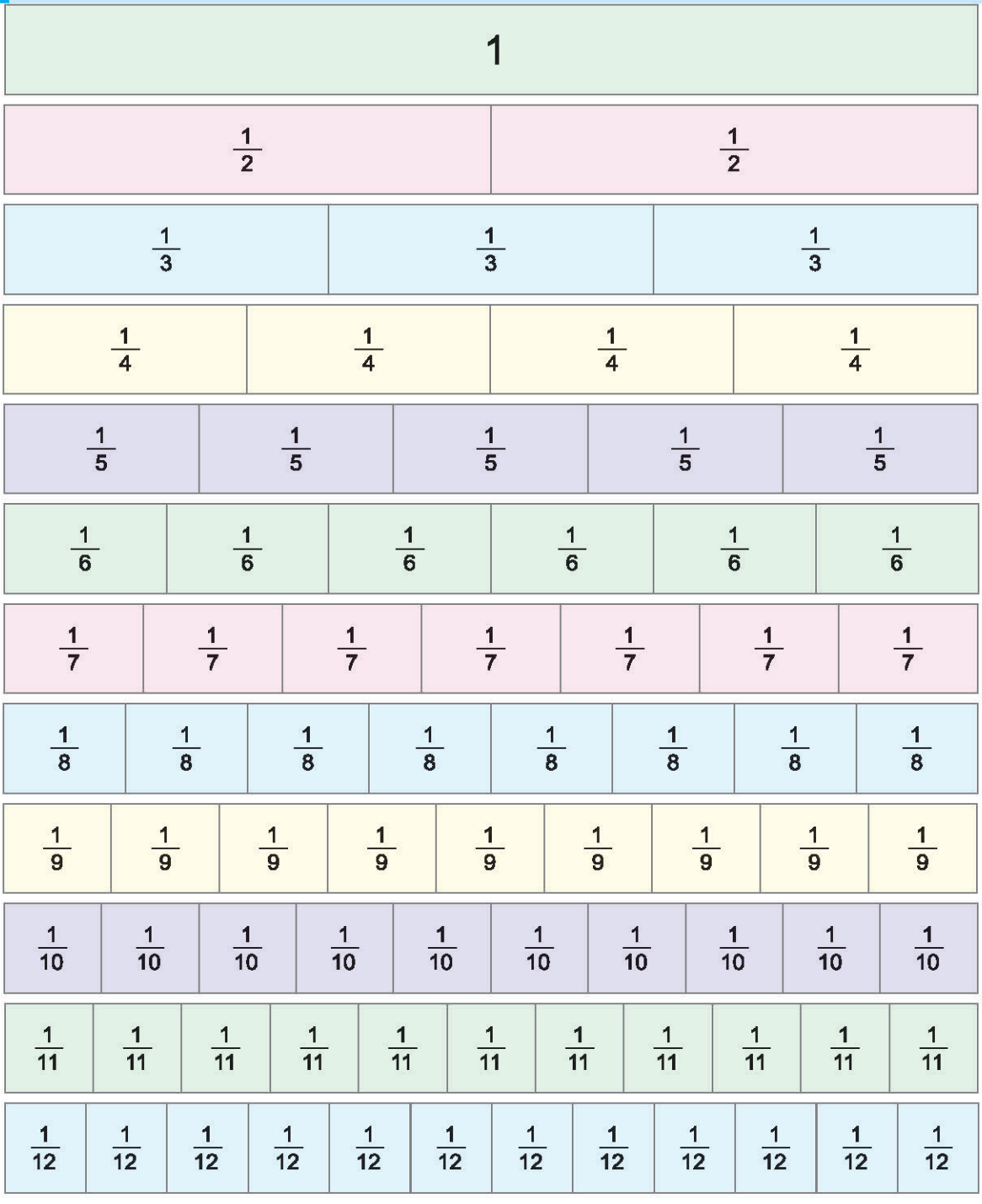
1 part out of 7 equal parts

$\frac{1}{7}$

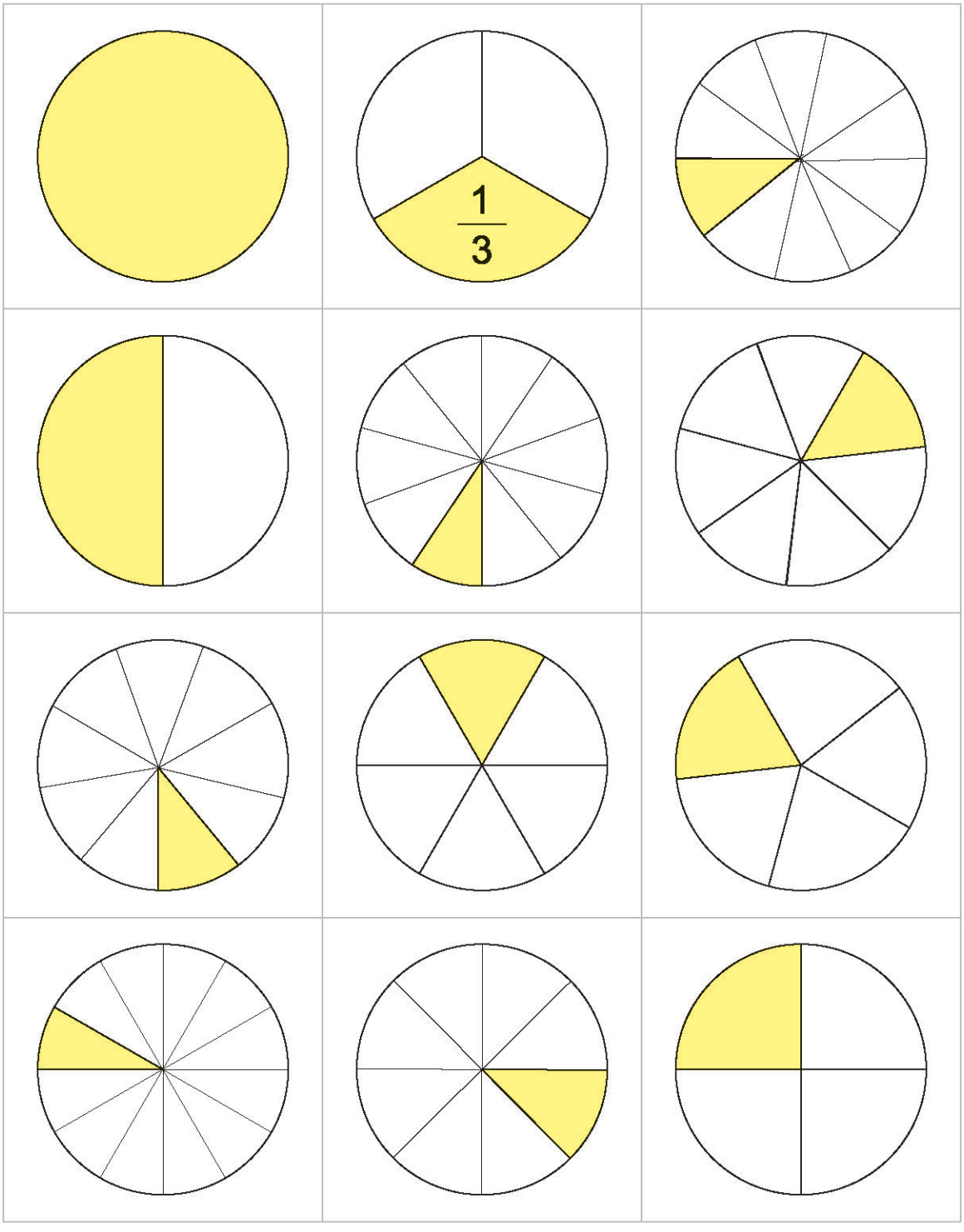
$\frac{1}{8}$ $\frac{1}{9}$ $\frac{1}{10}$ $\frac{1}{11}$ $\frac{1}{12}$

EXERCISE

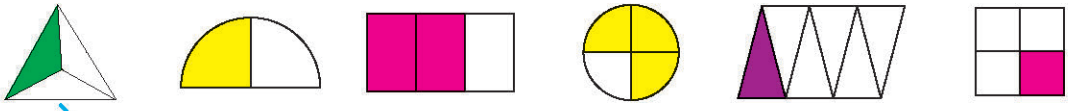
1. Read the following unit fractions



2. Write the colour part in numerical form



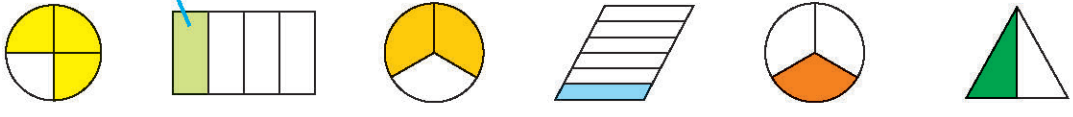
3. Match the figures with fractions



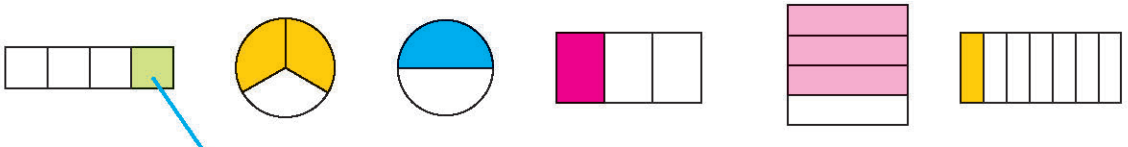
$\frac{1}{2}$	$\frac{1}{3}$	$\frac{3}{4}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{1}{6}$

4. Match the fractions with figures

$\frac{1}{4}$	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{1}{3}$	$\frac{1}{6}$	$\frac{3}{4}$



5. Match the figures with fractions



Two-third	Quarter	One-third	Half	One-seventh	Three-fourth

UNIT 2

NUMBER OPERATION

After Learning this unit, the students will be able to:

- Add ones and ones.
- Add ones and 2-digit numbers with carrying.
- Add 2-digit numbers and 2-digit numbers with carrying.
- Solve real life problems, involving addition of 2-digit numbers, with carrying.
- Add 3-digit numbers and ones without carrying.
- Add 3-digit numbers and 2-digit numbers without carrying.
- Add 3-digit numbers and 3-digit numbers without carrying.
- Solve real life problems, involving addition of 3-digit numbers, without carrying.
- Add 3-digit numbers and ones with carrying of tens and hundreds.
- Add 3-digit numbers and 2-digit numbers with carrying of tens and hundreds.
- Add 3-digit numbers and 3-digit numbers with carrying of tens and hundreds.
- Solve real life problems with carrying of tens and hundreds.
- Verify commutative property with respect to addition
- Subtract ones from 2-digit numbers with borrowing.
- Subtract 2-digit numbers from 2-digit numbers with borrowing.
- Solve real life problems of subtraction with borrowing.
- Subtract ones from 3-digit numbers without borrowing.
- Subtract 2-digit numbers from 3-digit numbers without borrowing.
- Subtract 3-digit numbers from 3-digit numbers without borrowing.
- Solve real life problems of subtraction without borrowing.
- Subtract ones from 3-digit numbers with borrowing.
- Subtract 2-digit numbers from 3-digit numbers with borrowing.
- Subtract 3-digit numbers from 3-digit numbers with borrowing.
- Solve real life problems of subtraction with borrowing.
- Solve simple problems regarding addition and subtraction with carrying/borrowing in mixed from.
- Recognize and use multiplication symbol 'x'.
- Recognize multiplication as repeated addition (e.g. $2 + 2 + 2 = 6 \longleftrightarrow$ 3 times $2 = 3 \times 2 = 6$).
- Complete number sequences in steps of 2, 3, 4, 5 and 10 (e.g. in steps of 2 the sequence is expressed as 2, 4, 6, ...).
- Develop multiplication tables of 2, 3, 4, 5 and 10 till the multiplication 10 x 10.
- Multiply numbers within multiplication table.
- Verify commutative property of multiplication.
- Solve real life problems on multiplication.
- Recognize and use division symbol.
- Recognize division as successive subtraction.
- Divide numbers within the multiplication tables with remainder zero.
- Solve real life problems involving division.
- Solve real life problems (using Pakistani currency as well) involving addition, subtraction,
- multiplication and division.

ADDITION

Addition of Ones and Ones

Example:  =

4 + 2 = 6

4 + 2 = 6

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

EXERCISE

Solve

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

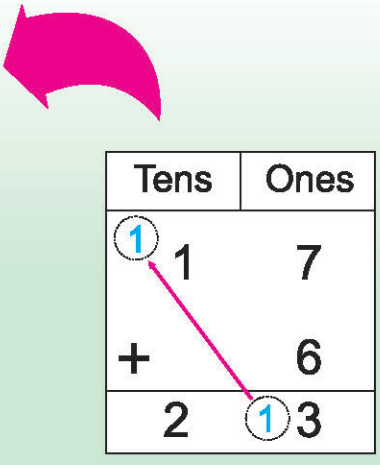
Addition of ones and two-digit numbers with carrying

Example:- Add 17 and 6

We first add ones which gives 13 ones. But 13 ones = 1 ten and 3 ones. So, we write 3 in ones column and carry 1 ten to tens column.

Now we add 1 ten + 1 ten = 2 tens

Therefore 17 + 6 = 23



EXERCISE

Solve

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

Addition of two-digit numbers without carrying

Example:- 12 + 26

12 = 1 ten and 2 ones

26 = 2 tens and 6 ones

Simply add ones 2 + 6 = 8, write 8 in the ones column.

Now add tens 1 + 2 = 3, write 3 in the tens column.

Tens	Ones
1	2
+ 2	6
3	8

EXERCISE

Solve

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

Adding two-digit numbers and two-digit numbers with carrying

Example:- Add 26 and 35

Tens	Ones
1	
2	6
3	5
6	1 1

Add 6 ones and 5 ones, we get 11 ones

Where, 11 ones = 1 ten and 1 one

Keep 1, in 1 ones column and carry 1 ten to the tens column.

Now we add tens

2 tens + 3 tens + 1 carry ten = 6 tens

So, our answer is 61

EXERCISE

Add the following.

1. 53 + 28 =

2. 27 + 56 =

3. 38 + 54 =

4. 45 + 37 =

5. 36 + 38 =

6. 23 + 69 =

7. 76 + 27 =

8. 26 + 37 =

9. 45 + 36 =

10. 67 + 35 =

11. 22 + 39 =

12. 38 + 56 =

Real life problems

Example

There are 49 students in grade-I and 36 students in grade-II.
What is the total number of students in both grades ?

Solution:

Number of students in grade-I	=	49
Number of students in grade-II	=	36
Total number of students in both grades		85

EXERCISE

1. In a garden there are 48 trees of mangoes and 36 trees of oranges.
What is the total number of trees in the garden ?

Trees of mangoes	=
Trees of oranges	=
Total trees	=

2. Amjad obtained 63 marks in Mathematics and 29 marks in English.
Tell the total number of marks obtained by him in both subjects ?

Marks in mathematics	=
Marks in english	=
Total marks	=

3 In a test cricket match, Imran scored 36 runs on Monday and 48 runs on Tuesday. How many runs did Imran scored ?

Runs scored on monday	=
Runs scored on tuesday	=
Total runs scored	=

4 Imad has 38 Rupees, his father gives him 25 Rupees. How many Rupees he has now ?

Rs. Imran has	=
Rs. Fathers gives	=
Rs. in total	=

Addition of 3 digit number and one digit numbers without carrying

Example:- **Add 234 and 5**

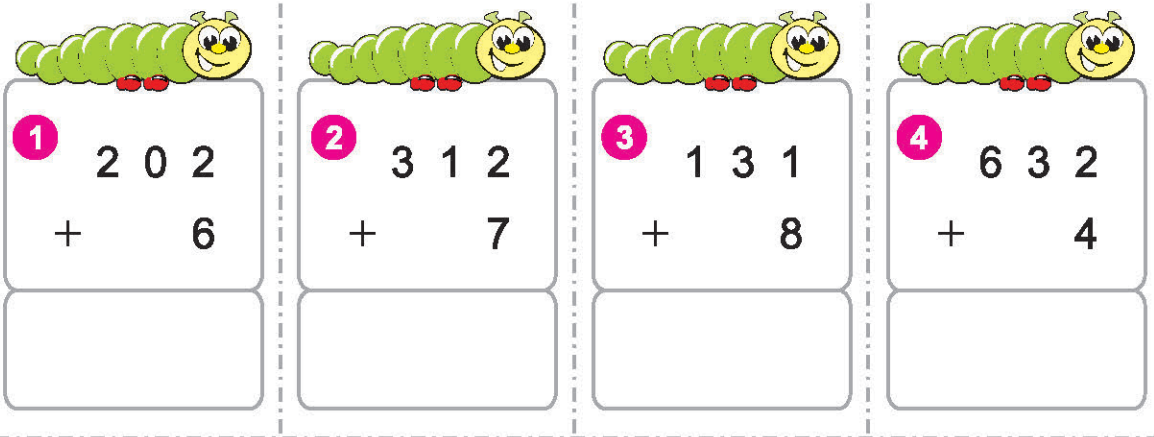
Solution:

$$\begin{array}{r} 2\ 3\ 4 \\ +\quad\ 5 \\ \hline 2\ 3\ 9 \end{array}$$

Add ones to ones,
add tens to tens and
then hundreds to hundreds

EXERCISE

Solve



1. 202 + 6 =
2. 312 + 7 =
3. 131 + 8 =
4. 632 + 4 =
5. 712 + 3 =
6. 320 + 8 =
7. 253 + 5 =
8. 803 + 4 =
9. 725 + 4 =
10. 821 + 8 =
11. 253 + 3 =
12. 541 + 6 =

Addition of 3 digit number and 2 digit numbers without carrying

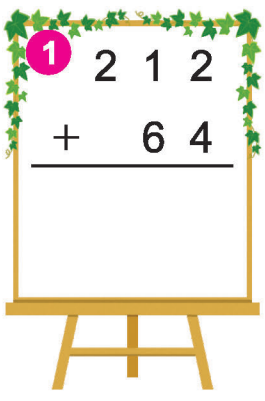
Example:- Add 163 and 35

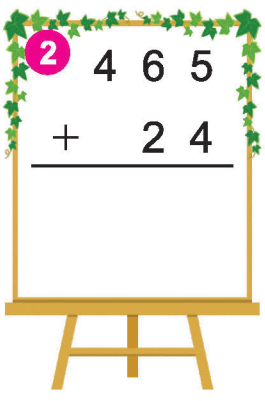
Hundreds	Tens	Ones
1	6	3
+	3	5
1	9	8

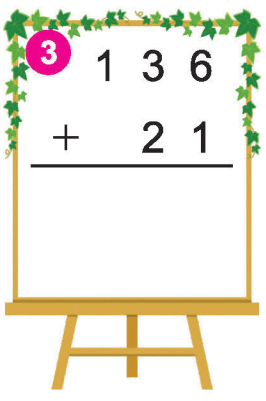
Add 3 ones and 5 ones we get 8 ones, write 8 in ones column. Now add 6 tens and 3 tens and get 9 tens. Write 9 in tens column. 1 hundred writes same as.
Therefore, the sum is 198.

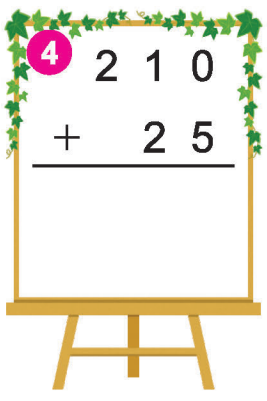
EXERCISE

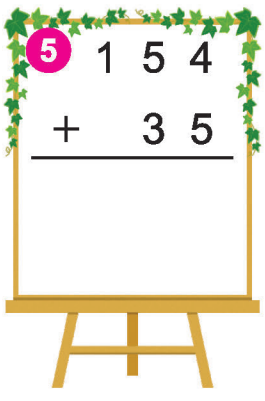
Solve

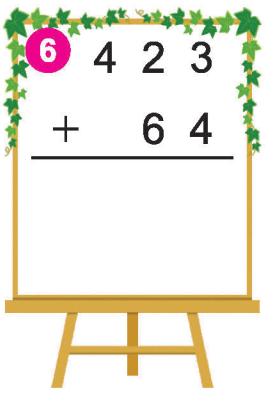


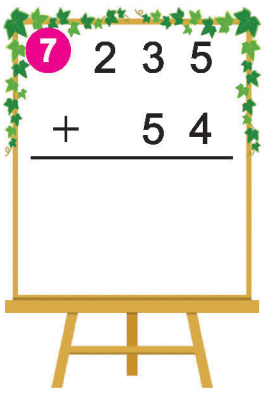


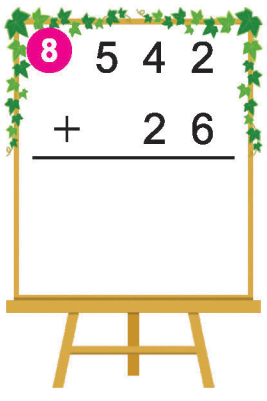


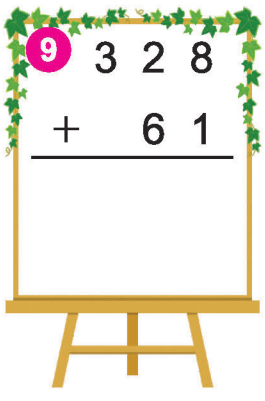


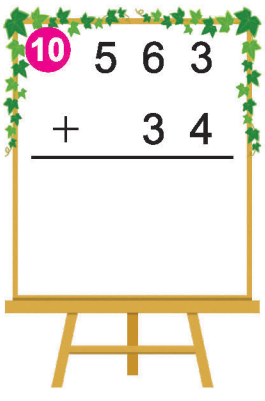


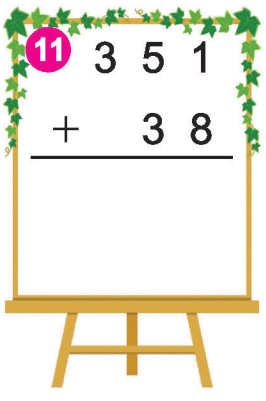


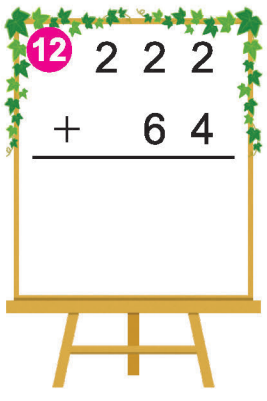












Addition of 3-digit numbers and 3-digit numbers without carrying

Example:- Add 425 and 343

Hundreds	Tens	Ones
4	2	5
+ 3	4	3
7	6	8

add 5 ones and 3 ones, we get 8 ones. Write 8 in ones column. Now add 2 tens and 4 tens and we get 6 tens. Write 6 in tens column. 4 hundreds and 3 hundreds are added and get 7 hundreds.

Therefore, the sum is 768.

EXERCISE

Solve

1. $123 + 312$
2. $422 + 524$
3. $305 + 424$
4. $413 + 273$
5. $354 + 534$
6. $225 + 332$
7. $411 + 355$
8. $384 + 415$
9. $532 + 344$
10. $667 + 221$
11. $345 + 412$
12. $413 + 461$

Real life problems

Example

There are 175 mango and 323 orange trees in an orchard.
How many trees are there in the orchard.

Solution:

Mango trees	=	1 7 5
Orange trees	=	3 2 3
Total trees	=	4 9 8

EXERCISE

1. There are 234 fish in the first pond and 754 fish in the second pond.
How many fish are there in both ponds ?

	=	
	=	
Total fish	=	

2. A book seller sold 325 books on thursday.
543 books sold on friday.
How many books were sold in all ?

	=	
	=	
Total books	=	

3. Saima has 224 bangles,
Karina has 310 bangles.
How many bangles they have altogether ?

	=	
	=	
Total bangles	=	

4. There are 751 girls and 285 boys in a primary school of a village.
How many students are in the school ?

	=	
	=	
Total students	=	

Addition of 3 digit numbers and 1 digit numbers up to tens and hundreds (with carrying)

Example:- Add 657 and 8

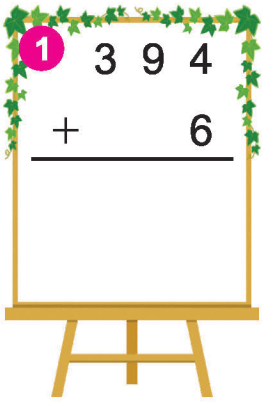
Hundreds	Tens	Ones
6	(1) 5	7
+		8
6	6	(1) 5

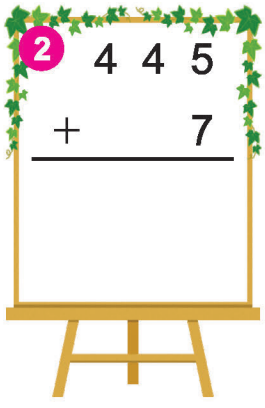
Add 7 ones and 8 ones and get 15. Write 5 in ones column. Now add 1 ten and 5 tens and get 6 tens, write 6 in tens column. Write 6 hundreds in hundred column.

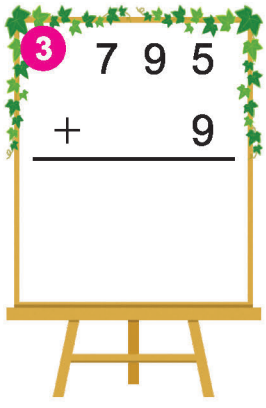
Therefore, the sum is 665.

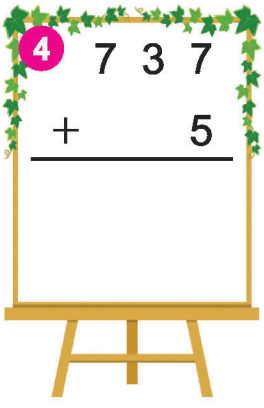
EXERCISE

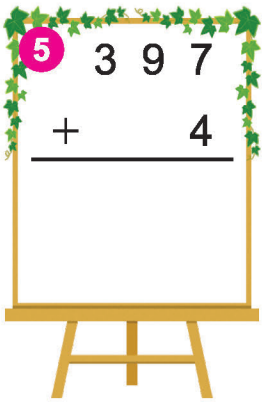
Solve

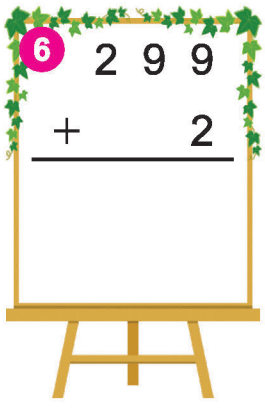


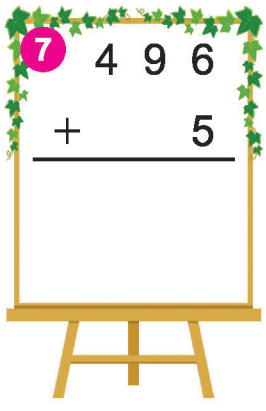


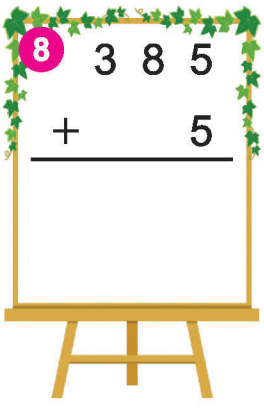


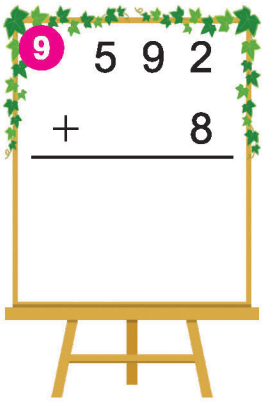


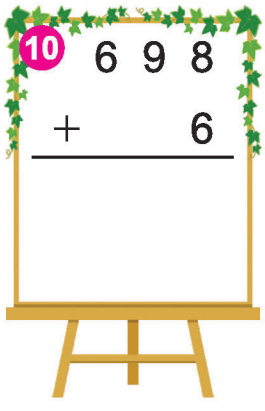


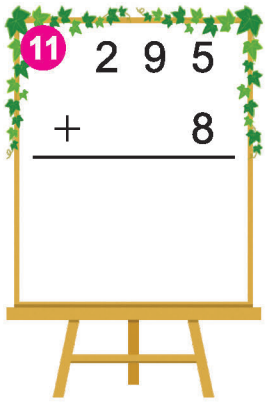


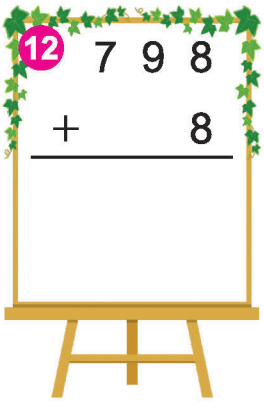












Addition of 3 digit and 2 digit numbers with carrying up to hundred and tens

Add 8 ones and 6 ones and we get 14. Write 4 in ones column and 1 ten to tens column. Now add 4 tens. Add 1 carry, we get 5 tens and get 12 tens. Now write 2 in tens column. Now 1 carry add in 2 hundreds and get total 3 hundreds.
Therefore, the sum is 324.

Example:- Add 248 and 76

Hundreds	Tens	Ones
①2	①4	8
+	7	6
3	2	4

Example:- Add 682 and 29

Hundreds	Tens	Ones
①6	①8	2
+	2	9
7	1	1

EXERCISE

Solve

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

Add 3-digit numbers into 3-digit numbers with carrying of tens and hundreds

Add 7 ones in 5 ones and get 12. Write 2 in ones column and 1 write in tens column as carry. Now 1 carry add in 6 tens and 8 tens and total we get 15 tens. Write 5 in tens column and 1 ten add in 2 hundreds. Then add 1 hundred in it and total sum will be 4 hundreds.
Therefore, the sum is 452.

Example:- Add 267 and 185

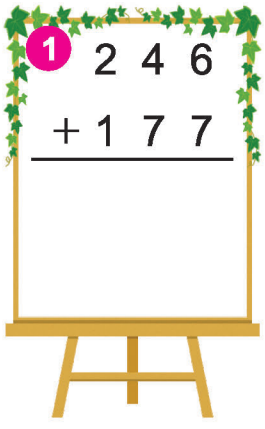
Hundreds	Tens	Ones
①2	①6	7
+ 1	8	5
4	5	2

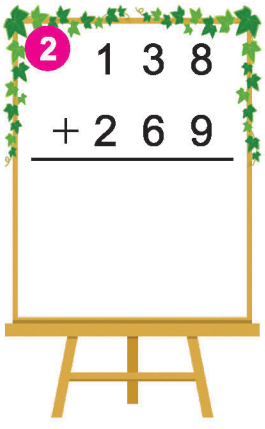
Example:- Add 724 and 197

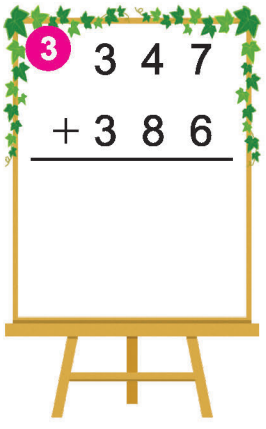
Hundreds	Tens	Ones
①7	①2	4
+ 1	9	7
9	2	1

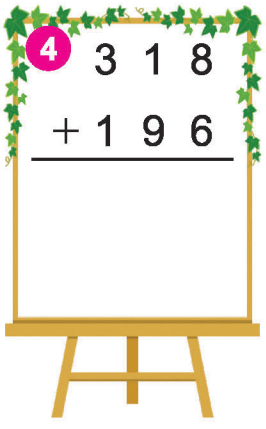
EXERCISE

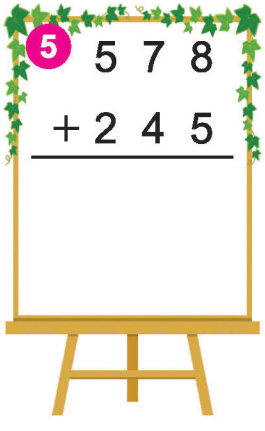
Solve

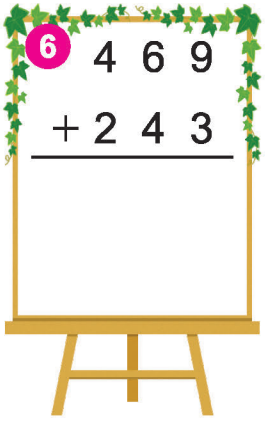


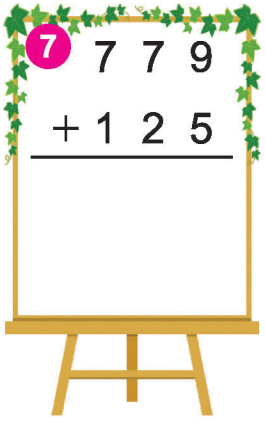


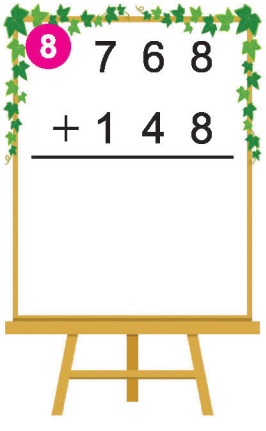


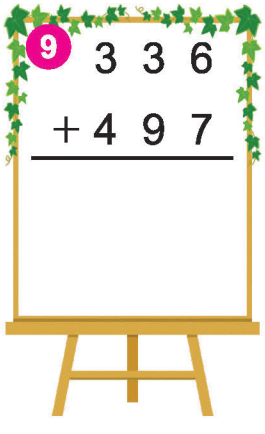


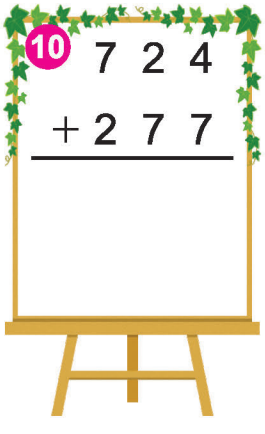


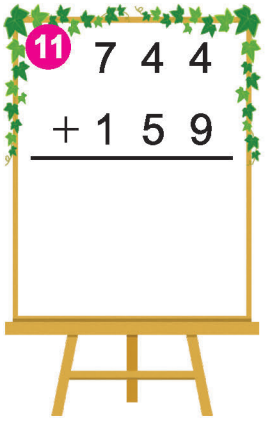


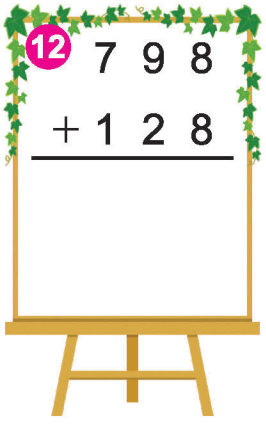












Real life problems

Example:-

A shopkeeper sold 679 books of Mathematics and 245 books of English in March. How many books did he sell in March?

Solution:

		(1)	(1)	
Mathematics books sold	=	6	7	9
English books sold	=	2	4	5
Total books sold		9	2	4

EXERCISE

1 There are 295 red balloons and 518 blue balloons in a shop.
How many balloons are there?

		(1)	(1)	
Red balloons	=	2	9	5
Blue balloons	=	5	1	8
Total balloons	=	8	1	3

2 Nimra collected 358 stamps and Fazila collected 278 stamps.
How many stamps did they collect?

Nimra collected stamps	=	
Fazila collected stamps	=	
Total stamps	=	

3 In a library there 758 books in an almirah and 165 books in shelf.
How many books are there in library?

Books in almirah	=	
Books in shelf	=	
Total books	=	

4 Pakistan cricket team scored 494 runs in 1st inning and 286 in 2nd innings.
Find the total runs of both innings.

Runs in 1st inning	=	
Runs in 2nd innings	=	
Total runs scored	=	

Commutative property with respect to addition

If we interchange the places of numbers in addition the answer will be the same. This property of addition is called commutative property.

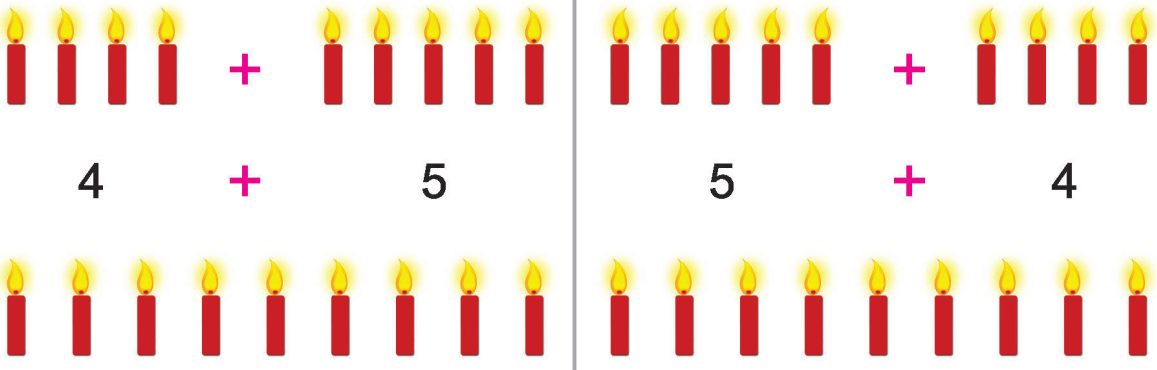
Example: 1

3 + 4 = 7

4 + 3 = 7

4 + 3 = 7 = 3 + 4

Example: 2



4 + 5 = 9

5 + 4 = 9

EXERCISE

Fill in the blanks by using commutative property of addition

1	3	+	5	=	8	=		+	3	
2	6	+		=	8	=		+	6	
3	2	+	3	=	5	=		+		
4	5	+		=	9	=	4	+		
5		+	6	=	7	=		+		
6	3	+		=		=	4	+	3	
7	15	+	25	=	40	=		+		
8	10	+	20	=		=		+		
9	42	+	32	=	74	=		+		
10	35	+		=		=	15	+	35	

Subtraction of ones, from 3 digit numbers without borrowing

Example:- Subtract 4 from 3 2 6

Hundreds	Tens	Ones
3	2	6
—		4
3	2	2

Subtract 4 ones from 6 ones and 2 ones is remain. Write 2 in ones column. There are no subtraction process in 2 tens and 3 hundreds. So, we write same as.

Therefore, the answer is 322.

EXERCISE

Solve

1. 455 − 3 =

2. 829 − 6 =

3. 525 − 2 =

4. 448 − 4 =

5. 579 − 8 =

6. 666 − 5 =

7. 577 − 6 =

8. 847 − 3 =

9. 139 − 7 =

10. 638 − 2 =

11. 476 − 4 =

12. 608 − 4 =

Subtraction of ones, 2 digit numbers and 3 digit numbers from 3 digit numbers without borrowing

Example:- Subtract 34 from 657

Hundreds	Tens	Ones
6	5	7
—	3	4
6	2	3

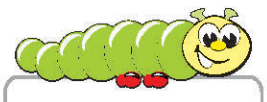
Subtract 4 ones from 7 ones and place 3 in ones column. Then 3 tens subtract from 5 tens and 2 in remains. Write 2 in tens column. There is no subtraction process in 6 hundreds.

So, the answer is 623.

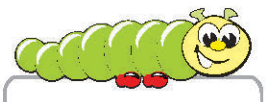
EXERCISE

Solve

11. 184 − 42



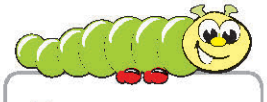
2. 872 − 21



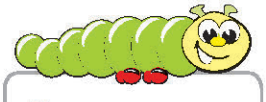
3. 479 − 65

4. 789 − 34

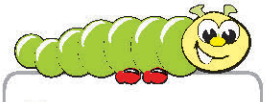
5. 525 − 14



6. 737 − 26

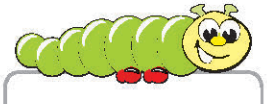


7. 888 − 73



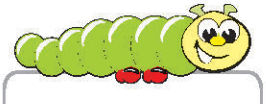
8. 786 − 45

9. 138 − 27



10. 558 − 46

11. 365 − 24



12. 253 − 12

Subtraction of ones, 2 digit numbers and 3 digit numbers from 3 digit numbers without borrowing

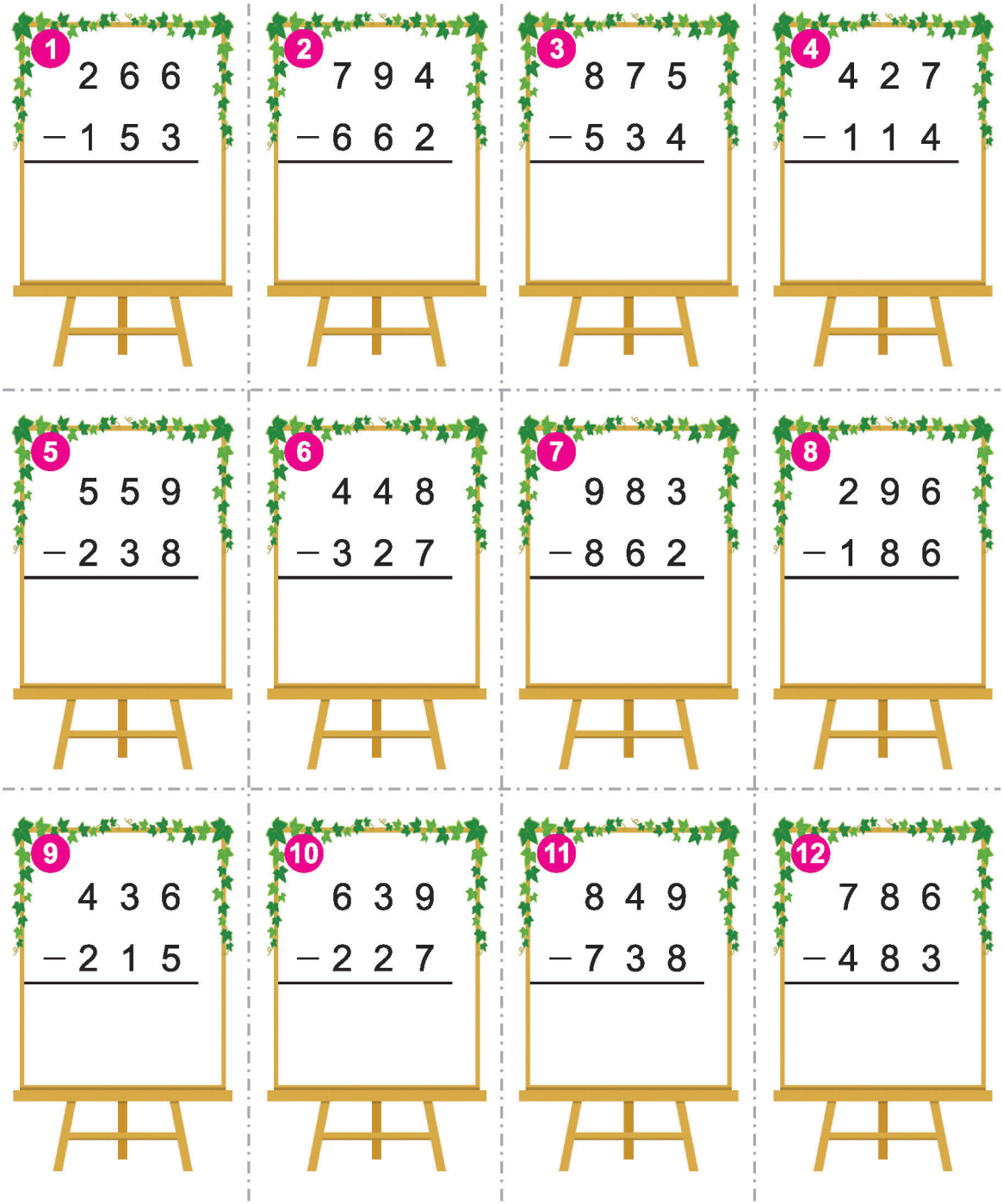
Example:- Subtract 345 from 579

Hundreds	Tens	Ones
5	7	9
− 3	4	5
2	3	4

Subtract 5 ones from 9 ones and remains 4 ones. Write 4 ones in column ones. Minus 4 tens from 7 tens and remain 3 tens, write 3 tens in tens column. 3 hundreds subtract from 5 hundreds and get 2 hundreds. Write 2 in hundreds column.
So, the answer is 234.

EXERCISE

Solve



Subtraction of ones from 2 digit numbers (with borrowing)

To subtract 3 ones from 4 ones, borrow 1 one from 2 tens, so the total sum will 13. Now subtract 4 ones from 13 and get 9 ones. Write 9 in ones column. By borrowing 1 tens from 2 tens remains only 1 ten, so the answer is 19.

Example:-

Subtract 4 from 23

Tens	Ones
①	⑩
2	3
−	4
1	9

Example:- Subtract 8 from 47

Tens	Ones
③	⑩
4	7
−	8
3	9

EXERCISE

Solve

1. $28 - 9$

2. $65 - 8$

3. $32 - 5$

4. $53 - 6$

5. $73 - 8$

6. $51 - 3$

7. $97 - 9$

8. $34 - 6$

9. $91 - 3$

10. $40 - 5$

11. $66 - 7$

12. $68 - 9$

Subtraction of 2 digit numbers from 2 digit numbers (with borrowing)

To subtract 8 ones from 2 ones, borrow 1 one from 3 tens, so the sum will be 12. Now subtract 8 ones from 12 and get 4 ones. Write 4 in ones column. By borrowing 1 ten from 3 tens, remain 2 tens. Minus 2 tens from 1 one we get 1 ten.

So, the answer is 14.

Example:-

Subtract 18 from 32

Tens	Ones
②	⑩
3	2
− 1	8
1	4

Example:- Subtract 17 from 43

Tens	Ones
③	⑩
4	3
− 1	7
2	6

EXERCISE

Solve

1. 8 6 − 4 9
2. 6 3 − 3 9
3. 9 2 − 7 5
4. 5 6 − 3 7
5. 6 7 − 4 8
6. 9 3 − 4 9
7. 8 1 − 4 8
8. 6 5 − 4 9
9. 8 0 − 5 9
10. 6 8 − 3 9
11. 4 2 − 3 7
12. 8 2 − 4 6

Real life problems

Example

Anwer has 25 pencils.

He gave 9 pencils to Amin.

How many pencils are left with Anwer ?

	(T) (O)
Total pencils	2 5
Pencils given to Amin	9
Pencils left	1 6

EXERCISE

1. There are 80 birds in a cage.
19 birds flew away.
How many birds are left in the cage ?

2. A van carrying 63 passengers.
18 passengers got down from the van to buy goods.
How many passengers are left in the van ?

3. A shopkeeper had 91 chickens in his shop.
Out of them 38 died due to some disease.
How many chickens are left in his shop ?

4. Faryal has 86 rupees.
She bought a small doll for 68 rupees.
How many rupees did she save ?

Subtraction of ones, 2 digit numbers and 3 digit numbers from 3 digit numbers without borrowing

To subtract 7 ones from 2 ones, we borrow 1 one from 3 tens, so the sum will be 12. Now subtract 7 ones from 12 and we get 5 ones. Write 5 ones in ones column. By borrowing 1 ten from 3 tens, remain 2 tens. Write 4 hundred as same.

The answer is 425.

Example:-

Subtract 7 from 432

Hundreds	Tens	Ones
4	3	2
—		7
4	2	5

Example:- Subtract 4 from 643

Hundreds	Tens	Ones
6	4	3
—		4
6	3	9

EXERCISE

Solve

1. 345 − 7 =

2. 846 − 8 =

3. 284 − 9 =

4. 524 − 5 =

5. 784 − 6 =

6. 990 − 7 =

7. 845 − 6 =

8. 432 − 3 =

9. 424 − 5 =

10. 451 − 2 =

11. 892 − 8 =

12. 176 − 7 =

Subtraction of ones, 2 digit numbers and 3 digit numbers from 3 digit numbers without borrowing

To subtract 8 ones from 6 ones, borrow 1 one from 3 tens, so the sum will 16. Subtract 8 ones from 16 and we get 8 ones. Write 8 in ones column. By borrowing 1 ten from 3 tens remain 2 tens. To minus 5 tens from 2 tens, we borrow 1 hundred from 4 hundreds and get 12 tens. Now subtract 5 tens from 12 tens and get 7 tens. To borrow one hundred from 4 hundred it remain 3 hundred.

So, the answer is 378.

Example:-

Subtract 58 from 436

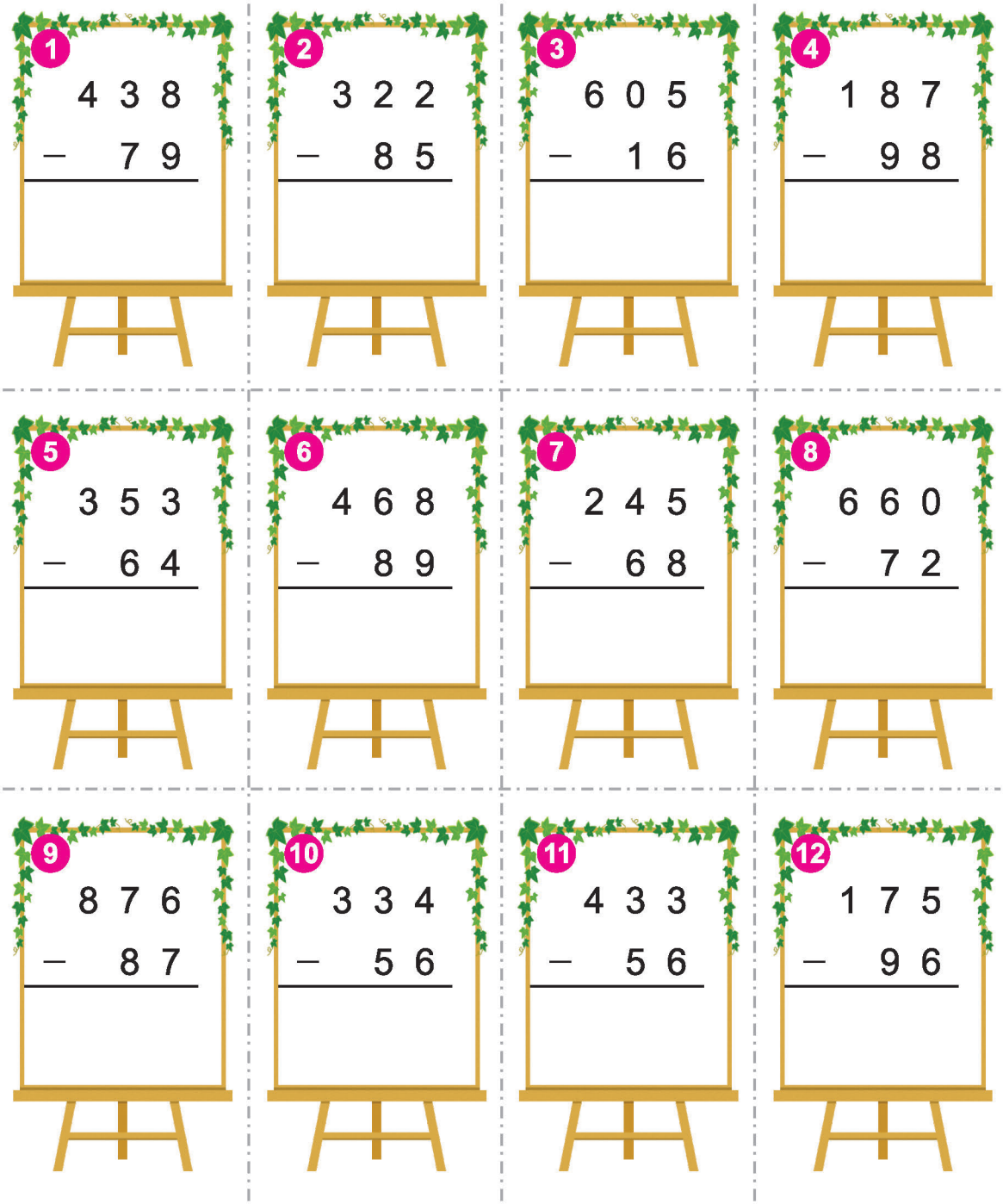
Hundreds	Tens	Ones
③ 4	⑫ 3	⑩ 6
—	5	8
3	7	8

Example:- Subtract 47 from 543

Hundreds	Tens	Ones
5	4	3
—	4	7
4	9	6

EXERCISE

Solve



Subtraction of ones, 2 digit numbers and 3 digit numbers from 3 digit numbers without borrowing

To subtract 9 ones from 6 ones borrow 1 one from 5 tens and get 16. Subtract 9 ones from 16 and we get 7 ones. Write 7 ones in ones column. By borrowing 1 ten from 5 tens, remain 4 tens. To subtract 6 tens from 4 tens we borrow 1 hundred from 4 hundreds and get 14 tens. Subtract 6 tens from 14 tens and get 8 tens. Write 8 in tens column. Subtract 2 hundreds from the remain 3 hundreds and get 1 hundred. 1 hundred write in hundreds column. The answer is 187.

Example:-

Subtract 269 from 456

Hundreds	Tens	Ones
③ 4	⑭ 5	⑩ 6
− 2	6	9
1	8	7

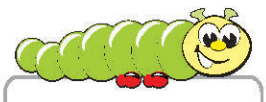
Example:- Subtract 387 from 796

Hundreds	Tens	Ones
7	9	6
− 3	8	7
3	0	9

EXERCISE

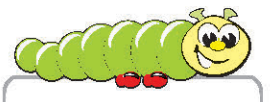
Solve

1. 257 − 128



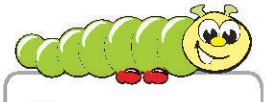
2. 884 − 668

3. 254 − 149

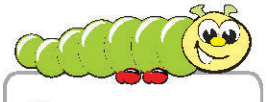


4. 393 − 276

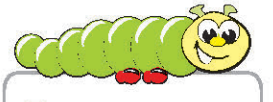
5. 886 − 547



6. 740 − 428



7. 406 − 218

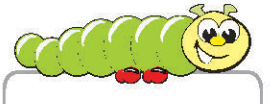


8. 654 − 426

9. 432 − 383

10. 406 − 317

11. 237 − 169



12. 745 − 598

Real life problems

Example

A school library has 800 books.
7 books of them are mathematics text books for grade-II.
What is the number of other books ?

	(7) (9) (10)
Total books	8 0 0
Mathematics text books	7
Other books	7 9 3

EXERCISE

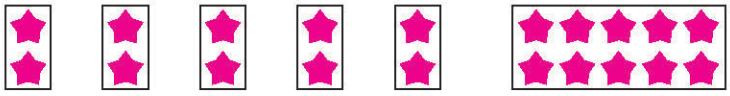
1. Salma has 354 beads in her garland. 9 beads are red in colour and rest of them are blue in colour. How many blue beads are in the Salma's garland ?

2. A hawker bought 325 water melons. He sold 49 out of them. How many water melons had left with him ?

3. There are 450 students in a school hall. 68 students were called back to the class by the teacher. How many student were left in the hall ?

4. A chicken seller had 765 chickens. He sold 589 chickens. How many chickens were left ?

Multiplication



2 + 2 + 2 + 2 + 2 = 10

5 times 2 = 10

Repeated addition of a number is called Multiplication

5 x 2 = 10 The symbol of multiplication is " X ".

3 + 3 + 3 + 3 = 12

4 times 3 = 12

4 x 3 = 12

5 + 5 + 5 + 5 + 5 = 25

5 times 5 = 25

5 x 5 = 25

EXERCISE

Filling the blanks

i 

3 + 3 + 3

3 x 3 = 9

ii 

2 + 2 + 2 + 2

4 x 2 = ____

iii 

4 + 4 + 4

3 x 4 = ____

iv 

5 + 5 + 5

3 x 5 = ____

v 

5 + 5 + 5 + 5

4 x 5 = ____

vi 

2 + 2 + 2 + 2 + 2

5 x 2 = ____

Fill in the blanks

2 + 2 + 2 = 6	3 x 2 = 6
4 + 4 + 4 =	3 x 4 =
3 + 3 + 3 + 3 + 3 =	5 x 3 =
10 + 10 =	2 x 10 =
5 + 5 + 5 + 5 + 5 + 5 =	6 x 5 =
10 + 10 + 10 =	3 x 10 =
2+2+2+2+2+2+2=	7 x 2 =

Fill in the blanks

2 x 2 =	2 + 2 = 4
4 x 2 =	+ + + =
5 x 3 =	+ + + + =
3 x 10 =	+ + =
5 x 4 =	+ + + + =
4 x 5 =	+ + + =
4 x 7 =	+ + + =
10 x 2 =	+ + + + + + + + + =

Multiplication Table of 2

	1 x 2 = 2
	2 x 2 = 4
	3 x 2 = 6
	4 x 2 = 8
	5 x 2 = 10
	6 x 2 = 12
	7 x 2 = 14
	8 x 2 = 16
	9 x 2 = 18
	10 x 2 = 20

Fill in the blanks

Multiplication Table of 3

	1 x 3 = 3
	2 x 3 = 6
	3 x 3 = 9
	4 x 3 = 12
	5 x 3 = 15
	6 x 3 = 18
	7 x 3 = 21
	8 x 3 = 24
	9 x 3 = 27
	10 x 3 = 30

Fill in the blanks

Multiplication Table of 4

	1 x 4 = 4
	2 x 4 = 8
	3 x 4 = 12
	4 x 4 = 16
	5 x 4 = 20
	6 x 4 = 24
	7 x 4 = 28
	8 x 4 = 32
	9 x 4 = 36
	10 x 4 = 40

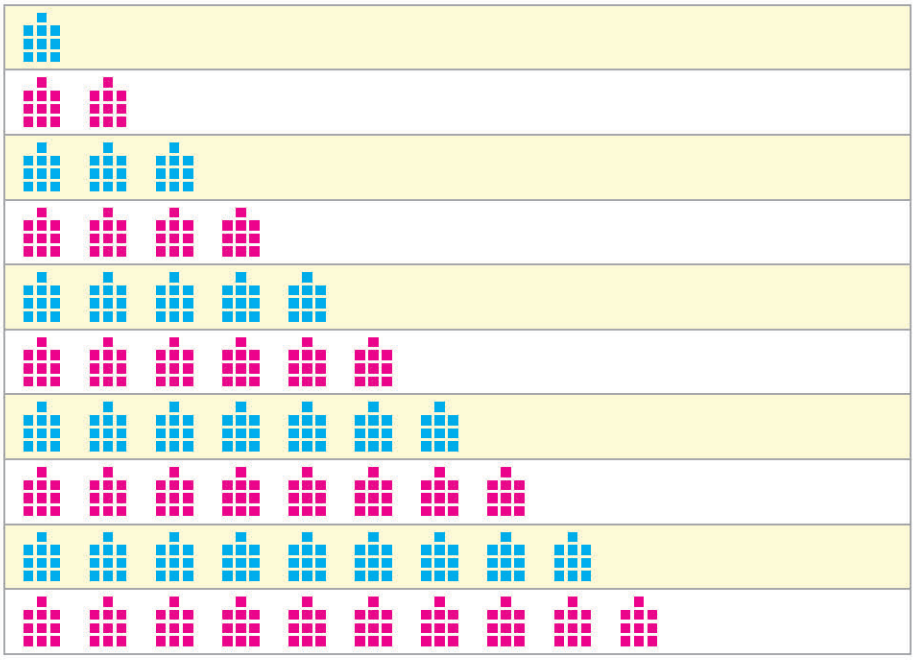
Fill in the blanks

Multiplication Table of 5

✿	1 x 5 = 5
✿ ✿	2 x 5 = 10
✿ ✿ ✿	3 x 5 = 15
✿ ✿ ✿ ✿	4 x 5 = 20
✿ ✿ ✿ ✿ ✿	5 x 5 = 25
✿ ✿ ✿ ✿ ✿ ✿	6 x 5 = 30
✿ ✿ ✿ ✿ ✿ ✿ ✿	7 x 5 = 35
✿ ✿ ✿ ✿ ✿ ✿ ✿ ✿	8 x 5 = 40
✿ ✿ ✿ ✿ ✿ ✿ ✿ ✿ ✿	9 x 5 = 45
✿ ✿ ✿ ✿ ✿ ✿ ✿ ✿ ✿ ✿	10 x 5 = 50

Fill in the blanks

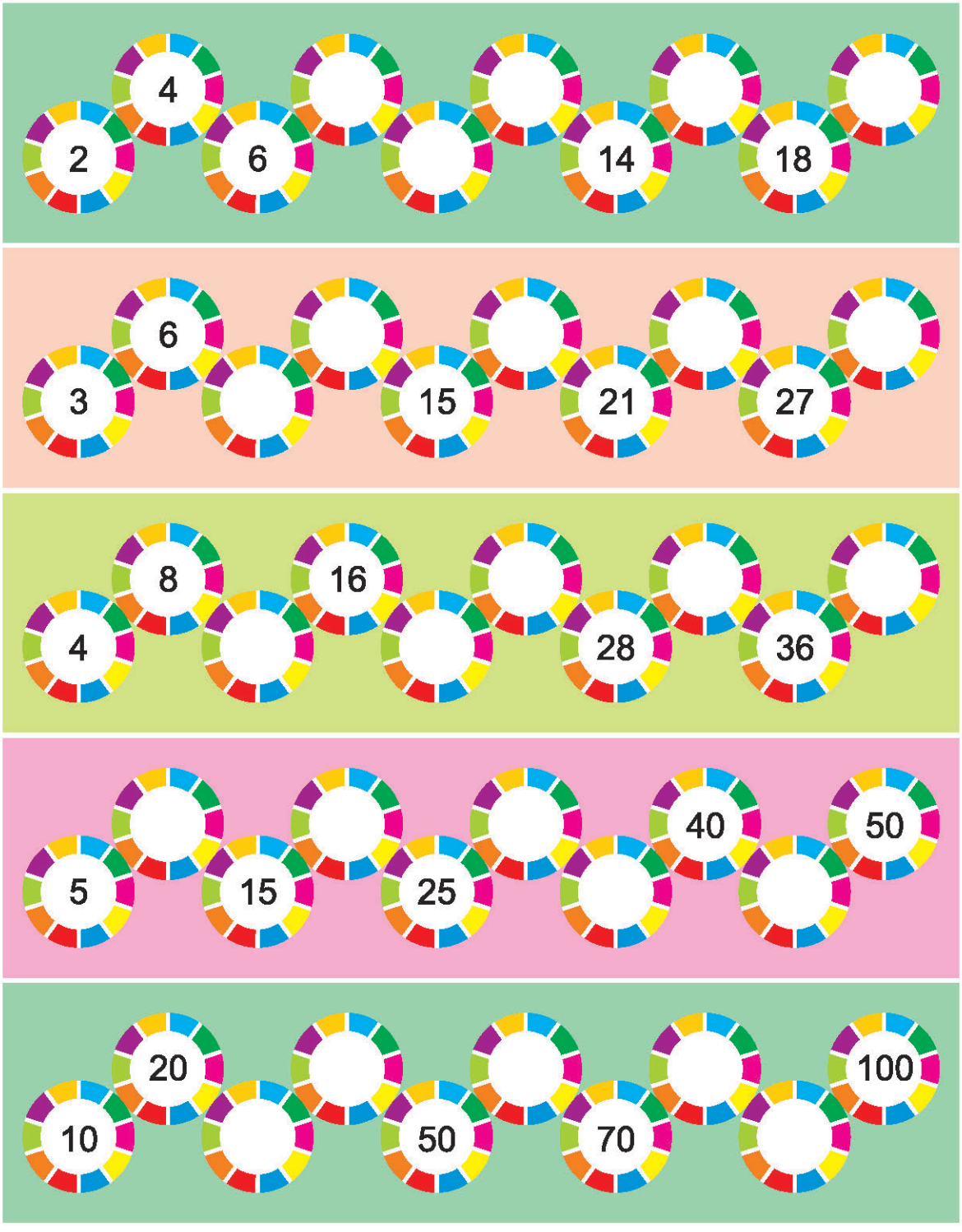
Multiplication Table of 10



1	x 10=10
2	x 10=20
3	x 10=30
4	x 10=40
5	x 10=50
6	x 10=60
7	x 10=70
8	x 10=80
9	x 10=90
10	x 10=100

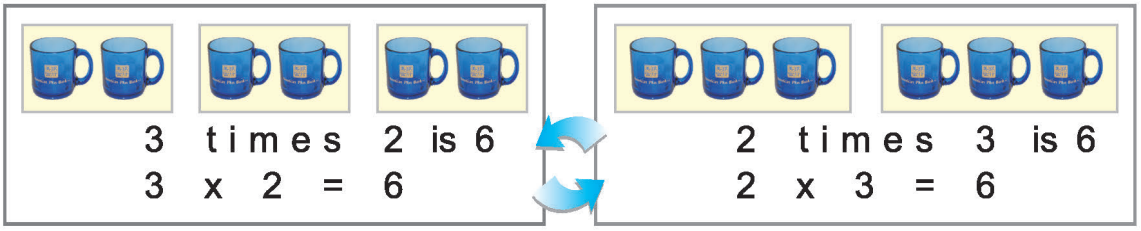
X	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
10	10	20	30	40	50	60	70	80	90	100

Follow the pattern and write the missing numbers

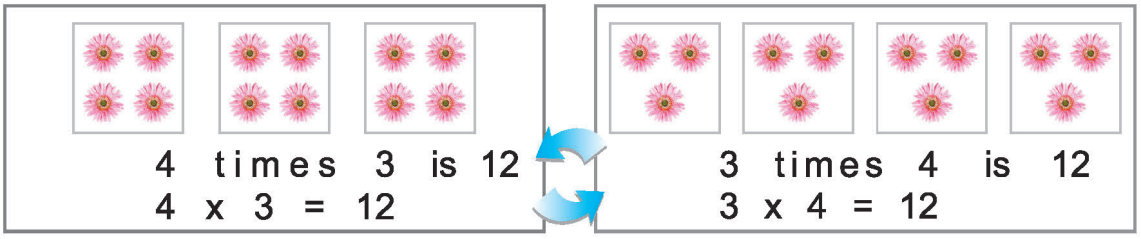


Commutative property of multiplication

If we interchange the places of the numbers in multiplication the answer will be the same. This property of multiplication is called Commutative Property of Multiplication.



3 x 2 = 6 = 2 x 3



4 x 3 = 12 = 3 x 4

EXERCISE

Fill in the blanks by using commutative property of multiplication.

1. 3 x ☐ = 6 = 2 x 3
2. 5 x ☐ = 15 = 3 x 5
3. 6 x ☐ = 24 = 4 x 6
4. ☐ x 10 = 30 = 10 x 3
5. ☐ x 4 = 32 = 4 x 8
6. ☐ x 7 = 14 = 7 x 2
7. ☐ x 5 = 30 = 5 x 6
8. 4 x ☐ = 20 = 5 x 4
9. 3 x ☐ = 12 = 4 x 3
10. 2 x ☐ = 10 = 5 x 2

Real Life Problems

Example

There are 5 girls.
Each girl has 3 balls.
How many balls are there?

Total girls	=	5
Each girl has balls	=	x 3
Total Balls	=	15

EXERCISE

1. There are 6 books in a bag. What is the total number of books in 4 bags.

Books in each bag	=	6
Number of bags	=	x 4
Total books	=	

2. A school has 5 classes. Each class has 10 students. How many students are there in school?

Student in each class	=	10
Total numbers of classes	=	x 5
Total students	=	

3. Price of one pencil is Rs. 3 What is the price of 7 pencils.

Total number of pencils	=	
Price of one pencil	=	
Price of total pencils	=	

4. One hand has 5 fingers. How much fingers 2 hands have?

1 hand has fingers	=	
Number of hands	=	
Total fingers	=	

5. A pot has 5 flowers. How many flowers are there in 4 pots?

Number of flowers in a pot	=	
Number of pots	=	
Total flowers	=	

6. There are 2 wheels in a bicycle. How many wheels are there in 10 cycles?

Nunmber of bicycles	=	
Wheels in each bicycles	=	
Total wheels	=	

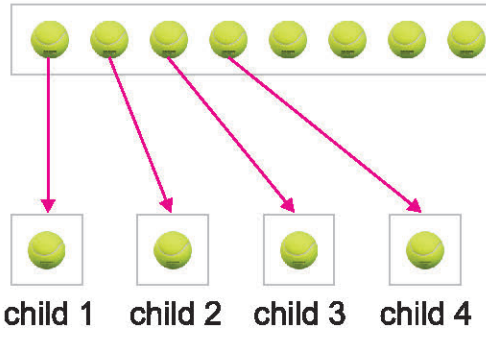
7. The price of one ball is Rs. 5 What is price of 10 such balls?

Number of balls	=	
Price of one ball	=	
Total price	=	

Division

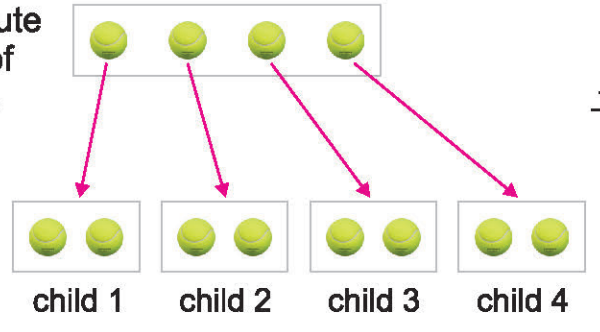
If there are 8 balls, How many balls can be distributed in 4 children ?

Step: 1 Distributed an equal number of balls to each child.



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

Step: 2 Once again distribute an equal number of balls to each child.



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

4 balls can be distributed two times from 8 balls it means that if we divide 8 balls to 4 children then each child will get 2 balls.

$$8 \div 4 = 2$$

" ÷ " is the symbol of division

$$\begin{array}{r} 2 \\ 4\overline{)\ 8} \\ -\ 8 \\ \hline 0 \end{array}$$

Each child will get 2 balls.

EXERCISE

Solve

1. $9 \div 3 = 3$
2. $10 \div 2 =$ ____
3. $12 \div 2 =$ ____
4. $16 \div 2 =$ ____
5. $18 \div 4 =$ ____
6. $21 \div 3 =$ ____
7. $25 \div 5 =$ ____
8. $28 \div 4 =$ ____
9. $30 \div 3 =$ ____
10. $36 \div 4 =$ ____
11. $40 \div 4 =$ ____
12. $48 \div 6 =$ ____

13. $2\overline{)8}$ = 4 (8 − 8 = 0)
14. $2\overline{)10}$ = ____
15. $2\overline{)12}$ = ____
16. $3\overline{)9}$ = ____
17. $3\overline{)18}$ = ____
18. $4\overline{)16}$ = ____
19. $4\overline{)28}$ = ____
20. $4\overline{)32}$ = ____
21. $5\overline{)25}$ = ____
22. $5\overline{)30}$ = ____
23. $5\overline{)45}$ = ____
24. $5\overline{)50}$ = ____

Division of number using table

÷	2	3	4	5	10
1	2	3	4	5	10
2	4	6	8	10	20
3	6	9	12	15	30
4	8	12	16	20	40
5	10	15	20	25	50
6	12	18	24	30	60
7	14	21	28	35	70
8	16	24	32	40	80
9	18	27	36	45	90
10	20	30	40	50	100

Method of using the table: 5 ÷ 15

Put a circle on number 15 in the first row under 5.

Now put a circle in number 3 in front of 15 in the first column.

Hens the answer is : 5 ÷ 15 = 3

Real life problems

Example

Class teacher has 24 books of Mathematics. He equally divides among 4 students. How many books will each student get?

Total books = 24

Total students = 4

Each student will get books = 24 ÷ 4

= 6

EXERCISE

1. 15 pencils are equally divided among 5 boys. How many pencils will each boy get?

Total pencils = 15

Total boys = 5

Each boy will get pencils = 15 ÷ 5

=

2. 30 buttons are placed equally in 3 boxes. How many button will be there in each box?

Total buttons = 30

Total boxes = 3

Button in each box = ÷

=

3. 35 mangoes equally divided among 5 girls. How many mangoes did each girl get?

Total mangoes =

Total girls =

Each girls will get mangoes = ÷

=

4 Distribute 20 toffees among 2 children equally. How many toffees does one child get?

Total toffees = ☐
Total children = ☐
Each child will get toffees = ☐ ÷ ☐
= ☐

5 50 toys are equally divided among 10 girls. How many toys does each girl get?

Total toys = ☐
Total girls = ☐
Each girl will get toys = ☐ ÷ ☐
= ☐

6 28 students are divided into 4 groups. How many students are there in each group?

Total students = ☐
Total groups = ☐
Students in each group = ☐ ÷ ☐
= ☐

7 Among how many girls can we distribute 45 pencils equally, so that each girl gets 5 pencils.

Total pencils = ☐
Each girls has pencils = ☐
Total girls = ☐ ÷ ☐
= ☐

Real life problems (Using Pakistani Currency)

Addition, Subtraction, Multiplication and Division

Example

650 tickets were sold on saturday and
349 tickets were sold sunday.
How many tickets were sold in the two days ?

Tickets sold on saturday = 6 5 0
Tickets sold on sunday = +3 4 9

Tickets sold in two days = 9 9 9

EXERCISE

2. The price of science book is Rs. 285 and the price of mathematics books is Rs. 396. What is the total price of both books ?

=
=
=

3. Ajmal has Rs. 350. His father has given him Rs. 493. What is the total amount of money Ajmal has ?

=
=
=

5. Nadia bought a shirt on Rs. 768. She gave Rs. 900 to the shopkeeper. How much amount Nadia received back ?

=
=
=

7. 32 erasers are equally shared among 8 children. How many erasers each child will get ?

=
=
=

8. A newspaper boy delivers 132 newspapers in a day. How many newspapers does he deliver in 6 days ?

=
=
=

9. The price of a brick is Rs. 5. What will be the price of 125 bricks ?

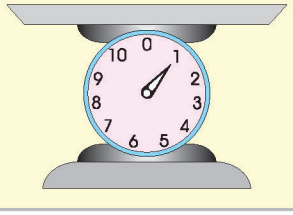
=
=
=

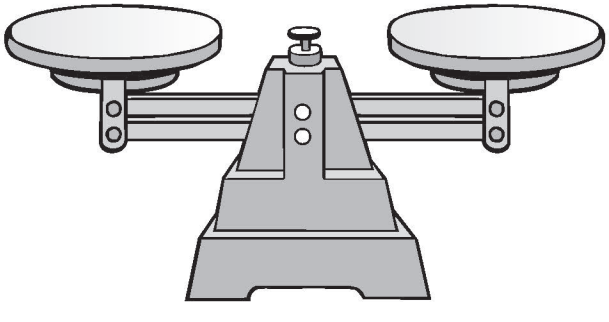
UNIT 3

Measurement of Length, Mass and Capacity

After Learning this unit, the students will be able to:

- Recognize the standard units of length, i.e. metre, centimtre.
- Read and write standard units of length including abbreviations.
- Use appropriate units of length to measure (with straightedge/ruler) the objects.
- Solve real life problems involving measurements.
- Recognize the standard units of mass / weight, i.e. kilogram, gram.
- Read and write standard units of mass / weight including abbreviations.
- Solve real life problems involving mass / weight.
- Compare capacity of different objects (jug. glass. cup etc.).
- Recognize and use the standard unit of capacity/volume, i.e. litre.
- Read and write standard units of capacity/volume including abbreviations.
- Solve real life problems involving capacity/volume.



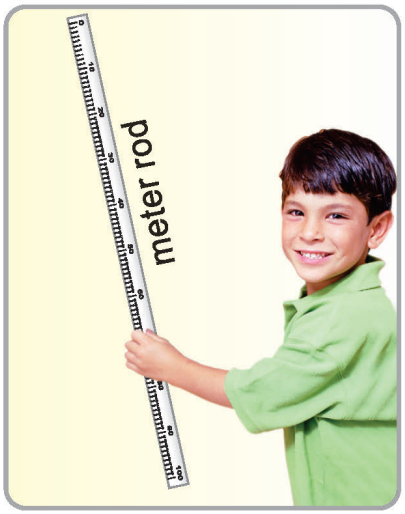


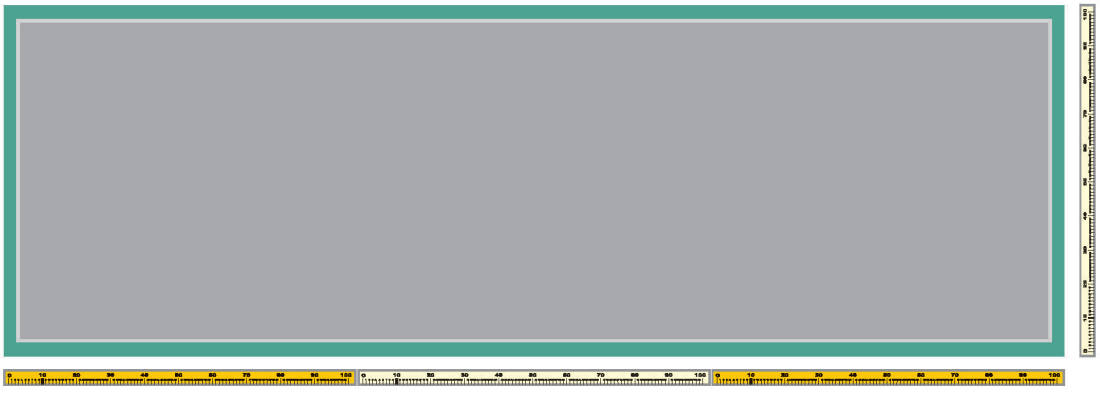
Measurement of length

For the accurate measurement of length, the basic unit is the metre. It is denoted by “m”.
The smaller lengths are measured in centimetres.
It is denoted by “cm”.

or
1 metre = 100 centimetres
1 m = 100 cm

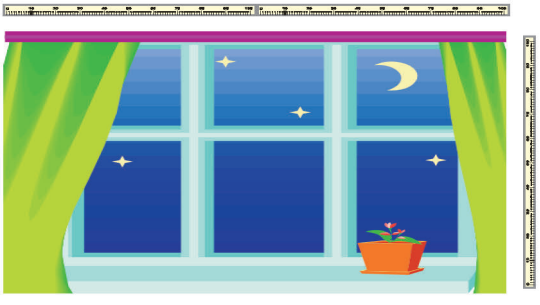
The metre rod is made of iron or wood which is used for measurement of cloth.





Length of black board is 3 metres.
Breadth of the black board is 1 metre.

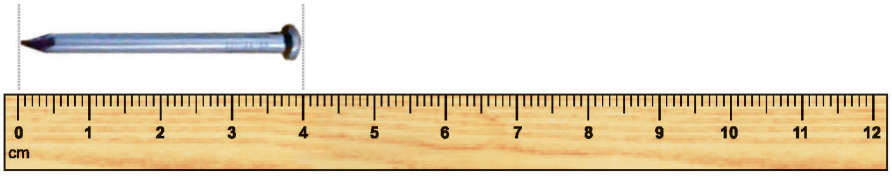
Length of the door is .....m
Width of the door is .....m



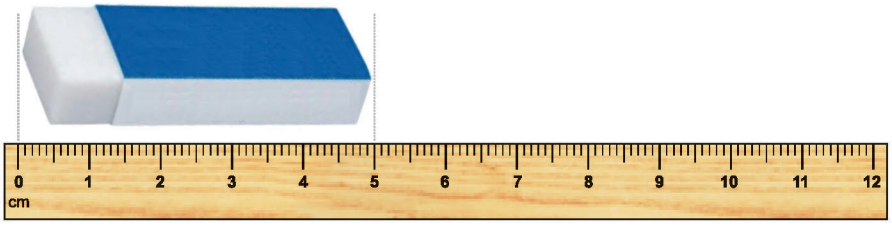
Length of the window is .....m
Width of the window is .....m

Length of the table is .....m
Width of the table is .....m

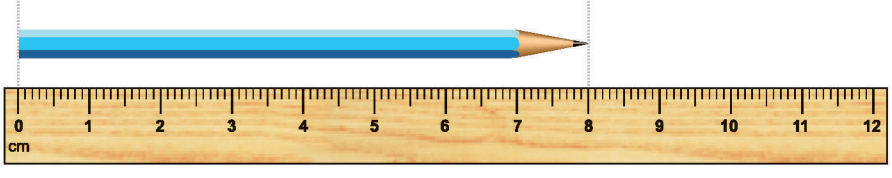
Similarly, we measure the length of small objects in centimeters.



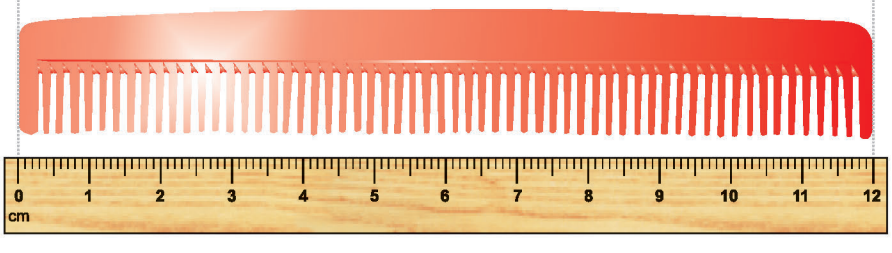
Length of nail is 4 cm.



Length of the eraser is 5 cm.



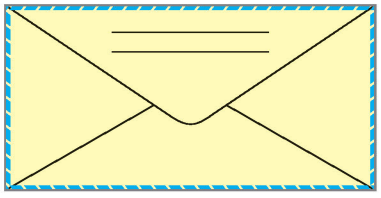
Length of pencil is 8 cm.



Length of the comb is 12 cm.

EXERCISE

Use the ruler to measure the " length " of the following objects.



Length of the envelope = 5 cm

Length of the pen = ...

Length of the book = ...

Length of the scissor = ...

Length of the rectangle = ...

Length of the screw = ...

Length of the bat = ...

Length of the geometry box = ...

Length of the rope = ...

Length of the bag = ...

Length of the Rs. 20 note = ...

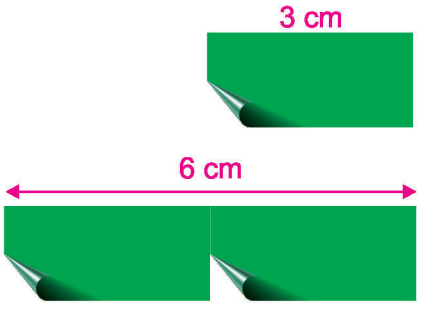
Length of the frame = ...

Real life problems

Example: 1

The length of green paper is 3 cm.
If 2 green papers are joined together then the total length of both papers will be 6 cm.

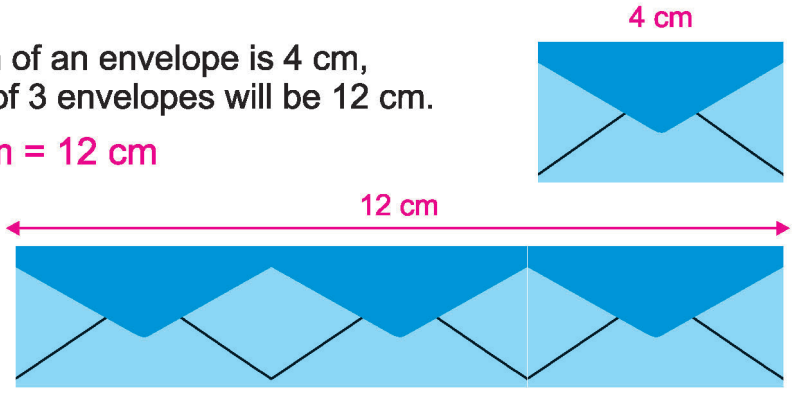
3 cm + 3 cm = 6 cm



Example: 2

Similarly, if the length of an envelope is 4 cm, then the total length of 3 envelopes will be 12 cm.

4 cm + 4 cm + 4 cm = 12 cm

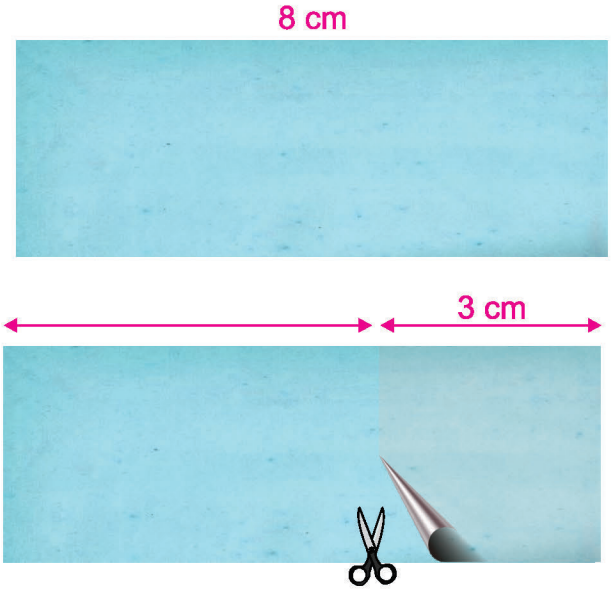


EXERCISE

1. If one mat is 3m long. Another mat is 5m long. What will be the length of mats if joined together ?

3 m + 5 m = ____

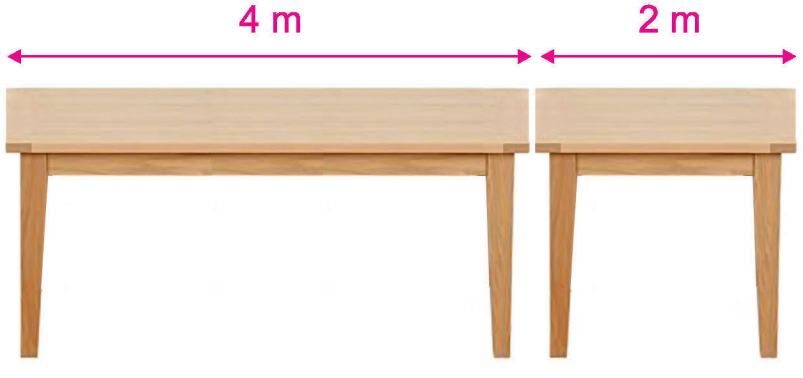
2. Sara had 8 cm long sheet, she cuts 3 cm sheet. How much sheet is left ?



8 cm - 3 cm = ☐

---

3. One table is 4 m long. Another table 2 m long. What will be the total length of the two tables if joined together ?



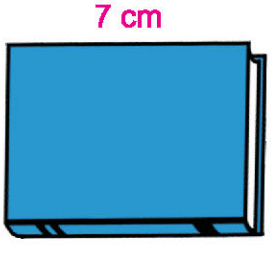
4 m + 2 m = ☐

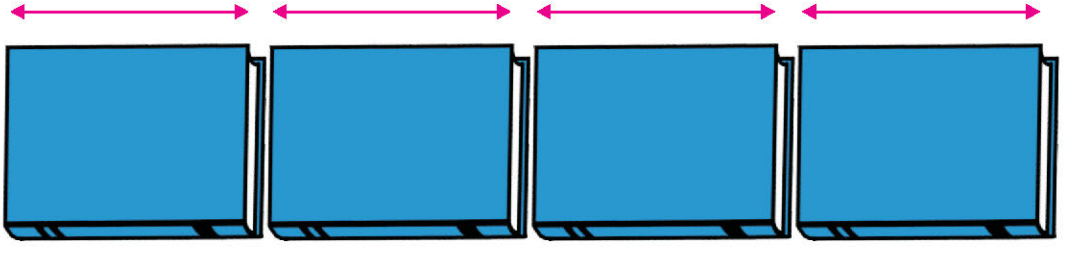
4. If the length of a piece of wood is 3 m what will be the total length of 3 wooden pieces ?

3 m + 3 m + 3 m = ☐

---

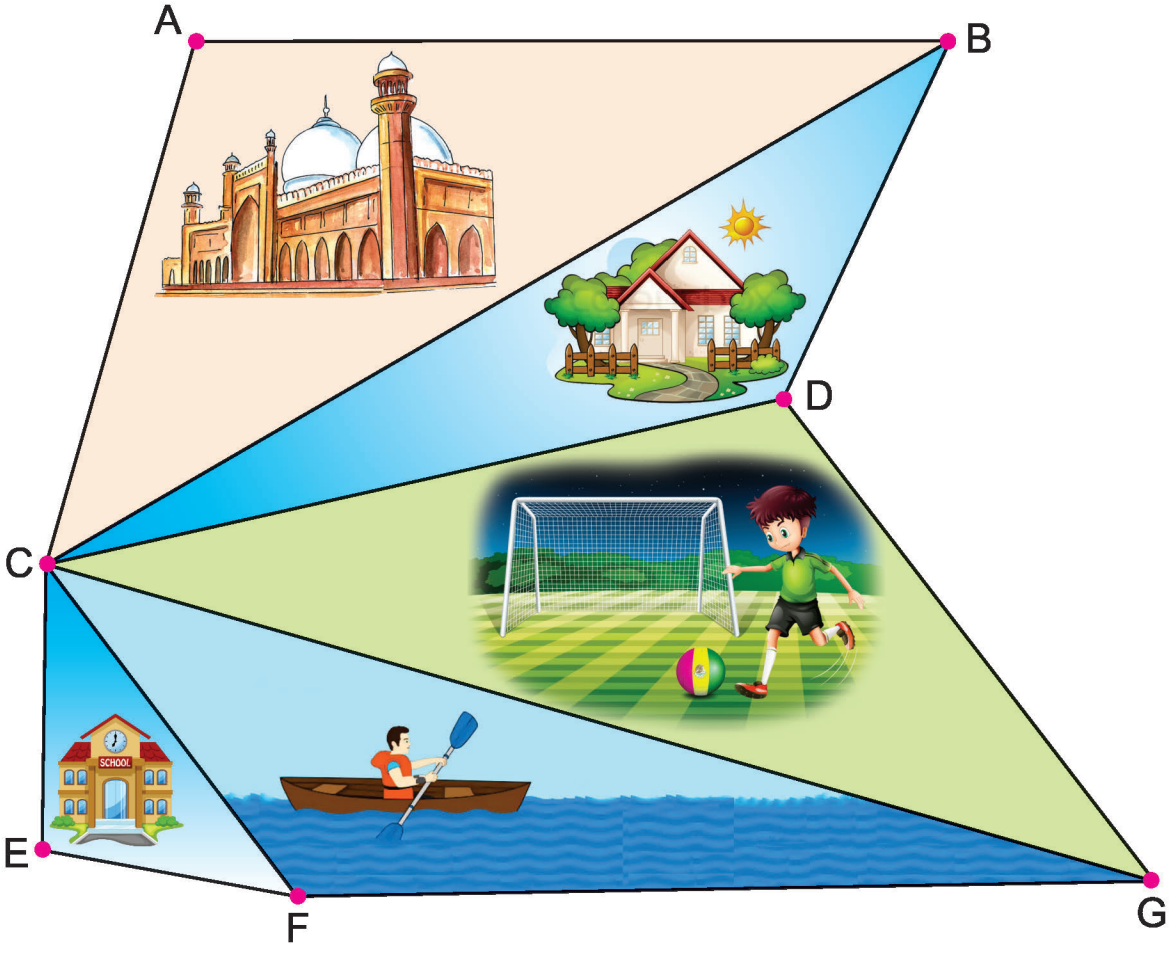
5. A book is 7 cm long.
If 4 books of same length are placed together. Then what will be the total length of the books ?





7 cm + 7 cm + 7 cm +7 cm = ☐

Use your centimeter ruler. Measure the distance and write in table.

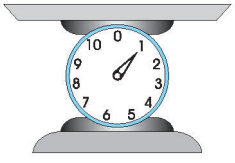


A to B	10 cm
A to C	
B to D	
B to C	
C to E	

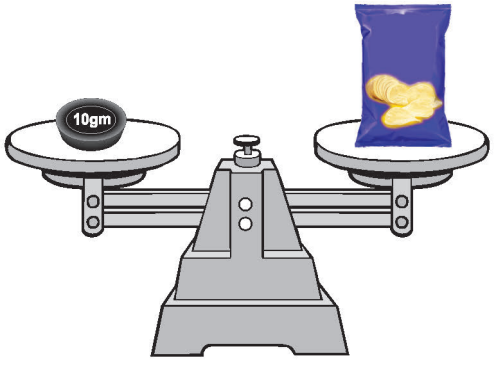
D to G	
E to F	
F to G	
C to G	
G to E	

Measurement of Mass/Weight

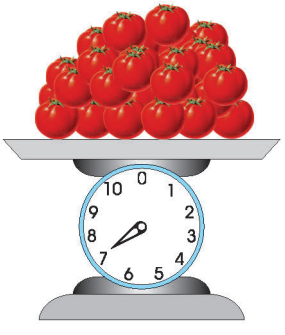
To find the mass of things we use the formal unit kilogram. We write 'kg' for kilogram. Things like sugar, flour, rice, grains etc are measured in kilograms. Similarly, to measure the mass of light things we use gram. We write 'gm' for gram.



or	1 Kilogram	=	1000 gm
	1 kg	=	1000 gm



Mass of chips packet is 10 gm



Mass of tomatoes is 7 kg

5gm

10gm

50gm

100gm

200gm

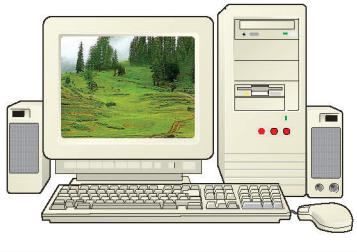
500gm

EXERCISE

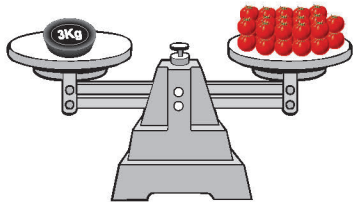
1. Tick (✓) the objects that weigh less than 1 kilogram

✓ 		
		

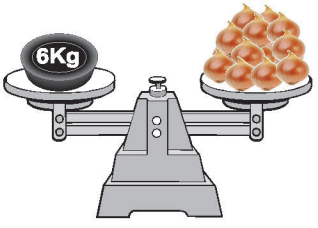
2. Cross (X) the objects that weigh more than 1 kilogram

X 	
	
	

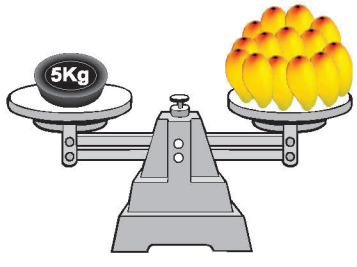
3. Write the weight



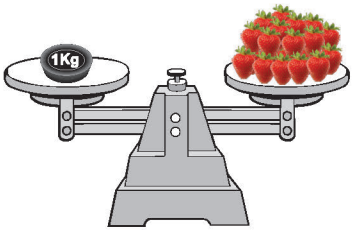
3 Kg



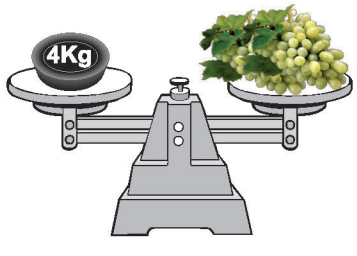
..... Kg



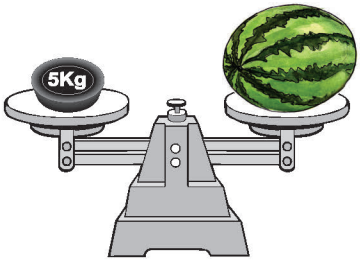
..... Kg



..... Kg



..... Kg



..... Kg

Real life problems

Example

Rizwan bought 15 kg flour and 12 kg rice. What is total weight of things he bought ?

Objects		kg
Flour	=	15
Rice	= +	12
Total	=	27

EXERCISE

1. Add 75 kg and 25 kg

	75	kg
+	25	kg
	100	kg

2. Subtract 150 kg from 375 kg

	375	kg
–	150	kg

3. Bilal bought 30 kg mangoes and 27 kg oranges. What is the total weight of fruits ?

4. Anwar bought 120 kg sugar and 240 kg rice. What will be the total weight ?

5. Mother bought 50 kg potatoes from one shop and 75 kg potatoes from another shop. Find the total weight of the potatoes.

6. If the mass of one bag flour is 100 kg and mass of another bag is 500 kg. What is the difference of mass between the two bags.

Measurement of Capacity

The jug holds more water than glass

Jug  Glass 

The kettle holds more tea than cup

Kettle  Cup 

Capacity is the amount of liquid that a container can hold.

The unit used for measuring the capacity of liquid is litre and it is denoted by *"l"*

1 litre = 1000 millilitre

1 l = 1000 ml

Litre is the unit of the capacity to measure the liquid. We use litre for measurement of water, milk, petrol, diesel and kerosine oil etc. In daily life the following pots are used for measuring the liquid in litres.

This jug contains 1 litre water 	This is litre pot used by milk seller to measure milk 	This is a litre bottle used to measure the petrol 

EXERCISE

1. Tick (✓) which have more capacity.

i)  ii)  iii) 

2. Cross (X) which have less capacity.

i)  ii)  iii) 

Example: 1 Add 37 litres milk and 25 litres milk.

Solution:

	3	7 ℓ
+	2	5 ℓ
	6	2 ℓ

Example: 2 Subtract 45 litres oil from 86 litres oil.

Solution:

	8	6 ℓ
–	4	5 ℓ
	4	1 ℓ

Example: 3 Milk seller purchased 40 litres of milk from 1st shopkeeper and 25 litres of milk from 2nd shopkeeper.
How much milk he has purchased ?

Solution:

	4	0 ℓ
+	2	5 ℓ
	6	5 ℓ

EXERCISE

1. Add 55 litres and 38 litres.

5 5 ℓ	
+ 3 8 ℓ	
	ℓ

2. Subtract 35 litres from 78 litres.

7 8 ℓ	
– 3 5 ℓ	
	ℓ

3. Find the difference of 150 litres and 130 litres.

1 5 0 ℓ	
– 1 3 0 ℓ	
	ℓ

4. There is 65 litres of milk in a container.
   15 litres of milk is added in it.
   How much milk in the container ?

6 5 ℓ	
+ 1 5 ℓ	
	ℓ

5. A water tank has 130 litres of water. If 165 litres water is poured into the tank, then how much water will be in the water tank ?

1 3 0 ℓ	
+ 1 6 5 ℓ	
	ℓ

6. There is 38 litres of kerosine oil in a pot.
   If 24 litres of oil is sold, then how much kerosine oil is left in the pot ?

3 8 ℓ	
– 2 4 ℓ	
	ℓ

UNIT 4

TIME

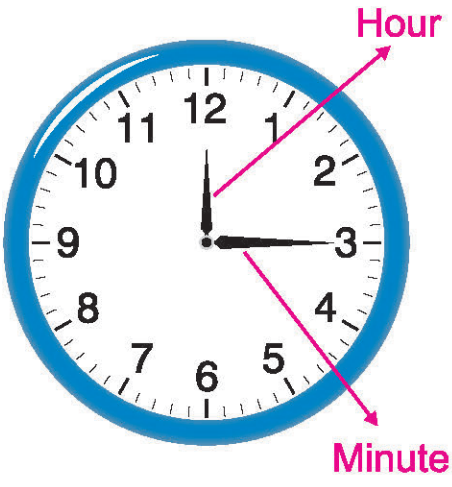
After Learning this unit, the students will be able to:

- Know the number of hours in a day and number of minutes in an hour.
- Read and write the time from a clock in hours and minutes (with five minute intervals) e.g., read 8:15 as eight fifteen and 8:50 as eight fifty.
- Recognize a.m. and p.m.
- Draw hands of a clock to show time in hours and minutes (with five minute interval)
- Use solar calendar to find a particular date.
- Use lunar calendar to find a particular date.

Clocks or watches tell us about the time. These are in many sizes and shapes.

About the clock

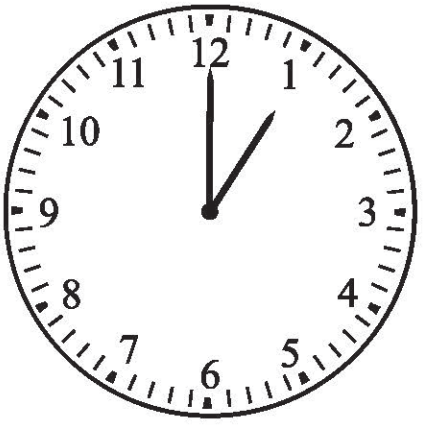
A clock has a dial on which **"1"** to **"12"** numbers are written. Short hand moves from one number to other number in **"One Hour"**. Long hand moves from one number to other number, in five minutes. Long hand completes a round in one hour. Short hand completes a round in 12 hours.



1 Hour	=	60 Minutes
1 Day	=	24 Hours

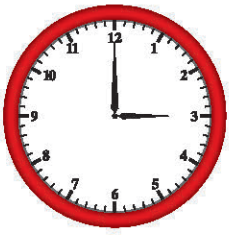
Telling the Time

Look at the clock. The hour hand is at **"1"** and the minute hand is at **"12"** then time is 1 o'clock. Remember, the minute hand takes one minute to move from one mark to another. There are five minutes between two numbers.

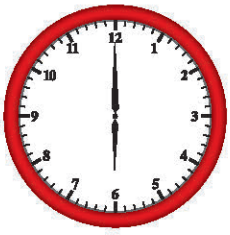


EXERCISE

1. What is the time on each clock.

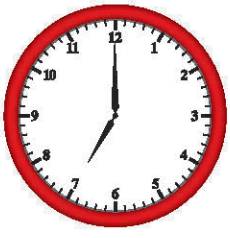


___3___o'clock



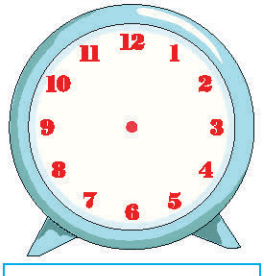
_____o'clock

_____o'clock

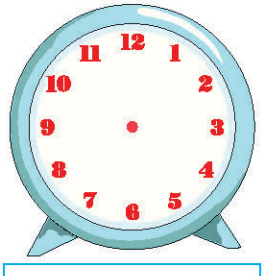


_____o'clock

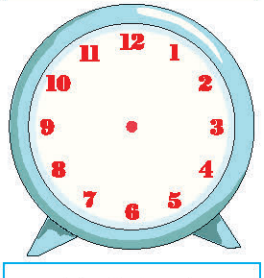
2. Draw the hands of hour and minute to show the time.



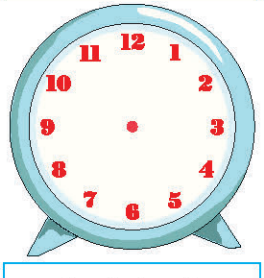
12 o'clock



4 o'clock



5 o'clock

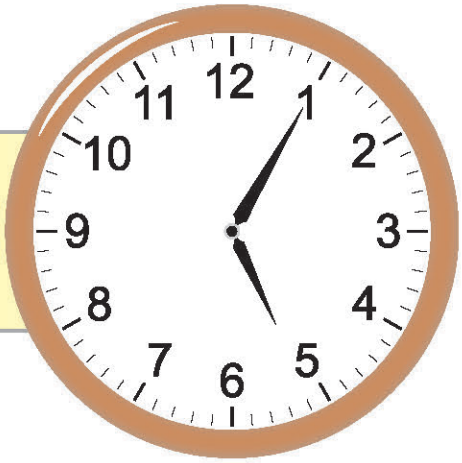


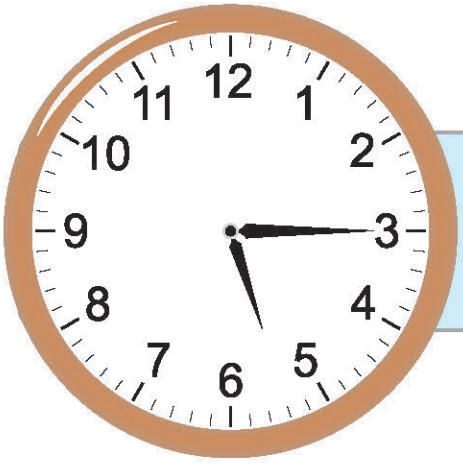
8 o'clock

Telling the time in hours and minutes.

The big hand takes five minutes to reach from one number to another.

It is five past five.

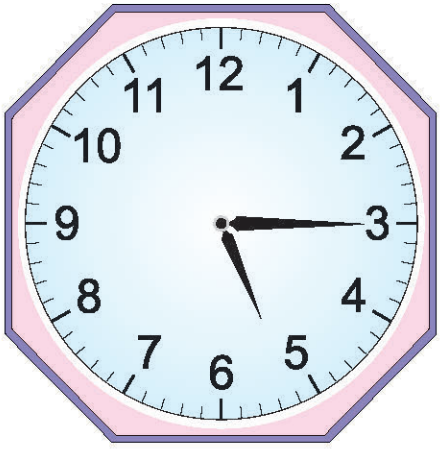


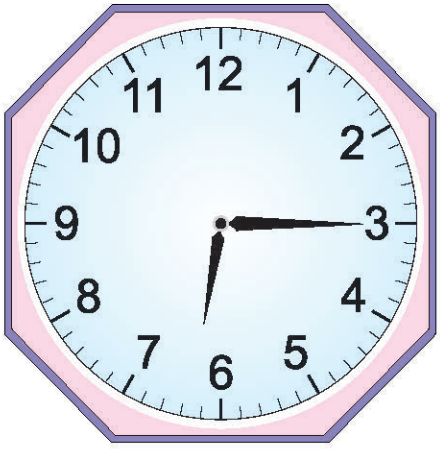


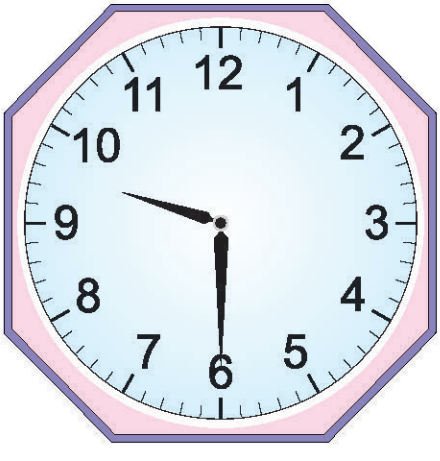
To count 5, 5 numbers is helpful for telling time in minutes.

EXERCISE

Write the time in words.

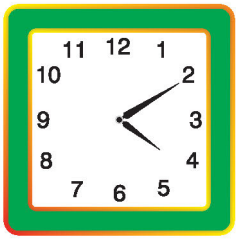




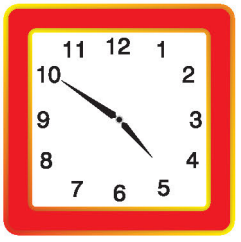


Telling the time is Hours and Minutes with 5 minutes interval

In this clock the hour hand is very near to **"4"** and the minute hand is on **"2"** the time is **4:10** and read as four ten.



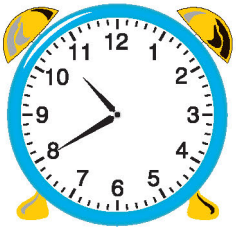
Similarly in this clock the hour hand is very near to **"5"** and the minute hand is on **"10"** the time is **"5:50"** and read as five fifty.



EXERCISE

1. What is the time on each of the following clocks?

3:10



1. Fill in the blanks

1 hour = ☐ minutes

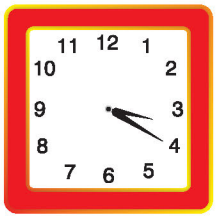
1 day = ☐ hours

2 hour = ☐ minutes + ☐ minutes = ☐ minutes

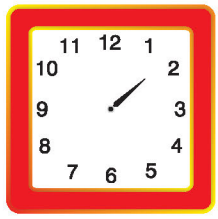
2 day = ☐ hours + ☐ hours = ☐ hours

2. Match the clock with the time

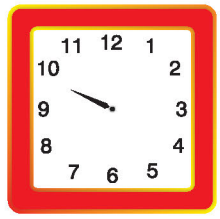
2. Draw the minute hand to show the given times



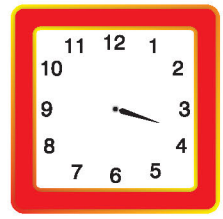
3:20



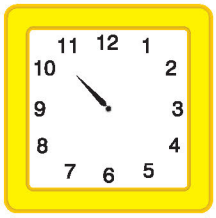
1:45



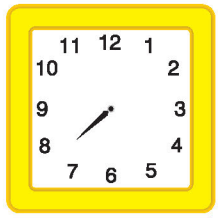
9:55



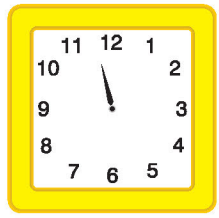
3:40



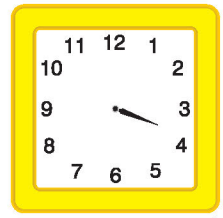
10:25



7:30



11:40



3:45

3. Draw the hour hand to show the given times

12:45

11:20

6:10

2:35

1:30

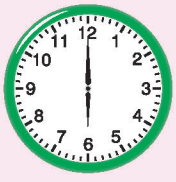
7:35

1:55

3:05

Recognition of “a.m.” and “p.m.”

Remember, we use a.m. to tell the time from just after 12 mid night to just before 12 noon.

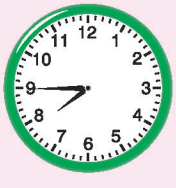


The time is six o’clock in the morning.

6.00 a.m.

The time is quarter past seven in the morning.

7:15 a.m.

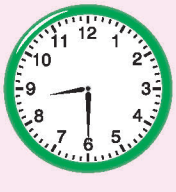


The time is quarter to eight in the morning.

7:45 a.m.

The time is eight o’clock in the morning.

8.00 a.m.



The time is half past eight in the morning.

8:30 a.m.

Similarly, we use “p.m.” to tell the time from 12 noon to just before 12 midnight.

The time is one thirty in the afternoon.

1:30 p.m.

The time is five o’clock in the afternoon.

5:00 p.m.

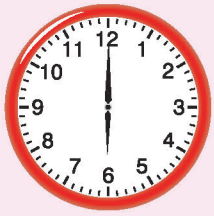
The time is half past seven in the evening.

7:30 p.m.

The time is quarter to ten in the night.

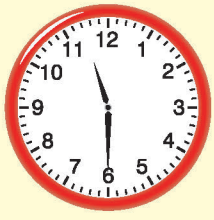
9:45 p.m.

Fill in the boxes with a.m. or p.m.

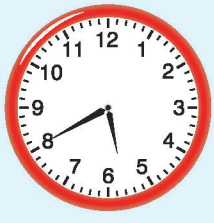


It is six o' clock in the morning.

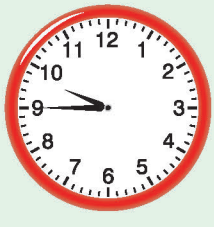
6:00 a.m.

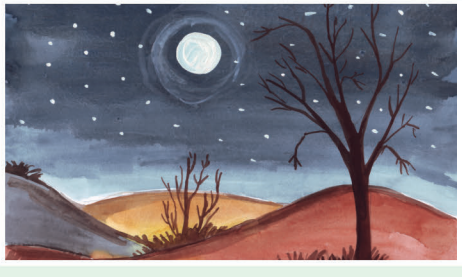


It is eleven thirty in the morning.

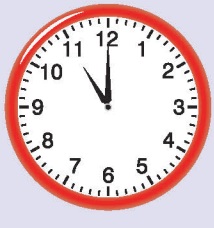


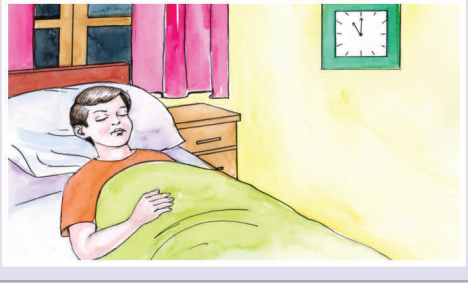
It is five forty in evening.





It is nine forty five at night.





It is eleven o' clock at night.

SOLAR CALENDAR

Solar calendar depends upon the solar system. In solar system the earth revolves around the sun. The time taken by one revolution of earth is called **"One Solar Year"**. A solar year has been divided into 12 months.

① January	② February	③ March	④ April	⑤ May	⑥ June
⑦ July	⑧ August	⑨ September	⑩ October	⑪ November	⑫ December

SOLAR CALENDAR

January

Mon	Tues	Wed	Thur	Fri	Sat	Sun
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

February

Mon	Tues	Wed	Thur	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March

Mon	Tues	Wed	Thur	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April

Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

May

Mon	Tues	Wed	Thur	Fri	Sat	Sun
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

June

Mon	Tues	Wed	Thur	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July

Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

August

Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September

Mon	Tues	Wed	Thur	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

October

Mon	Tues	Wed	Thur	Fri	Sat	Sun
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

November

Mon	Tues	Wed	Thur	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December

Mon	Tues	Wed	Thur	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

LUNAR CALENDAR

Lunar Calendar depends upon sight of the moon. The moon revolves around earth. The time taken by one revolution of moon is called **"One Lunar Month".** The names of months of Lunar Calender are:

① Muharram	② Safar	③ Rabi-ul-Awwal	④ Rabi-us-Saani	⑤ Jamadi-ul-Awwal	⑥ Jamadi-us-Saani
⑦ Rajab	⑧ Shaaban	⑨ Ramzan	⑩ Shawwal	⑪ Zeeqaud	⑫ Zilhaj

LUNAR CALENDAR 1432

Muharram 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
		1	2	**3**	4	5
6	7	8	9	**10**	11	12
13	14	15	16	**17**	18	19
20	21	22	23	**24**	25	26
27	28	29				

Safar 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
			1	**2**	3	4
5	6	7	8	**9**	10	11
12	13	14	15	**16**	17	18
19	20	21	22	**23**	24	25
26	27	28	29	**30**		

Rabi-ul-Awwal 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
					1	2
3	4	5	6	**7**	8	9
10	11	12	13	**14**	15	16
17	18	19	20	**21**	22	23
24	25	26	27	**28**	29	

Rabi-us-Saani 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
30						1
2	3	4	5	**6**	7	8
9	10	11	12	**13**	14	15
16	17	18	19	**20**	21	22
23	24	25	26	**27**	28	29

Jamadi-ul-Awwal 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
	1	2	3	**4**	5	6
7	8	9	10	**11**	12	13
14	15	16	17	**18**	19	20
21	22	23	24	**25**	26	27
28	29					

Jamadi-us-Saani 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
		1	2	**3**	4	5
6	7	8	9	**10**	11	12
13	14	15	16	**17**	18	19
20	21	22	23	**24**	25	26
27	28	29	30			

Rajab 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	**8**	9	10
11	12	13	14	**15**	16	17
18	19	20	21	**22**	23	24
25	26	27	28	**29**		

Shaaban 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
					1	2
3	4	5	6	**7**	8	9
10	11	12	13	**14**	15	16
17	18	19	20	**21**	22	23
24	25	26	27	**28**	29	30

Ramzan 1432

Mon	Tues	Wed	Thur	Fri	Sat	Sun
1	2	3	4	**5**	6	7
8	9	10	11	**12**	13	14
15	16	17	18	**19**	20	21
22	23	24	25	**26**	27	28
29						

Shawwal 1433

Mon	Tues	Wed	Thur	Fri	Sat	Sun
	1	2	3	**4**	5	6
7	8	9	10	**11**	12	13
14	15	16	17	**18**	19	20
21	22	23	24	**25**	26	27
28	29	30				

Zeeqaud 1433

Mon	Tues	Wed	Thur	Fri	Sat	Sun
			1	**2**	3	4
5	6	7	8	**9**	10	11
12	13	14	15	**16**	17	18
19	20	21	22	**23**	24	25
26	27	28	29			

Zilhaj 1433

Mon	Tues	Wed	Thur	Fri	Sat	Sun
				1	2	3
4	5	6	7	**8**	9	10
11	12	13	14	**15**	16	17
18	19	20	21	**22**	23	24
25	26	27	28	**29**	30	

EXERCISE

Fill in the blanks

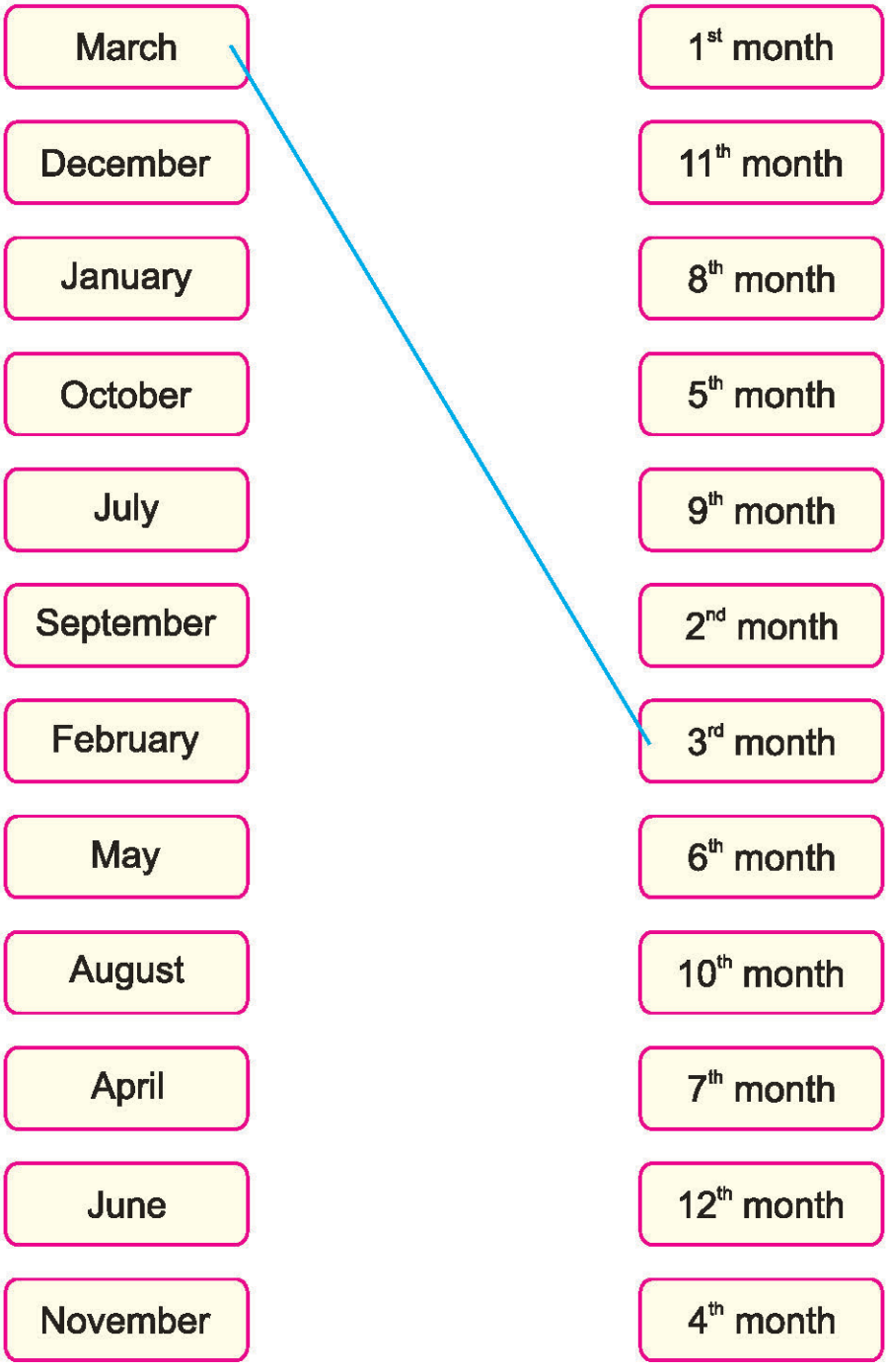
1. First date of new year	1st January
2. Last date of the year	
3. Independence day of Pakistan	
4. Birth day of Quaid-e-Azam	
5. Last day of 2nd month of solar calendar	
6. Defence day of Pakistan	
7. Birthday of our national poet	
8. Your date of birth ?	

Fill in the blanks

1. The month of fasting	Ramazan
2. The first month of islamic calendar	
3. The last month of islamic calendar	
4. The name of birth month of our last	
prophet Mohammad (PBUH)	
5. The sixth month of islamic calendar	
6. The month of Hajj	

EXERCISE

1. Match the solar months with respect to their positions



2. Match the lunar or Islamic calendar with respect to their order

Rajab	Eighth month
Muharrum	Second month
Zeeqaud	Twelfth month
Safar	Eleventh Month
Rabi-ul-Awwal	Tenth month
Jamadi-us-Saani	Fifth month
Jamadi-ul-Awwal	Seventh month
Zilhaj	Fourth month
Shaaban	Third month
Ramzan	Sixth month
Rabi-us-Saani	Ninth month
Shawwal	First month

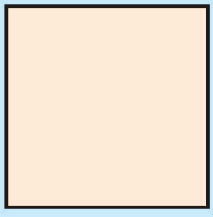
UNIT 5

GEOMETRY

After Learning this unit, the students will be able to:

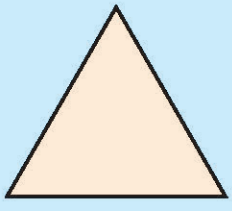
- Identify the figures like square , rectangle, triangle, circle, semi-circle and quarter-circle.
- Identify vertices and sides of a triangle, rectangle and square.
- Differentiate between a straight line and curved line.
- Identify straight and curved lines from the given line drawings
- Use straightedge/ruler to draw a straight line of given length (exclude fractional lengths).

Geometrical Figures

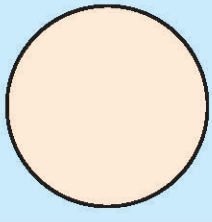


This is a square

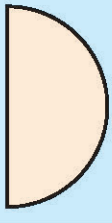
This is a rectangle



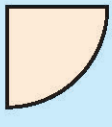
This is a triangle



This is a circle



This is a semi circle



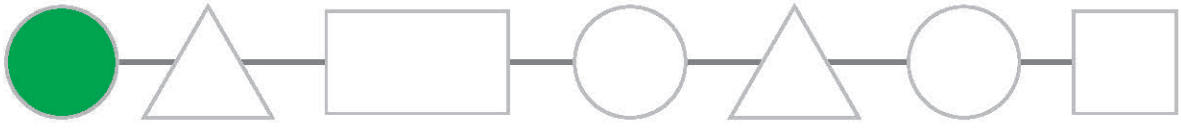
This is a quarter circle

Colour the square

Colour the rectangle

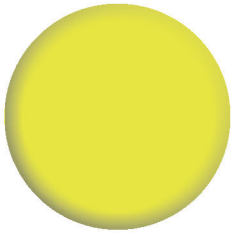
Colour the triangle

Colour the circle

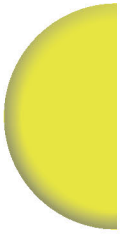


Activity

This is a card of a circle shape.



If we fold it, it will be a semi circle.



If we fold it again, it will be quarter circles.

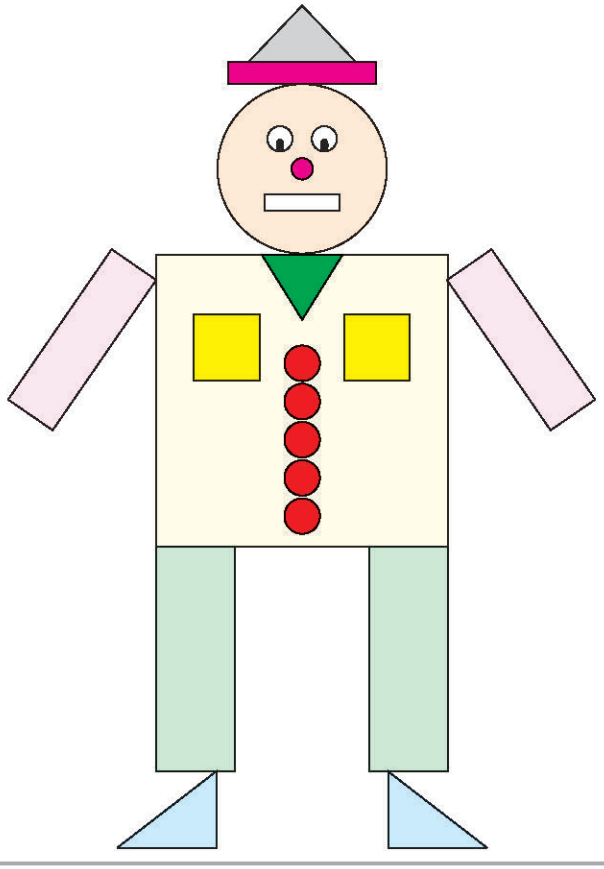
Circle

Semi Circle

Quarter Circle

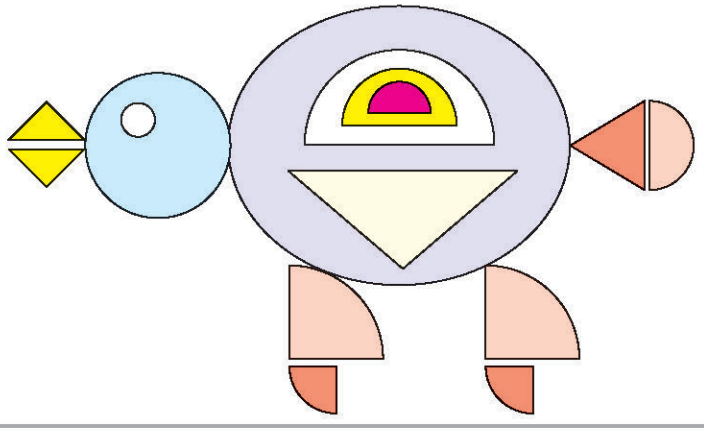
EXERCISE

1. Count and write the number of shapes



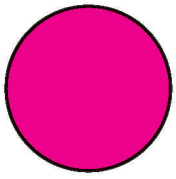
Circles	9
Rectangles	
Triangles	
Square	

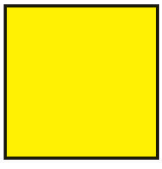
2. Count and write the number of shapes

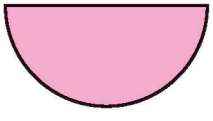


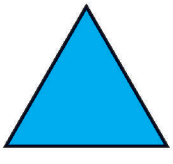
Semi Circle	
Quarter Circle	
Circles	
Triangles	

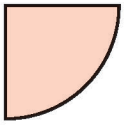
3. Match the shapes with objects



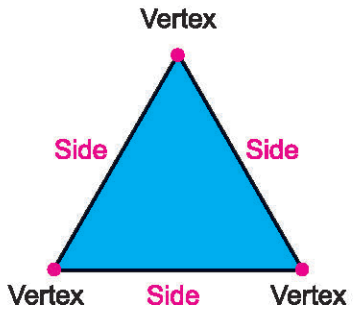




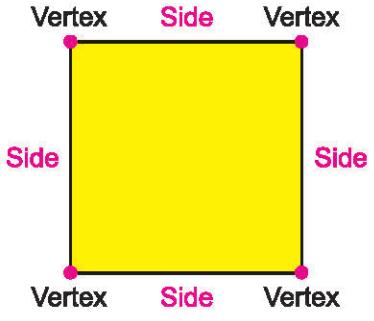




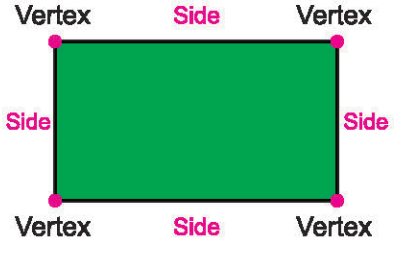
Vertices and sides of a triangle, rectangle and square



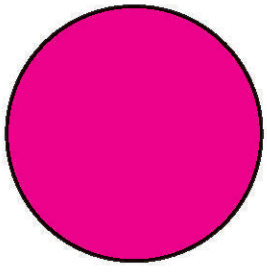
- It is a triangle.
- It has three vertices.
- It has three sides.



- It is a square.
- It has four vertices.
- It has four sides.



- It is a rectangle.
- It has four vertices.
- It has four sides.



- It is a circle.
- It has no vertices.
- It has no sides.

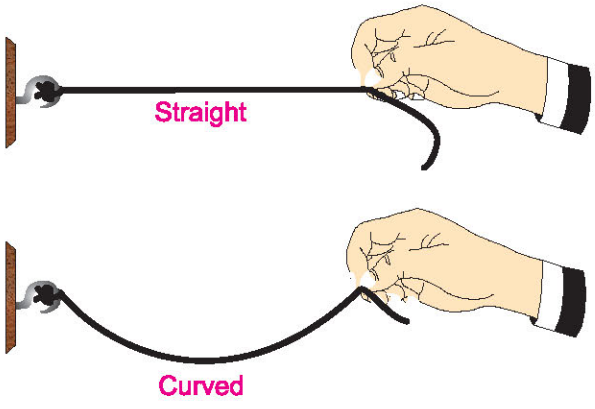
Straight lines and curved lines

This is a piece of string.

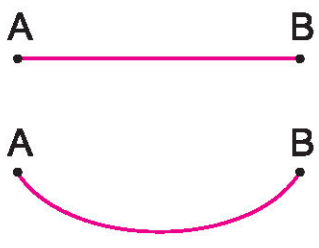
When we stretch it.

It makes a straight line.

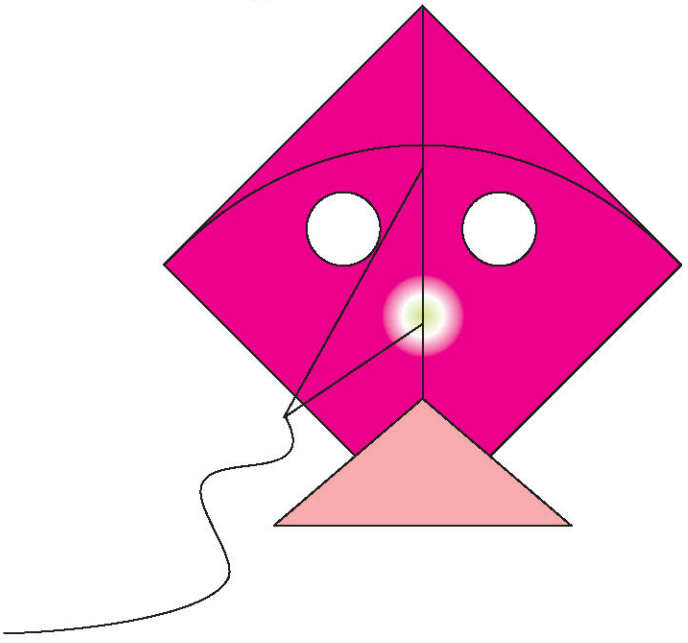
Similarly, when we loose the string it makes a curved line.



Now we can draw a shortest possible path from point A to B this path is called straight line, whereas the curved path from A to B is called curved line.



Identify and write the numbers of straight line and curved line in the following figure.



Straight lines

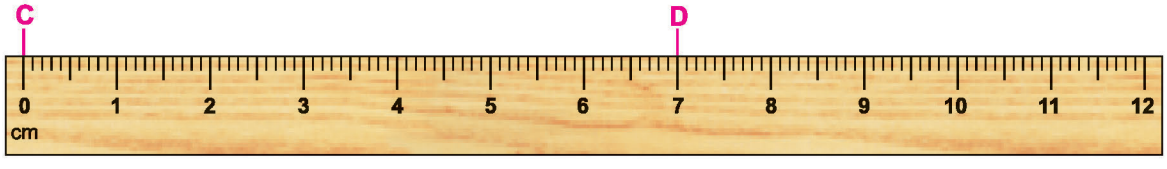
Curved lines

Drawing of straight lines

In the given below figure from point A to B is a shortest path between two points.

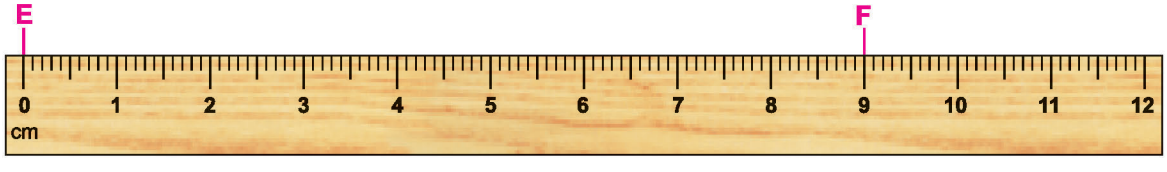
It is a 3 cm straight line

Again, from point C to D is a shortest path between another two points.



It is a 7 cm straight line

Similarly, what is the length of straight line from the points E to F ?



The length of straight line is ☐ cm.

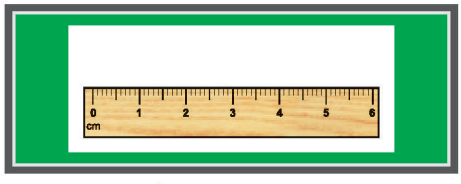
Drawing of straight lines using ruler

Example: 1

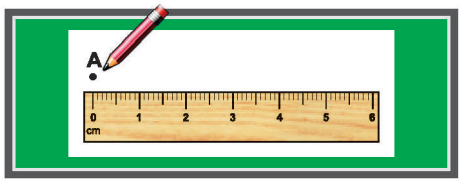
Draw a straight line of **5** cm, long.

1. Take a sheet of white paper

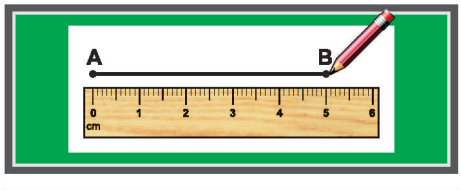
2. Place a ruler on the sheet



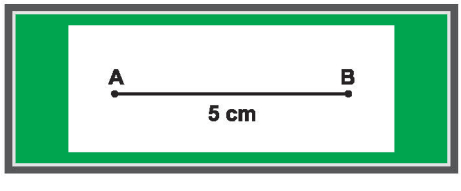
3. Mark the first point as **A** with pencil



4. Mark the second point as **B** and draw a line of **5** cm, long

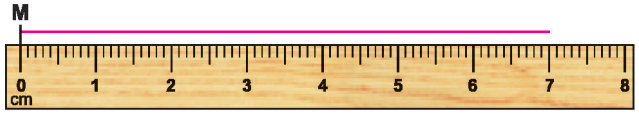


5. The line **A** to **B** is a **5** cm, straight line

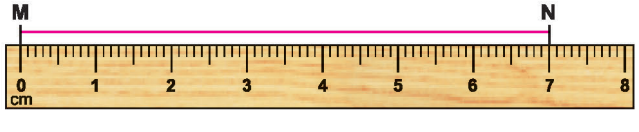


Example: 2 Measure the given straight line from **M** to **N**

1. Place the **0** of ruler at point **M** of the straight line from **M** to **N**



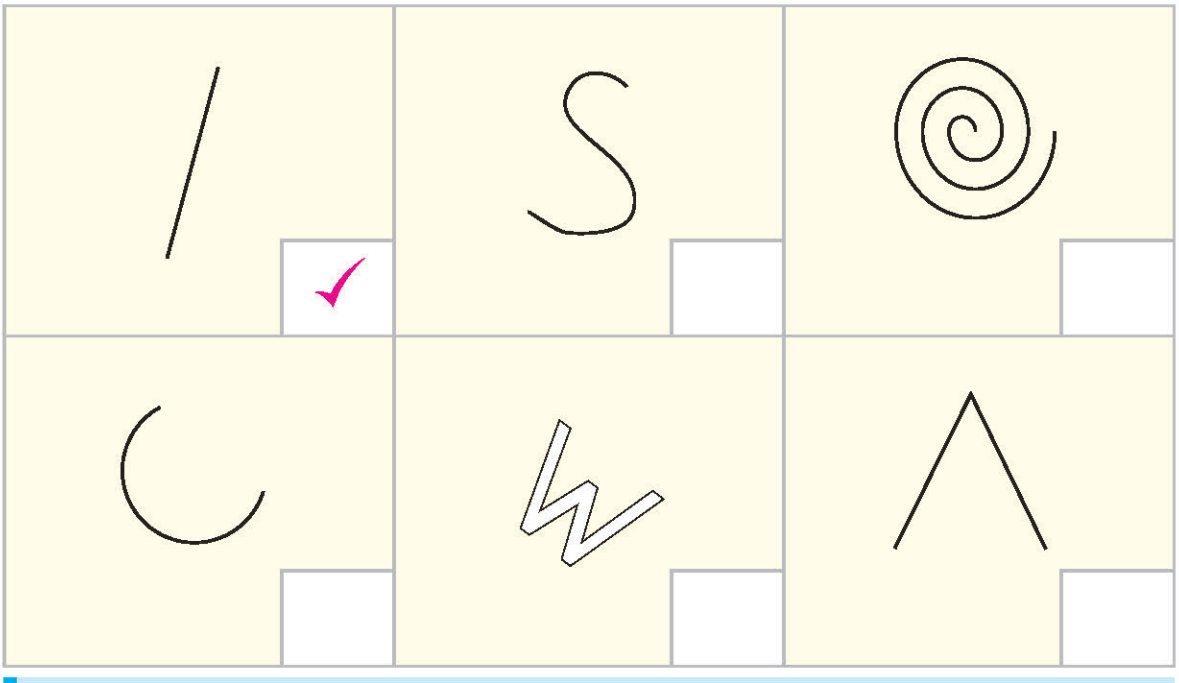
2. Count the length of straight line from point **M** to **N**



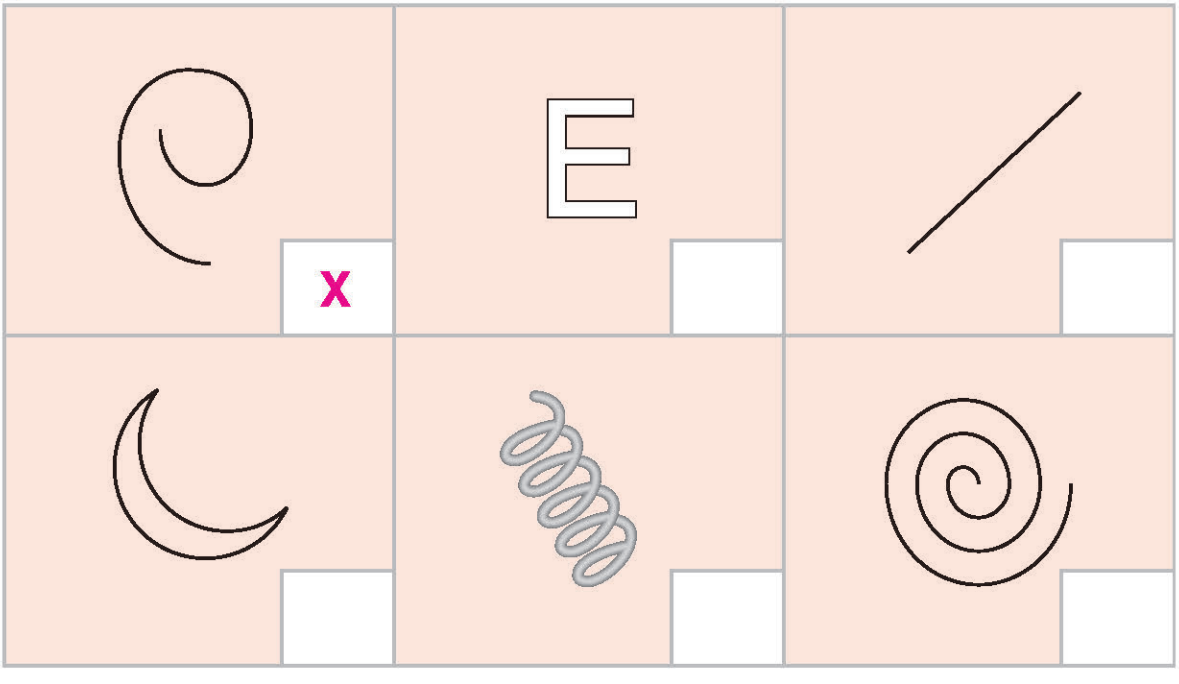
3. The measurement of straight line from **M** to **N** is 7cm.

EXERCISE

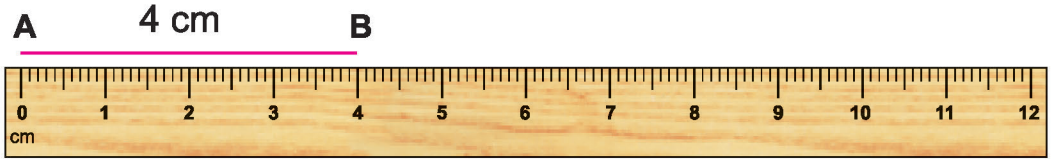
1. Tick (✓) the straight lines in the following shapes

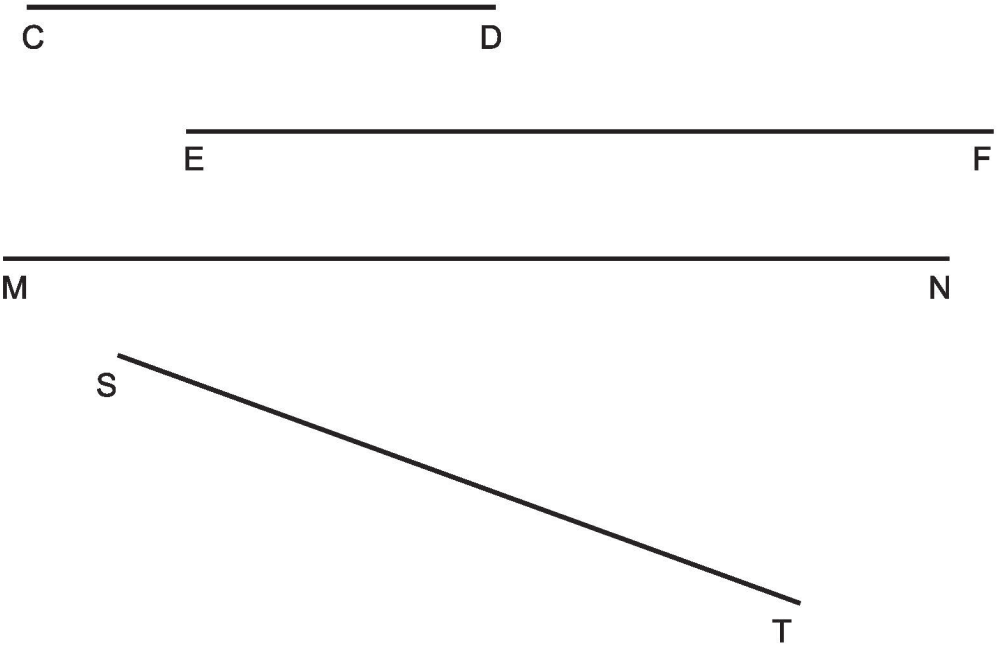


2. Cross (X) the curved lines in the following shapes



3. Measures the following lines with straight edge / ruler





4. Draw the straight lines of the following measures

5 cm	5 cm
7 cm	
4 cm	
9 cm	
3 cm	

- بڑوں کا ادب کرنا اچھی عادت ہے۔
- نیک بنو نیکی پھیلاؤ۔
- والدین کا احترام کرنا چاہیے۔
- سچ بولنا اچھی عادت ہے۔
- چوری کرنا گُناہ ہے۔
- صبح سویرے اُٹھنا اچھی عادت ہے۔
- علم کی روشنی پھیلاؤ۔
- جھوٹ بولنا بُری بات ہے۔
- اساتذہ کا احترام کرنا چاہیے۔
- صفائی نصف ایمان ہے۔

قومی احتساب بیورو بلوچستان

قومی ترانہ

پاک سَرزمین شادباد کِشورِ حَسین شادباد
تُو نِشانِ عَزمِ عالی شان اَرض پاکِستان
مرکزِ یقین شادباد
پاک سَرزمین کا نِظام قُوّتِ اُخُوّتِ عوام
قوم، مُلک، سَلطنت پائِندہ تابِندہ باد
شادباد منزلِ مُراد
پرچَمِ سِتارہ و ہِلال رَہبرِ تَرقّی و کمال
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