

NEW
FAVOURITE
MATH



Level **B**

NEW FAVOURITE MATH

Levels A-F

Modern Book Center

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We would like to thank the editors and our designers, who all contributed to the development of New Favourite Math.

We would like to dedicate this course to the teachers around the world who will bring New Favourite Math to life in their classrooms.

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Authors:

- Prof. Brian Marshall.
- Dr. Mark Erans.
- Anna Kush

Academic Consultants:

- Dr. Akram Al Dyat.
- Dr. Hamza Al Majdelawy.
- Dr. Hussien Al Sharafat.
- Dr. Emtinan Al Wuheiby.
- Dr. Ahmad Kana'an.

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NEW FAVOURITE MATH

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1.1 Numbers Within 99

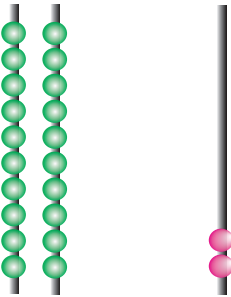
Tens



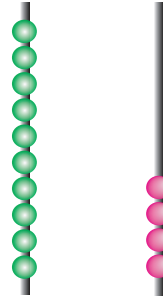
Ones



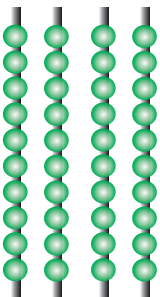
• Count and write:



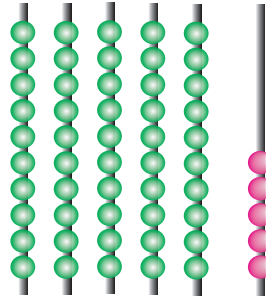
Tens	Ones	Number
2	2	22



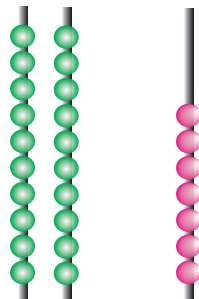
Tens	Ones	Number



Tens	Ones	Number



Tens	Ones	Number

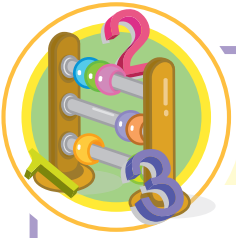


Tens	Ones	Number



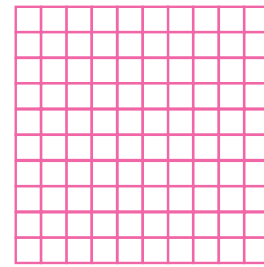
- How many tens and ones are there in:

Number	Tens	Ones
12	1	2
23		
45		
67		
78		
90		
20		
33		
57		
9		



1.2 Numbers Within 999

- Count the small squares in this figure. There are 100 small squares in one hundred.



one hundred units



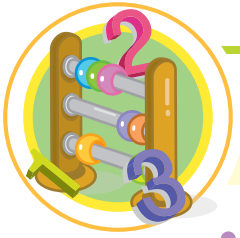
ten units



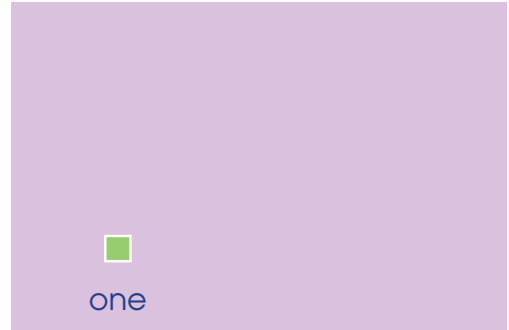
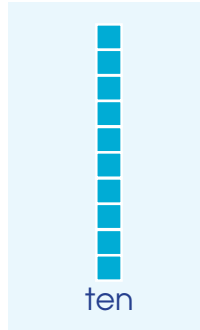
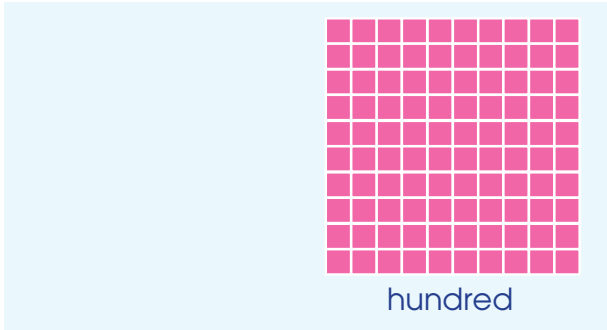
one unit

- Count and write how many hundreds:

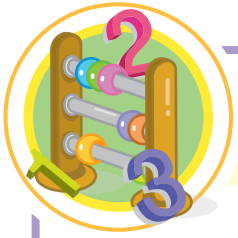
	In words	In numbers
	two hundreds	_____
	_____ hundreds	_____
	_____ hundreds	_____
	_____ hundred	_____



• Count and write.



	Hundreds	Tens	Ones	Number
	1	1	3	113
	—	—	—	—
	—	—	—	—
	—	—	—	—



1.3 Reading and Writing Numbers

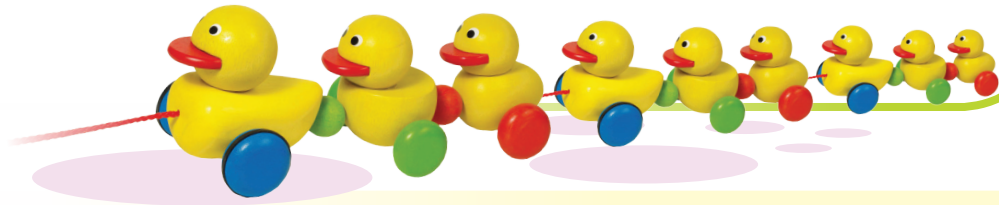
- Look at the number

123

- We say: It is one hundred and twenty three,
(It has one hundred, two tens, three ones).

- Read the number and write how many hundreds, tens and ones there are.

Number	Hundreds	Tens	Ones
123	1	2	3
234	—	—	—
345	—	—	—
406	—	—	—
678	—	—	—
890	—	—	—
900	—	—	—
623	—	—	—



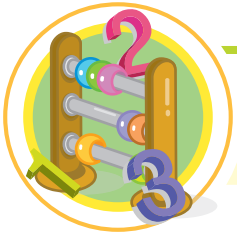
- Read the number.
- Write the underlined number in its correct place.

Number	Hundreds	Tens	Ones
<u>1</u> 09	1		
2 <u>1</u> 8	—	—	—
4 <u>3</u> 6	—	—	—
5 <u>4</u> 5	—	—	—
7 <u>6</u> 3	—	—	—
8 <u>7</u> 2	—	—	—
9 <u>8</u> 1	—	—	—
9 <u>0</u> 0	—	—	—



- Write the number.

Hundreds	Tens	Ones	Number
3	4	2	342
3	0	6	_____
4	3	0	_____
6	1	0	_____
1	0	0	_____
7	4	7	_____
5	8	5	_____
7	5	0	_____



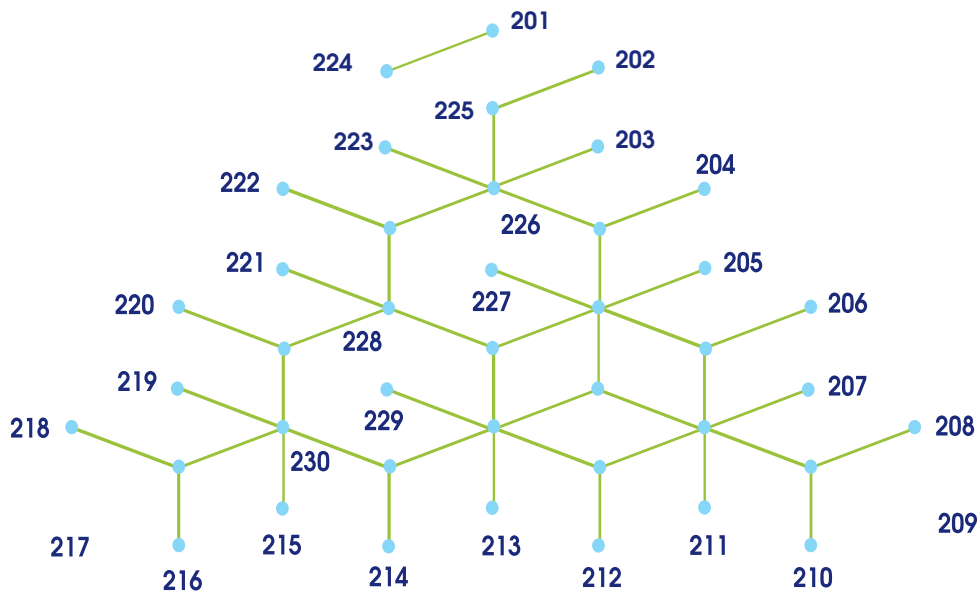
1.4 Counting

Count in ones to complete the table.



101				105				110
211		213						219
321			324				328	
431		433				437		
541					546			550
651				655			658	
761			764				768	
871		873			876			
981	982				986			
991			994				998	

- Join the dots to complete the picture (starting from 201) then colour it.



- Count in tens to complete the table.

10		30			60			90	100
110									
210		230			260				300
310			340			370			
410			440			470			500

- Count in ones or tens to complete the table.

331		333		335		337		339	
510		530		550		570		590	
605	606			609	610			613	614
830			860			890	900		920
11				15				19	
600		602			605			608	

- Count by **2** steps.



- Draw circles around the numbers that you stopped at and circle them.

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

- Write the circled numbers.

- Count by **5** steps.

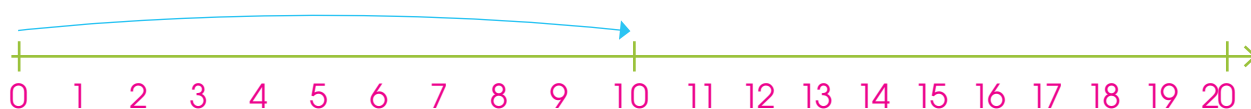


- Draw triangles around the numbers that you stopped at and circle them.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

- Write the circled numbers.

- Count by **10** steps.



- Draw a square around the numbers that you stopped at and circle them.

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

- Write the circled numbers.





1.5 Greater or Smaller (Ordering)

- Look at the numbers.



One hundred and twenty three is smaller.

Three hundred and forty one is greater.



H	T	O
1	2	3
3	4	1

One hundred and twenty three.

Three hundred and forty one.

- The first number has 1 in the hundreds column and the second number has 3 in the hundreds column, so the second number is greater.
- Circle the greatest number in each set.
(Check the hundreds column).

123, 321

234, 432

543, 345

637, 736

259, 952

121, 323

809, 790

671, 563

819, 929

- Circle the smallest number in each set.

136, 361, 613

569, 956, 695

517, 751, 175

461, 146, 614



- If the numbers in the hundreds column are the same, then check the **tens column**. If the number in the tens column is greater, then the number is greater.
- Circle the greatest number in each set.
(Check the tens column).

325, 346

231, 212

630, 640

901, 926

125, 169

459, 426

- If the numbers in the hundreds and tens columns are the same, then check the **ones column**. If the number in the ones column is greater, the number is greater.
- Circle the greatest number in each set.
(Check the ones column).

123, 125

231, 234

345, 348

788, 786

808, 802

912, 916

- Circle the greatest number.

206, 202, 260

704, 407, 470

495, 594, 945

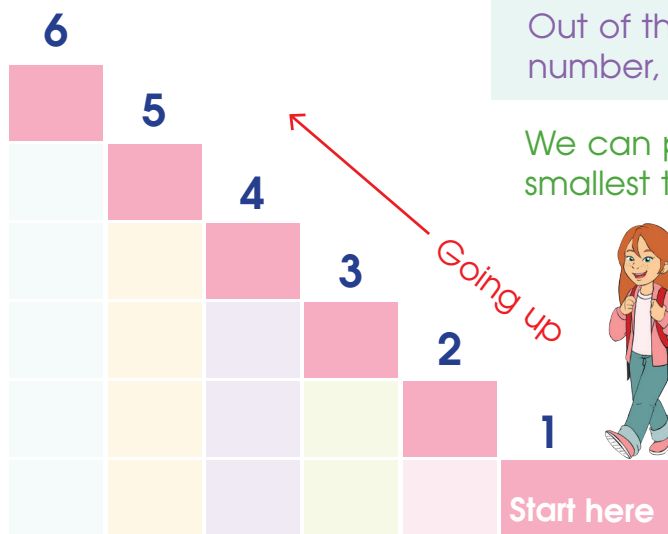
235, 352, 532



1.6 Ascending and Descending Order

Ascending order

- Look at the numbers, **5, 2, 3, 1, 6, 4**.



Out of these, number 1 is the smallest number, 6 is the greatest number.

We can put the numbers from the smallest to the greatest like this.



Can you define the ascending order using your own words?

- This is called the **ascending order of numbers**.
- Write the numbers in ascending order.

15	27	40
35	12	66

→

	15				
--	----	--	--	--	--

17	45	33
99	32	56

→

					99
--	--	--	--	--	----

145	263	272
736	418	481

→

--	--	--	--	--	--

633	725	810
612	646	216

→

--	--	--	--	--	--

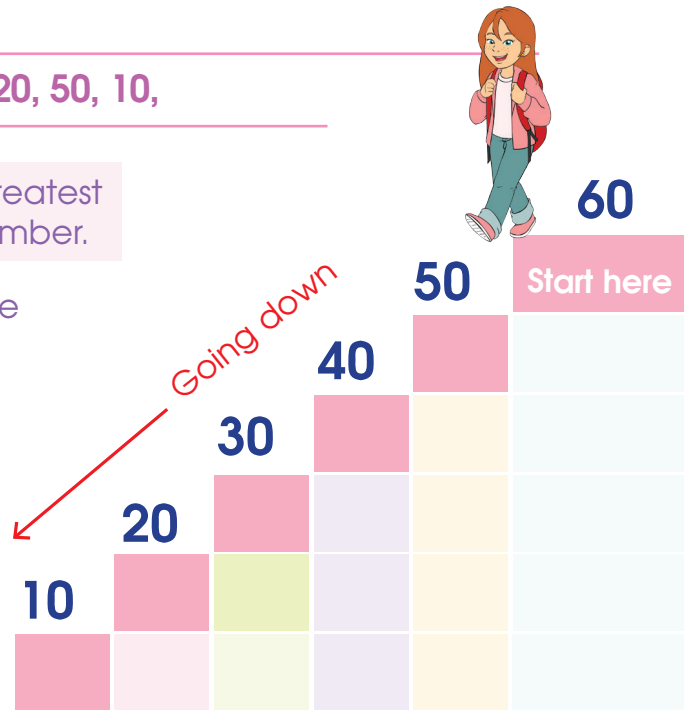
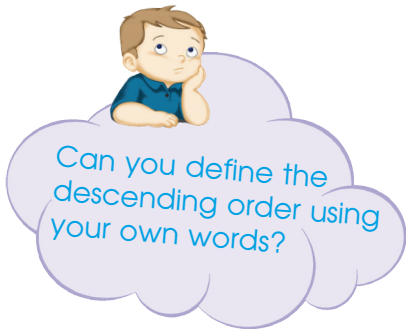


The descending order

- Look at the numbers: **60, 30, 40, 20, 50, 10,**

Out of these numbers 60 is the greatest number and 10 is the smallest number.

We can put the numbers from the greatest to the smallest like this.



- This is called the **descending order of numbers.**
- Write the numbers in a descending order.

31 93 82

75 74

→

93				
----	--	--	--	--

7 6

9 8 10

→

--	--	--	--	--

260 620 740

650 130

→

--	--	--	--	--

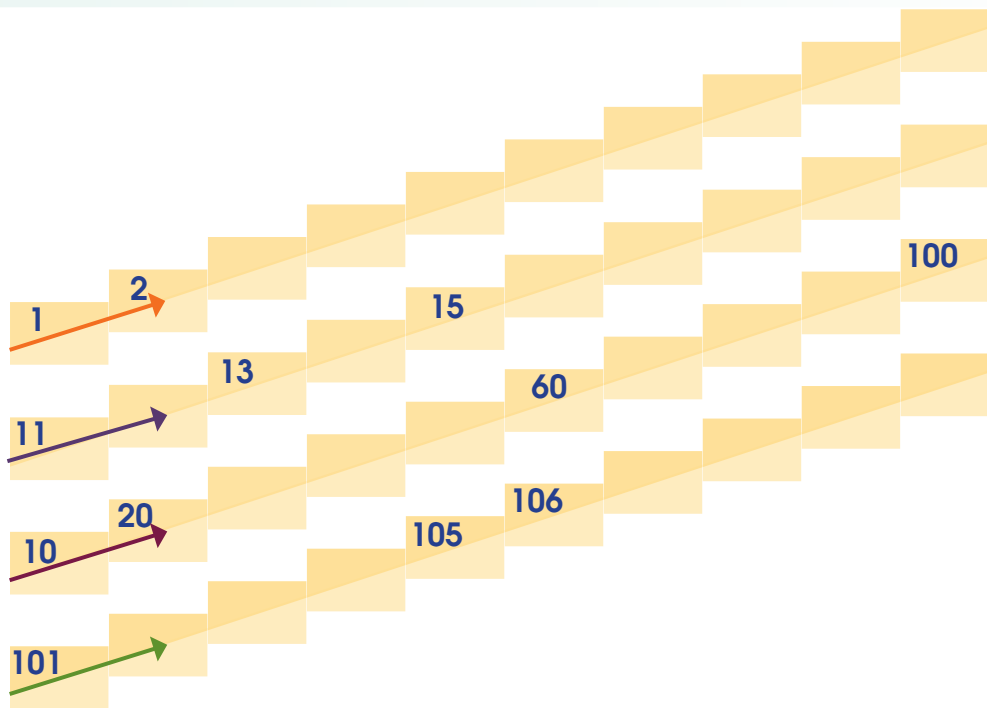
218 745

238 254 227

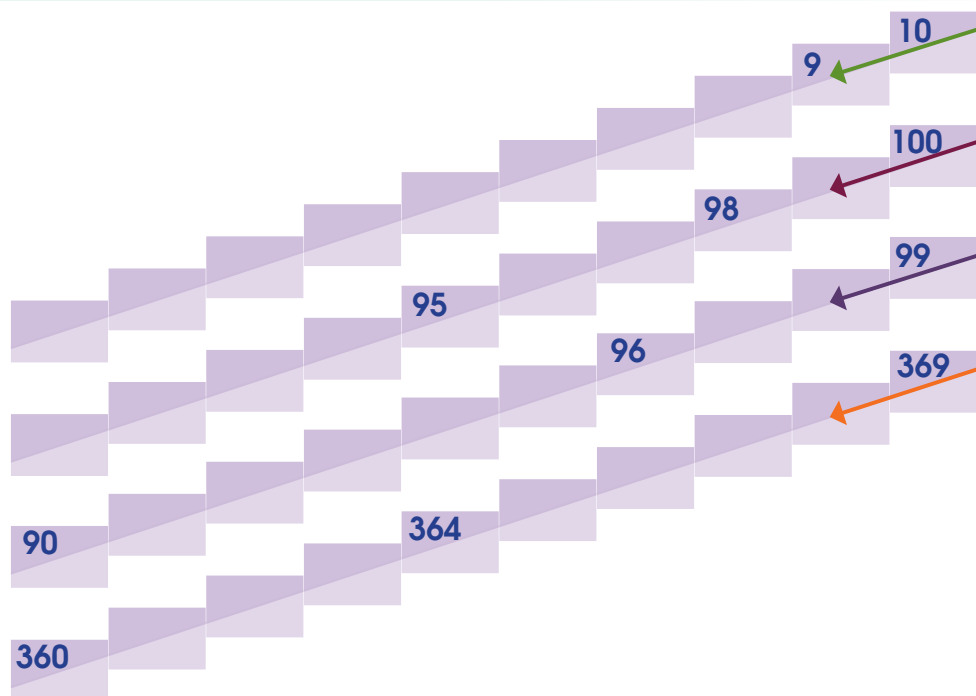
→

--	--	--	--	--

- Write the following numbers in ascending order:



- Write the following numbers in descending order:





1.7 Number Patterns

- Write the number that comes next.

10, 121, 117, 29, 256,

320, 47, 157, 816,

- Write the number that comes in-between.

99,, 101

464,, 466

328,, 330

282,, 284

548,, 550

372,, 374

- Write the number that comes before.

....., 88

....., 100

....., 61

....., 65

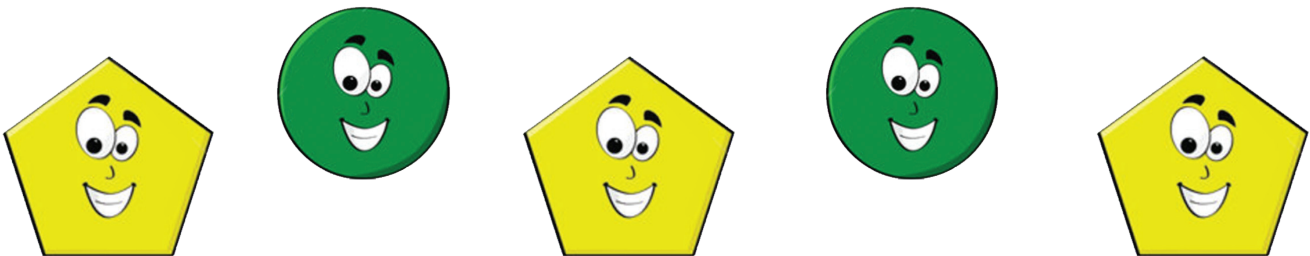
....., 80

....., 71

....., 30

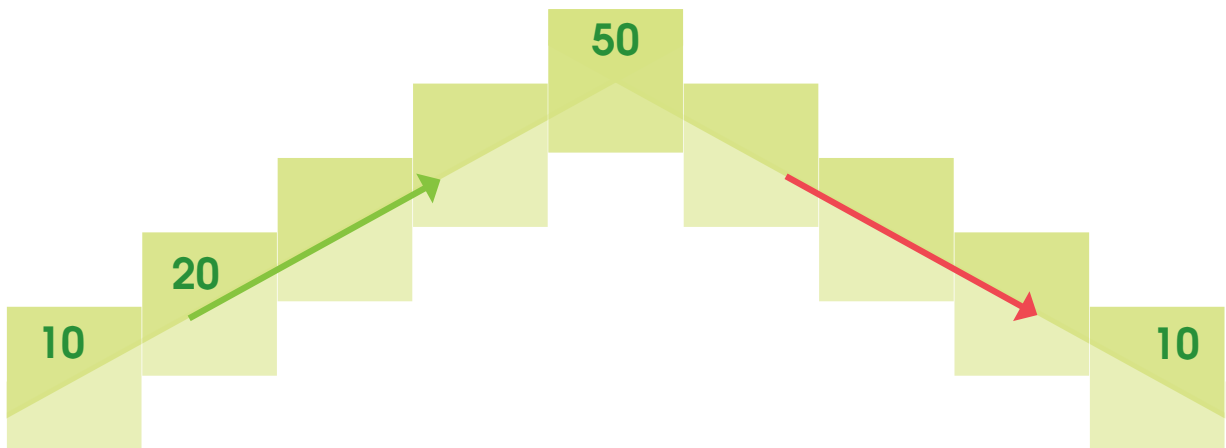
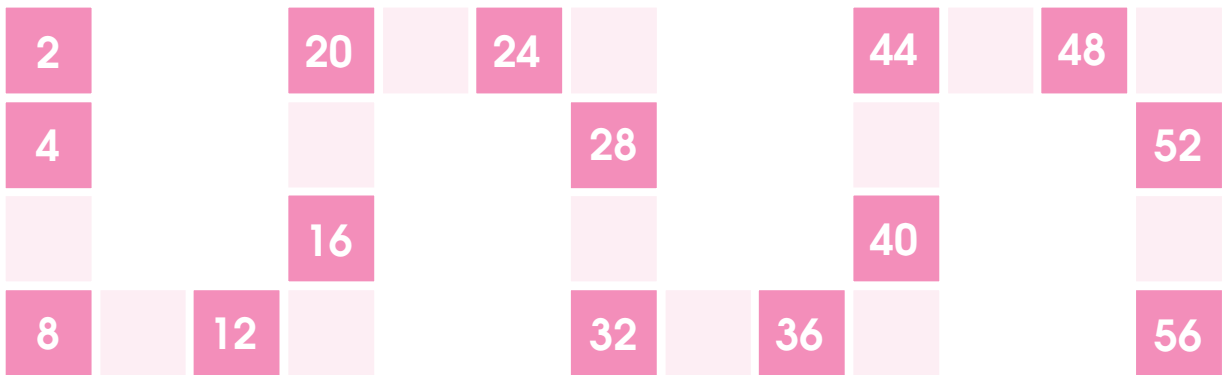
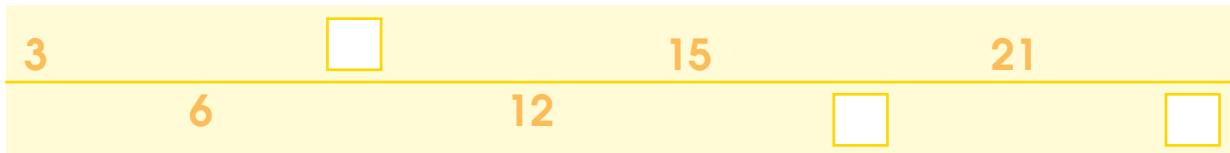
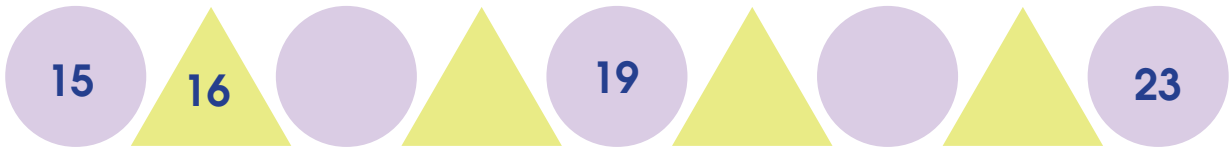
....., 91

....., 81





• Complete the number patterns.





1.8 Numbers in Words

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





To get help,
look at the
next page!



- Write the following numbers in words.

Number

10

.....

120

.....

235

.....

342

.....

550

.....

606

.....

703

.....

780

.....

998

.....

1000

.....



We say	We write
One hundred	100
One hundred and one	101
One hundred and ten	110
One hundred and eleven	111

• Write in numbers.

Two hundred and eleven 211
Four hundred and five
Six hundred and thirteen
Eight hundred and nine
Nine hundred

• Write the numbers in words.

423 Four hundred and twenty three

234

345

567

789

Revision Test

1 Complete the following.

501,,,, 505,,,, 510

10,,,, 50,,,, 90,

2 Following the pattern, write the number that comes next.

3,, 9,, 15,, 21,, 27,

3 Write the following in ascending order.

12, 20, 16, 19, 15, 17, 11, 13, 18, 14

.....

4 Write the following in descending order.

9, 1, 2, 6, 5, 8, 3, 10, 7, 4,

.....

5 Tick the smallest number in each set.

136, 263, 316

625, 265, 562



6 Tick the greatest number in each set.

213, 131, 319

206, 602, 260

7 Write the number that comes after.

100,..... 639,.....

8 Write the number that comes in-between.

659,....., 661 473,..... 475

9 Write the number that comes before.

....., 30 , 555

10 Write the numbers in words.

11,, 13....., 96.....

11 Write the words in numbers.

▶ One hundred and eleven

▶ Six hundreds

▶ Nine hundreds and seven



2.1 Introduction to Addition

$1 + 2 = \dots\dots\dots$

$2 + 0 = \dots\dots\dots$

$2 + 3 = \dots\dots\dots$

$3 + 1 = \dots\dots\dots$

$3 + 4 = \dots\dots\dots$

$4 + 2 = \dots\dots\dots$

$4 + 5 = \dots\dots\dots$

$5 + 3 = \dots\dots\dots$

$5 + 1 = \dots\dots\dots$

$5 + 2 = \dots\dots\dots$

$6 + 2 = \dots\dots\dots$

$7 + 2 = \dots\dots\dots$

$7 + 2 = \dots\dots\dots$

$7 + 0 = \dots\dots\dots$

- Complete the table.

+	1	2	3	4	5	6
1	2					
2		4				
3			6			
4				8		
5					10	
6						12



2.2 Addition to Make 10

- Draw the missing number of circles to make 10.

- Write the missing numbers.

$0 + \bigcirc = 10$

$3 + \bigcirc = 10$

$10 + \bigcirc = 10$

$8 + \bigcirc = 10$

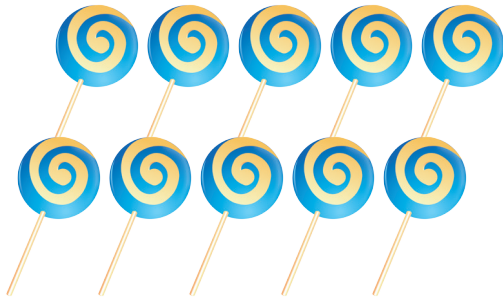
$2 + \bigcirc = 10$

$1 + \bigcirc = 10$



Addition by Tens

I have ten sweets.



$$10 + 1 = 11$$

$$20 + 2 =$$

$$14 + 4 =$$

You can take mine too.



$$7 + 8 =$$

$$9 + 6 =$$

$$10 + 10 =$$



2.3 Addition to Make 20 and More



- Write the missing number.

$19 + \dots\dots 1 \dots\dots = 20$

$9 + \dots\dots\dots = 20$

$8 + \dots\dots\dots = 20$

$18 + \dots\dots\dots = 20$

$7 + \dots\dots\dots = 20$

$17 + \dots\dots\dots = 20$

$6 + \dots\dots\dots = 20$

$16 + \dots\dots\dots = 20$

$5 + \dots\dots\dots = 20$

$15 + \dots\dots\dots = 20$

$4 + \dots\dots\dots = 20$

$14 + \dots\dots\dots = 20$

$3 + \dots\dots\dots = 20$

$13 + \dots\dots\dots = 20$

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

$12 + \dots\dots\dots = 20$

$1 + \dots\dots\dots = 20$

$11 + \dots\dots\dots = 20$



(Adding Tens and Ones)

$$12 + 15 = 27$$

$$10 + 2 + 10 + 5 = 20 + 7$$

////////// + //

+

////////// + /////

Add:

$12 + 15 = \dots\dots 27 \dots\dots$

$24 + 23 = \dots\dots\dots$

$13 + 23 = \dots\dots\dots$

$33 + 26 = \dots\dots\dots$

$25 + 60 = \dots\dots\dots$

$45 + 13 = \dots\dots\dots$

$13 + 76 = \dots\dots\dots$

$32 + 23 = \dots\dots\dots$



2.4 Adding Two-Digit Numbers Without Regrouping

Tens Ones

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

Add the ones first.
Then, add the tens.

T	O
4	7
+ 3	2
<hr/>	
<input type="text"/>	<input type="text"/>

T	O
5	6
+ 3	2
<hr/>	
<input type="text"/>	<input type="text"/>

T	O
4	8
+ 4	1
<hr/>	
<input type="text"/>	<input type="text"/>

T	O
4	5
+ 5	3
<hr/>	
<input type="text"/>	<input type="text"/>

2	7
+ 4	2
<hr/>	
<input type="text"/>	<input type="text"/>

7	6
+ 2	3
<hr/>	
<input type="text"/>	<input type="text"/>

2	4
+ 1	3
<hr/>	
<input type="text"/>	<input type="text"/>

4	5
+ 2	0
<hr/>	
<input type="text"/>	<input type="text"/>

5	1
+ 1	5
<hr/>	
<input type="text"/>	<input type="text"/>

4	4
+ 3	4
<hr/>	
<input type="text"/>	<input type="text"/>

5	5
+ 3	4
<hr/>	
<input type="text"/>	<input type="text"/>

7	6
+ 2	3
<hr/>	
<input type="text"/>	<input type="text"/>

6	0
+ 1	6
<hr/>	
<input type="text"/>	<input type="text"/>

1	1
+ 1	3
<hr/>	
<input type="text"/>	<input type="text"/>

8	1
+ 0	3
<hr/>	
<input type="text"/>	<input type="text"/>

4	5
+ 3	2
<hr/>	
<input type="text"/>	<input type="text"/>



Adding Three-Digit Numbers Without Regrouping

H
(Hundred)

	H	T	O
	2	1	6
+	1	4	2
<hr/>			
	3	5	8

Add ones first, then tens and hundreds last.

	H	T	O
	1	1	9
+	2	8	0
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	H	T	O
	4	0	8
+	1	8	0
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	H	T	O
	2	1	0
+	1	7	6
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	1	1	9
+	2	6	0
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	3	4	2
+	2	4	1
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	7	3	2
+	2	6	7
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	2	5	3
+	3	1	4
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	1	9	6
+	1	0	2
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	2	5	3
+	2	1	4
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>



2.5 Adding With Regrouping

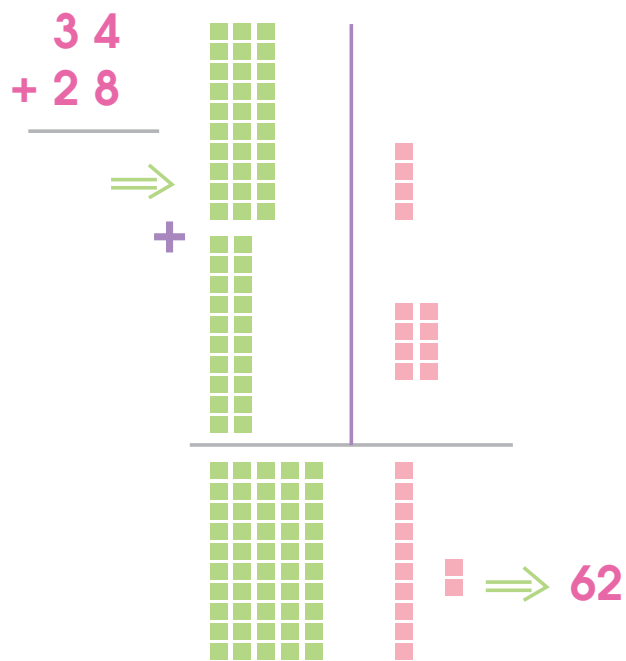
Sara has \$28. Her mother gave her \$34 as a reward because she got the 1st place in the class.

How much does Sara have now?

We have to make an addition of \$28 and \$34

So:

$$34 + 28 = \dots\dots\dots$$

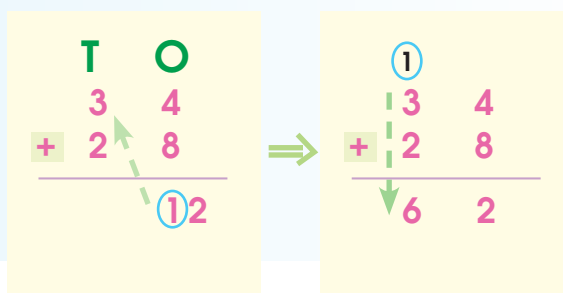


We learnt to start addition with ones.

$$4 + 8 = 12$$

1(tens) + 2 (ones)

10 + 2, we move the (1) tens to tens column and keep on 2 as a result.





Adding Two-Digit Numbers With Regrouping

- Find the sum of the following.

$$\begin{array}{r} \text{T} \quad \text{O} \\ 2 \quad 1 \\ + 3 \quad 9 \\ \hline 6 \quad 0 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 7 \quad 3 \\ + 4 \quad 8 \\ \hline 12 \quad 1 \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 3 \quad 5 \\ + 4 \quad 7 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 4 \quad 7 \\ + 3 \quad 8 \\ \hline \end{array}$$

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

$$\begin{array}{r} \text{T} \quad \text{O} \\ 6 \quad 4 \\ + 1 \quad 9 \\ \hline \end{array}$$

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

$$\begin{array}{r} 4 \quad 7 \\ + 2 \quad 9 \\ \hline \end{array}$$

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

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

$$\begin{array}{r} 7 \quad 9 \\ + 2 \quad 6 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \quad 9 \\ + 3 \quad 1 \\ \hline \end{array}$$

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

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



2.6 Adding Three-Digit Numbers With Regrouping

Add: $397 + 245 =$

$$\begin{array}{r} 397 \\ + 245 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{1} \\ 397 \\ + 245 \\ \hline 2 \end{array}$$

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1} \\ 397 \\ + 245 \\ \hline 42 \end{array}$$

$$\begin{array}{r} \textcircled{1} \quad \textcircled{1} \\ 397 \\ + 245 \\ \hline 642 \end{array}$$

Step 1:

Add ones (Regrouping)
 $7 + 5 = 12$

Step 2:

We have to add tens
 $9 + 4 = 14$
Remember regrouping (1).

Step 3:

Add hundreds, so:
 $3 + 2 + (1) = 6$

Find the sum of the following, then check your answer.

	H	T	O
	4	4	4
+	2	2	8

	H	T	O
	2	5	2
+	3	6	8

	H	T	O
	6	4	8
+	1	1	9

	5	6	6
+	2	3	4

	1	6	1
+	6	5	8

	2	9	6
+	3	2	3



2.7 Problem Solving

(Addition and Subtraction)

- 1 Molly has 5 apples. Sam gave her 11 more.
How many apples does Molly have?

Molly **5** apples

Sam **+ 11** apples

- 2 Sara has 631 papers. Her friends gave her 489 more.
How many papers does Sara have?

- 3 There were 25 birds on a tree, 6 birds flew away.
How many birds were left on the tree?





4 Find the sum of the following, then check your answer.

$$\begin{array}{r} 4 \quad 8 \\ + \quad 4 \quad 9 \\ \hline \square \quad \square \end{array}$$

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

$$\begin{array}{r} 4 \quad 5 \\ + \quad 6 \quad 9 \\ \hline \square \quad \square \end{array}$$

$$\begin{array}{r} 2 \quad 1 \quad 5 \\ + \quad 3 \quad 6 \quad 6 \\ \hline \square \quad \square \quad \square \end{array}$$

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

$$\begin{array}{r} 2 \quad 5 \quad 3 \\ + \quad 3 \quad 7 \quad 9 \\ \hline \square \quad \square \quad \square \end{array}$$

$$\begin{array}{r} 8 \quad 3 \\ + \quad 3 \quad 7 \\ \hline \square \quad \square \end{array}$$



3.1 Introduction to Subtraction

Without Regrouping

- ① $6 - 2 = 4$
- ② $7 - 3 = 4$
- ③ $14 - 7 = 7$
- ④ $20 - 11 = 9$
- ⑤ $100 - 20 = 80$

Complete:

- a $60 - 40 = \dots\dots\dots$
- b $100 - 50 = \dots\dots\dots$
- c $20 - 10 = \dots\dots\dots$
- d $50 - 50 = \dots\dots\dots$
- e $44 - 4 = \dots\dots\dots$
- f $23 - 12 = \dots\dots\dots$

T	O
9	8
- 5	2
4	6

- Subtract the ones first.
- Subtract the tens second.



Find the result.

T	O
3	5
- 1	1

T	O
4	5
- 2	2

T	O
5	5
- 1	3



$$\begin{array}{r} \text{T} \quad \text{O} \\ 6 \quad 7 \\ - 2 \quad 5 \\ \hline \end{array}$$

$$\begin{array}{r} \text{T} \quad \text{O} \\ 9 \quad 7 \\ - 2 \quad 4 \\ \hline \end{array}$$

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

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

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

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

$$\begin{array}{r} 4 \quad 7 \\ - 3 \quad 0 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \quad 9 \\ - 1 \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 8 \quad 6 \\ - 5 \quad 3 \\ \hline \end{array}$$



3.2 Subtracting Three-Digit Numbers Without Regrouping

	H	T	O
	5	6	4
-	1	5	2
<hr/>			
	4	1	2

- Subtract the ones first.
- Subtract the tens second.
- Subtract the hundreds third.

Subtract the following.

	5	6	5
-	3	4	4
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	6	5	6
-	2	3	3
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	7	5	4
-	2	3	4
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	9	7	3
-	7	3	2
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	7	4	9
-	4	2	3
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>

	6	5	8
-	3	2	5
<hr/>			
	<input type="text"/>	<input type="text"/>	<input type="text"/>



3.3 Subtracting Two-Digit Numbers With Regrouping

Remember

That you always work from right to left.

The ones column is on the far right side and then tens and hundreds. Since you are working with two-digit numbers, you only have to worry about ones and tens.

Not all of the subtraction problems will be simple. You will need to borrow/regroup about half of the time. It's not harder. It's just different. As a reminder, the concept of regrouping in subtraction means "borrowing" from the column to the left. Since you are only working with two-digit numbers, you will borrow from the tens column.

$$\begin{array}{r} 9 \quad 1 \\ - 3 \quad 5 \\ \hline \end{array} \rightarrow \begin{array}{r} 1 \\ - 5 \\ \hline \end{array}$$
 We can't subtract 5 from 1, because 5 is greater than 1. But, no worries! We can fix it! Now borrow from the tens stripe ~~9~~ → 8.

$$\begin{array}{r} \cancel{9} \quad 1 \\ - 3 \quad 5 \\ \hline \end{array} \rightarrow \begin{array}{r} 1 \\ 8 \quad 1 \\ - 3 \quad 5 \\ \hline \end{array} \rightarrow \begin{array}{r} 10 \\ 8 \quad 1 \\ - 3 \quad 5 \\ \hline \end{array} \rightarrow \begin{array}{r} 8 \quad 11 \\ - 3 \quad 5 \\ \hline 5 \quad 6 \end{array}$$

Subtract the following.

T	O
6	2
-	2 5
□	□
6	7
-	3 8
□	□

T	O
4	3
-	1 7
□	□
9	0
-	1 2
□	□

T	O
7	1
-	4 7
□	□
6	4
-	3 6
□	□

T	O
5	2
-	3 5
□	□
9	3
-	5 8
□	□

Revision Test



1- Find:

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

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

$$\begin{array}{r} 6 \quad 2 \\ + \quad 3 \quad 5 \\ \hline \square \quad \square \end{array}$$

$$\begin{array}{r} 6 \quad 9 \\ - \quad 2 \quad 3 \\ \hline \square \quad \square \end{array}$$

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

$$\begin{array}{r} 4 \quad 8 \\ - \quad 4 \quad 6 \\ \hline \square \quad \square \end{array}$$

$$\begin{array}{r} 3 \quad 5 \\ + \quad 6 \quad 0 \\ \hline \square \quad \square \end{array}$$

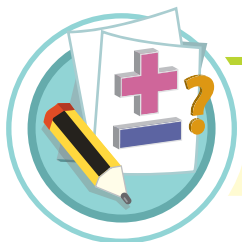
$$\begin{array}{r} 3 \quad 6 \\ - \quad 2 \quad 2 \\ \hline \square \quad \square \end{array}$$

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

$$\begin{array}{r} 6 \quad 6 \\ + \quad 1 \quad 2 \\ \hline \square \quad \square \end{array}$$

$$\begin{array}{r} 7 \quad 9 \\ - \quad 4 \quad 6 \\ \hline \square \quad \square \end{array}$$

$$\begin{array}{r} 8 \quad 7 \\ + \quad 1 \quad 1 \\ \hline \square \quad \square \end{array}$$



2- Add or Subtract:

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

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

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

$$\begin{array}{r} 3 \quad 8 \\ - 1 \quad 2 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \quad 2 \\ + 2 \quad 6 \\ \hline \end{array}$$

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

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

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

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



3- Add or Subtract:

	H	T	O
	4	6	3
+	2	3	1

	H	T	O
	3	4	1
+	1	4	8

	H	T	O
	3	5	6
+	1	3	2

	H	T	O
	7	9	5
+	8	3	7

	H	T	O
	5	6	8
+	1	2	7

	H	T	O
	2	8	8
+	1	5	5

	H	T	O
	5	9	5
-	3	3	2

	H	T	O
	3	6	4
-	1	2	2

	H	T	O
	3	5	6
-	1	3	4

	H	T	O
	4	9	2
-	1	1	6

	H	T	O
	3	5	4
-	1	2	9

	H	T	O
	3	8	1
-	1	7	5



3.4 Problem Solving

- 1 Maggie put 10 pencils in a box. Sam put 8 more.
How many pencils are there in the box?

Maggie **10** pencils

Sam **+** **8** pencils

pencils in the box



- 2 A shop-keeper has 12 toys. He sold 7. How many toys are left?

Shop-keeper has **12** toys

Sold **- 7** toys

toys left



- 3 There are 25 pages in a story book.
Samir read 18 pages. How many pages are left to read?





4.1 The Concept of Multiplication



- **2 groups of 2 are four.**



- **3 groups of 2 are six.**

We can also write:

2 groups of 2 are 4

2 x 2 is 4

3 groups of 2 are 6

3 x 2 is 6

We can read this as:

2 times 2 is 4

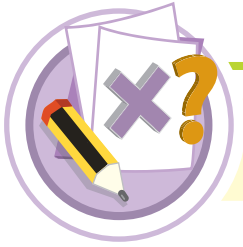
3 times 2 is 6

'**X**' is called the multiplication sign.

It tells us how many times a number is added.

Then, multiplication means that you have a certain number of groups of the same size.





4.2 Multiplication Table



$2 + 2$



2×2

4

$2 + 2 + 2$



2×3

6

$2 + 2 + 2 + 2$

$2 + 2 + 2 + 2 + 2$

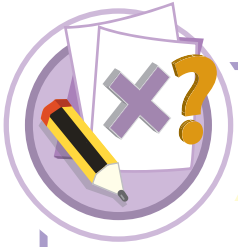
$2 + 2 + 2 + 2 + 2 + 2$

$2 + 2 + 2 + 2 + 2$
 $2 + 2$

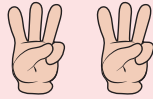
$2 + 2 + 2 + 2 + 2$
 $2 + 2 + 2$

$2 + 2 + 2 + 2 + 2$
 $2 + 2 + 2 + 2$

$2 + 2 + 2 + 2 + 2$
 $2 + 2 + 2 + 2 + 2$



$3 + 3$



3×2

6

$3 + 3 + 3$

$3 + 3 + 3 + 3$

$3 + 3 + 3 + 3 + 3$

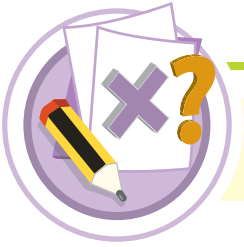
$3 + 3 + 3 + 3 + 3 + 3$

$3 + 3 + 3 + 3 + 3$
 $3 + 3$

$3 + 3 + 3 + 3 + 3$
 $3 + 3 + 3$

$3 + 3 + 3 + 3 + 3$
 $3 + 3 + 3 + 3$

$3 + 3 + 3 + 3 + 3$
 $3 + 3 + 3 + 3 + 3$



$4 + 4$



4×2

8

$4 + 4 + 4$

$4 + 4 + 4 + 4$

$4 + 4 + 4 + 4 + 4$

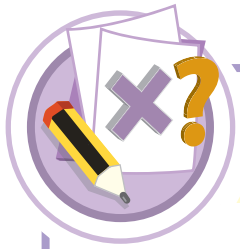
$4 + 4 + 4 + 4 + 4 + 4$

$4 + 4 + 4 + 4 + 4$
 $4 + 4$

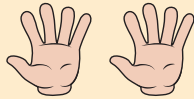
$4 + 4 + 4 + 4 + 4$
 $4 + 4 + 4$

$4 + 4 + 4 + 4 + 4$
 $4 + 4 + 4 + 4$

$4 + 4 + 4 + 4 + 4$
 $4 + 4 + 4 + 4 + 4$



$5 + 5$



5×2

10

$5 + 5 + 5$

$5 + 5 + 5 + 5$

$5 + 5 + 5 + 5 + 5$

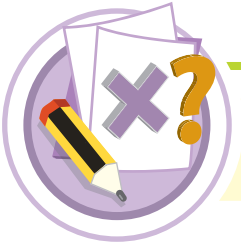
$5 + 5 + 5 + 5 + 5 + 5$

$5 + 5 + 5 + 5 + 5$
 $5 + 5$

$5 + 5 + 5 + 5 + 5$
 $5 + 5 + 5$

$5 + 5 + 5 + 5 + 5$
 $5 + 5 + 5 + 5$

$5 + 5 + 5 + 5 + 5$
 $5 + 5 + 5 + 5 + 5$



4.3 Multiplying by (1), (0) and (10)



- 5 dishes, every dish contains **one** apple.

- Then $1 + 1 + 1 + 1 + 1 = 5$ (number of apples).

Note that number of apples = the number of dishes, so we write $5 \times 1 = 5$

and so on

$$1 \times 1 = 1$$

$$1 \times 2 = 2$$

$$1 \times 3 = 3$$

$$1 \times 4 = 4$$

$$1 \times 5 = 5$$

$$1 \times 6 = 6$$

$$1 \times 7 = 7$$

$$1 \times 8 = 8$$

$$1 \times 9 = 9$$

$$1 \times 10 = 10$$



- You have 5 dishes but the number of apples in every dish = 0 (Zero), so the number of apples = zero and so on

$$0 \times 1 = 0$$

$$0 \times 2 = 0$$

$$0 \times 3 = 0$$

$$0 \times 4 = 0$$

$$0 \times 5 =$$

$$0 \times 6 =$$

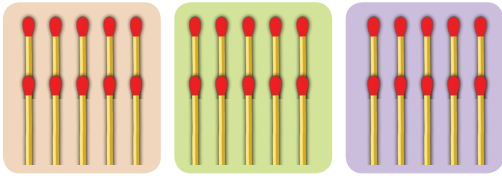
$$0 \times 7 =$$

$$0 \times 8 =$$

$$0 \times 9 =$$

$$0 \times 10 =$$

1

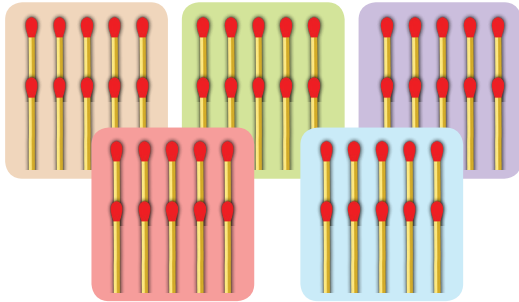


You see 3 groups, every one contains 10 matchsticks, so:

$$10 + 10 + 10 = 30$$

$$10 \times 3 = 30$$

2



$$10 + 10 + 10 + 10 + 10 = 50$$

$$10 \times 5 = 50$$

Let's continue:

$10 \times 1 = 10$

$10 \times 5 = \underline{\hspace{2cm}}$

$10 \times 8 = \underline{\hspace{2cm}}$

$10 \times 2 = 20$

$10 \times 6 = \underline{\hspace{2cm}}$

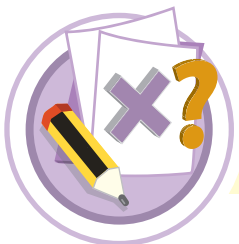
$10 \times 9 = \underline{\hspace{2cm}}$

$10 \times 3 = 30$

$10 \times 7 = \underline{\hspace{2cm}}$

$10 \times 10 = \underline{\hspace{2cm}}$

$10 \times 4 = \underline{\hspace{2cm}}$



Exercise

Do you know how to use multiplication tables?



3

X 2

4

X 1

2

X 2

3

X 3

4

X 4

5

X 5

8

X 5

9

X 4

4.4 Problem Solving

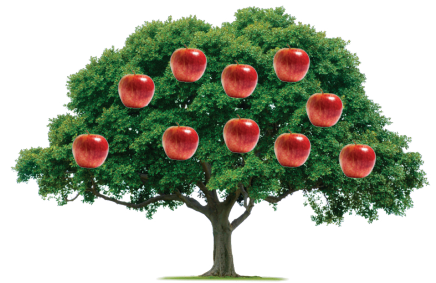
a) 1 pencil box has 6 pencils.

3 pencil boxes have $(3 \times 6) = \dots\dots\dots$ pencils.



b) 1 tree has 10 apples.

6 trees have =apples...



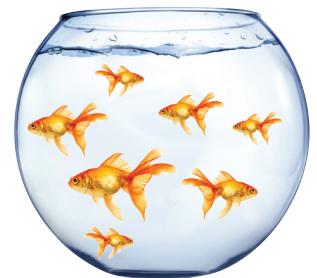
c) 1 flower pot has 5 flowers.

7 flower pots have =flowers.....



d) 1 pot has 7 fishes.

5 pots have =fishes.....

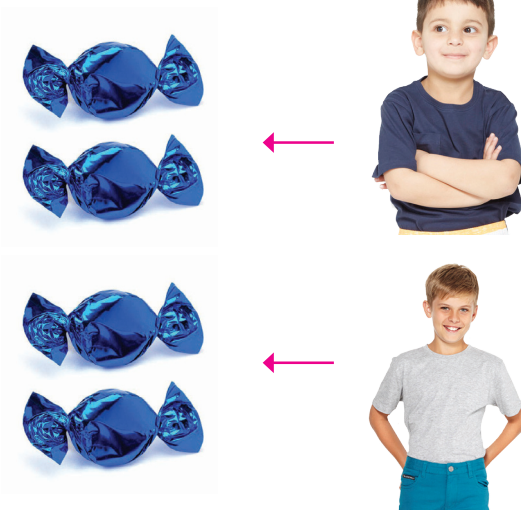




5.1 Definition of Division

Division means splitting into equal parts or groups. It is the result of "fair sharing".

- 2 boys share 4 sweets.



Each boy will get 2 sweets.

- Put 10 oranges in 5 baskets.



Each basket has 2 oranges.

- Put 8 buttons on 2 shirts.



- Each shirt has 4 buttons.

- 2 girls share 6 toys.



- Each girl has 3 toys.



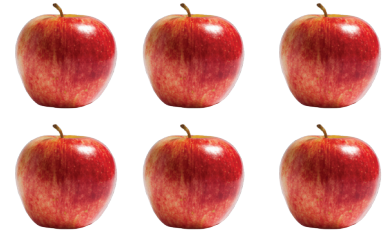
5.2 Application on Division

Dividing 6 apples between 2 baskets.

Put one apple in each.

4 apples are left

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



Put one more apple in each.

2 apples are left

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



Put one more apple in each.

No apples are left

$$\begin{array}{r} 2 \\ - 2 \\ \hline 0 \end{array}$$

We have put **3** apples in each basket, and no apples are left.

We have divided **6** apples into two baskets.

Each basket has **3** apples.

We can write this as:

6 apples divided into **2** baskets $6 \div 2$

We use the sign, \div , to divide.

To divide means to give or share things equally.



Making groups of 2.



$$2 \div 2 = 1$$

We can make **1** group of **2**.



$$4 \div 2 = 2$$

We can make **2** groups of **2** in each.



$$6 \div 2 = 3$$

We can make **3** groups of **2** in each.



$$8 \div 2 = 4$$

We can make **4** groups of **2** in each.

Making groups of 5



1 group of **5**.



2 groups of **5** in each.



3 groups of **5** in each.





Divide.

8 books among 2 boys. $8 \div 2$ is 4 books each.

10 buttons among 2 shirts. $10 \div 2$ isbuttons each.

9 toys among 3 children. $9 \div 3$ istoys each.

5 chocolates among 5 children. $5 \div 5$ ischocolate each.

How many will each get?



Each boy gets balls.

$$4 \div 2$$



Each girl gets balloons.

$$6 \div 3$$



Each basket has apples.

$$9 \div 3$$

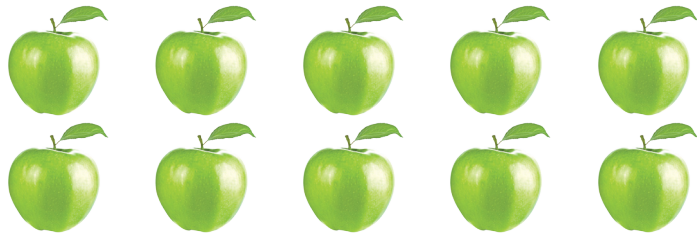


• Divide

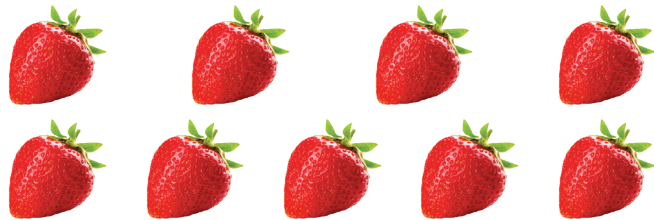
a 12 cupcakes in 3 boxes.
 $12 \div 3 = 4$ cupcakes in each box.



b 10 apples in 2 boxes.



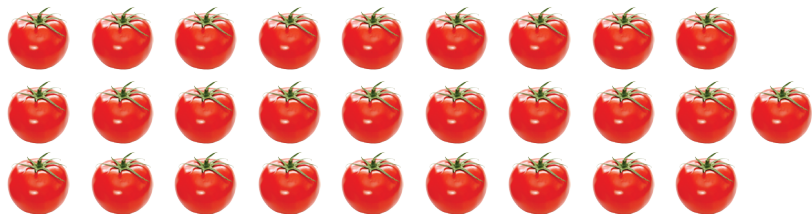
c 9 strawberries in 3 boxes.



d 36 cookies in 4 boxes.



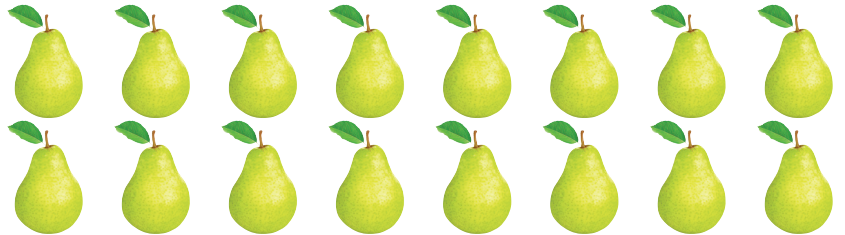
e 28 tomatoes in 4 boxes.





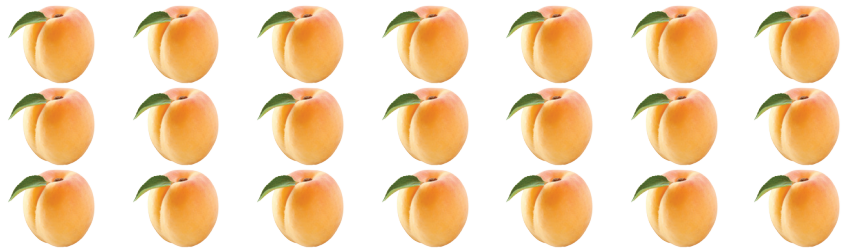
f 16 pears in 4 plates.

.....
.....



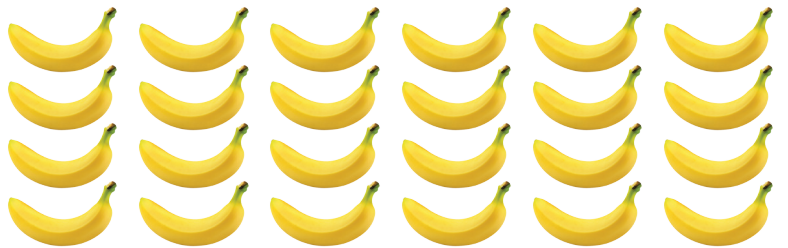
g 21 apricots in 7 boxes.

.....
.....



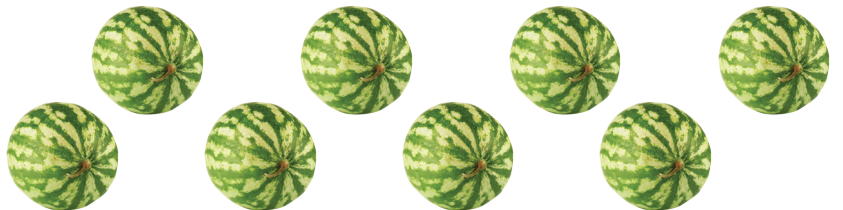
h 24 bananas among 6 boys.

.....
.....



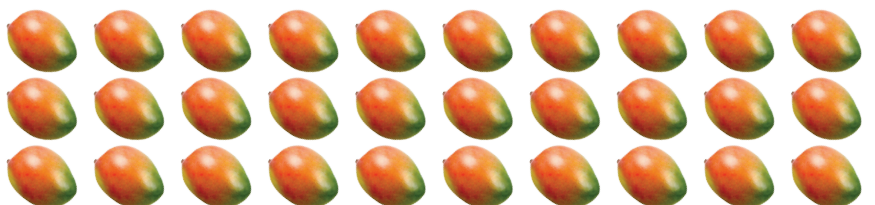
i 8 watermelons in 8 tins.

.....
.....





j 30 mangoes in 5 boxes.

.....
.....





5.3 Problem Solving

1 Divide 20  equally among your 5 friends.
How many  will each get?

.....




2 Divide 36 books equally among 6 people.
How many books will each get?



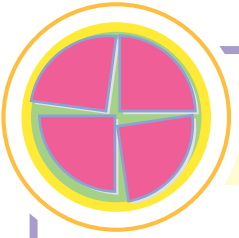
.....

3 Divide 7  into 1 group.
How much will the group get?

.....

4 Lara and Sara have 8 . Each has the same number
of .
How many  does each have?

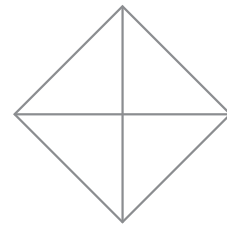
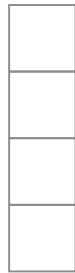
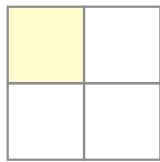
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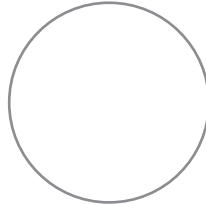
6.1 Fraction 1

- When we make four equal parts of an object, we have made four quarters.
One part out of four is called **one-fourth or (a quarter)**.

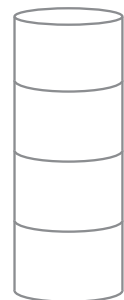
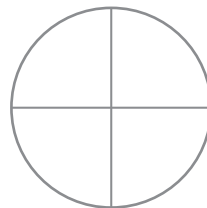
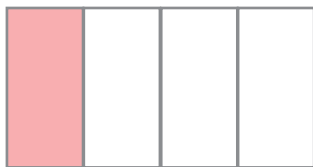
- Colour one-fourth of each.



- Draw lines to make halves then colour.



- Colour one-fourth (quarter) of each.



I can represent
the coloured part
by $\frac{1}{4}$.
 $\frac{1}{4}$ is read as 1 over 4
and is called a fraction.

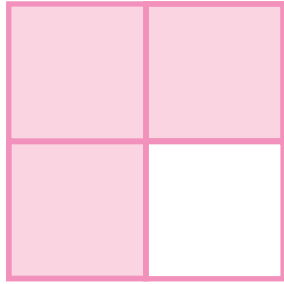


6.2 Fraction 2

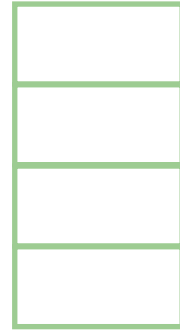


Three-fourths means three out of four equal parts.

- Colour three-fourths of each.



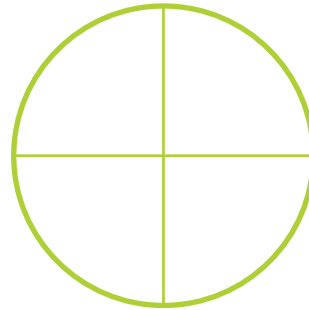
I can represent the coloured shape by $\frac{3}{4}$.



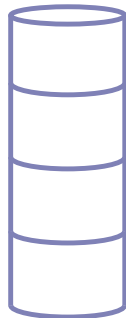
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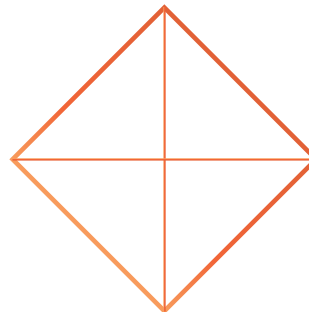
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.....



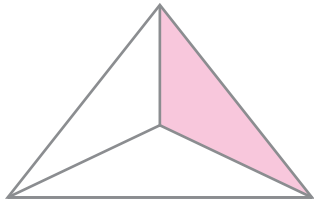
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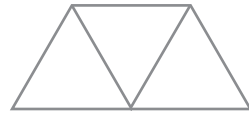
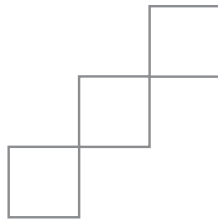
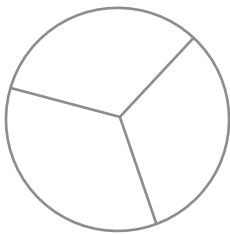
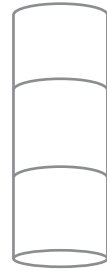
.....

- One-third means one out of three equal parts.

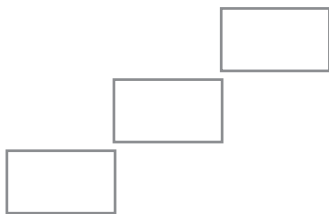
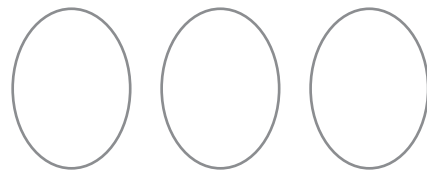
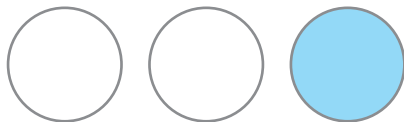
- Colour one-third of each.



In fraction = $\frac{1}{3}$



- Colour one-third of each.

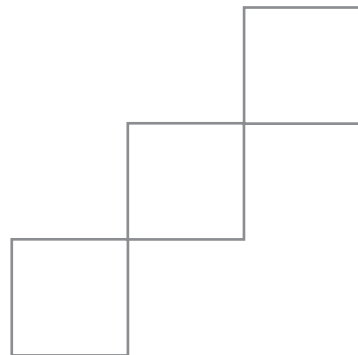
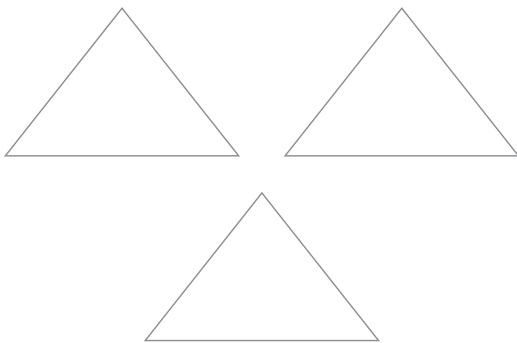
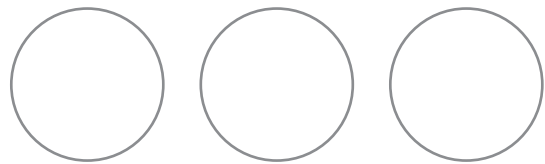
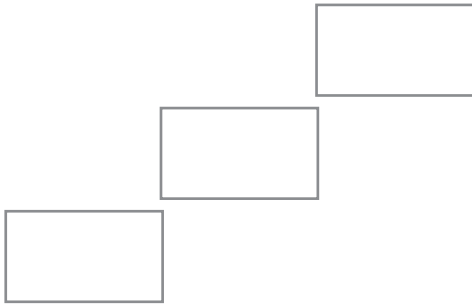
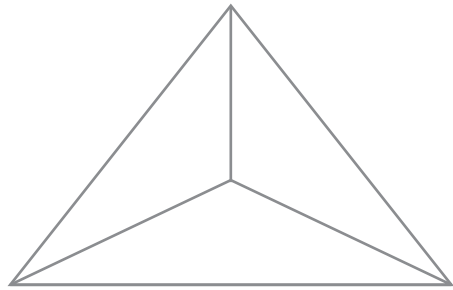
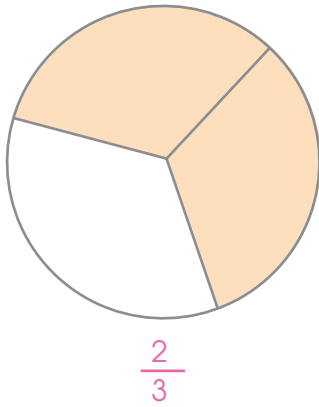




6.3 Fraction 3

Two-thirds means two out of three equal parts.

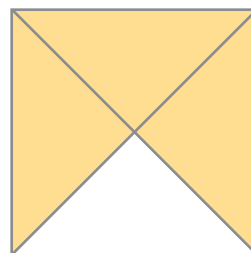
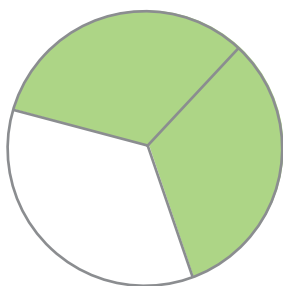
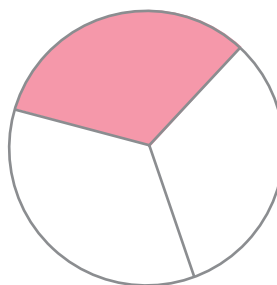
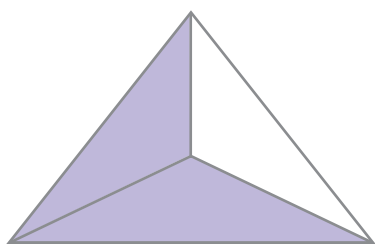
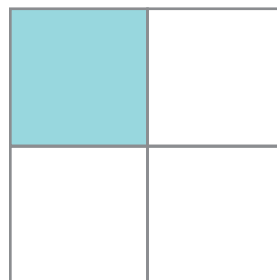
- Colour two-thirds of each.



- Name the coloured parts.

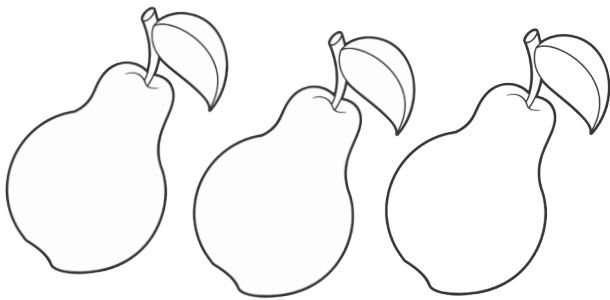


one-third = $\frac{1}{3}$

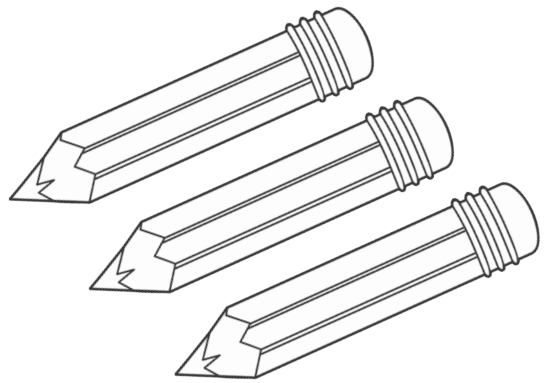




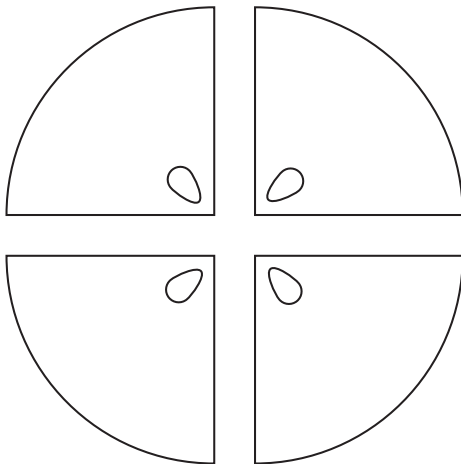
- Draw a circle around the parts and colour them.



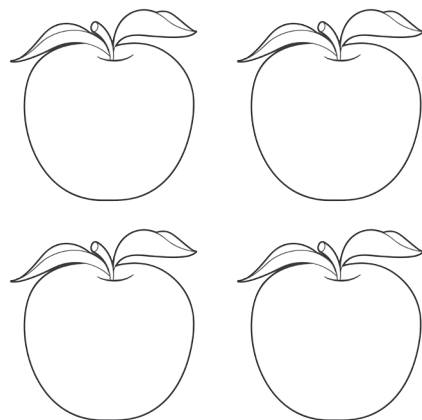
one-third



two-thirds



a quarter



three-fourths

Money

Unit

7



7.1 Notes and Coins



5 cents



25 cents



50 cents



Exercises

- Which notes do I need?

If I want to pay \$25 for the supermarket without change, what do you think are best note to use. Why?

a



b



c



d

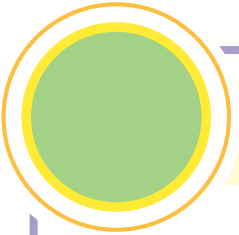


Give us other options that can be used without change.

- Look at these notes and coins.



- Find other options to get \$1.
- How many ways can you find to get \$5?



7.2 Amounts That I Need

Circle the correct notes that helps you make the amount.

\$50

\$20

\$10

\$5

make \$15

\$50

\$20

\$10

\$5

make \$30

\$50

\$20

\$10

\$5

make \$65

\$100

\$50

\$10

\$5

make \$115



7.3 Problem Solving



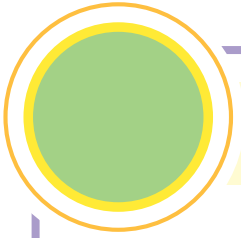
1- How much will I pay for?

1 Ruler	\$1
1 Milk	\$2
1 Pen	\$ 3
<hr/>	
Total	\$6

1 Shirt	\$
1 Ball	\$
1 Bag	\$
<hr/>	
Total	\$

1 Bag	\$
1 Doll	\$
1 Shirt	\$
<hr/>	
Total	\$

1 Doll	\$
1 Pen	\$
1 Ring	\$
<hr/>	
Total	\$



2- How much will you pay for the following?
(Use the fewest number of notes).

1 Ring

2 Shirts

3 Dolls

Total

Fewest Notes

.....

3 Milk cartons

7 Pens

2 Dolls

Total

Fewest Notes

.....

2 Bags

1 Shirt

3 Rings

1 Pen

Total

Fewest Notes

.....



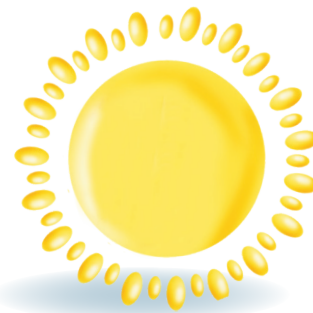
8.1 Plane Shapes

- Match the objects that have the same shapes.

Square



Rectangle

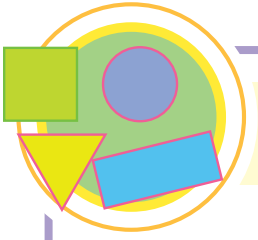


Triangle



Circle

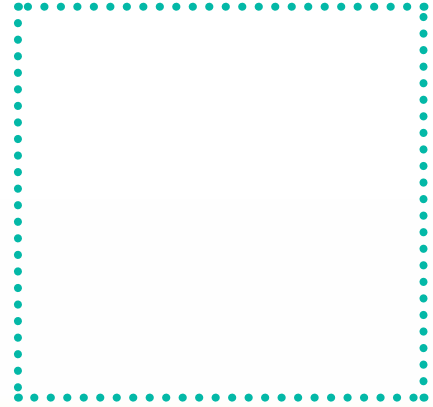




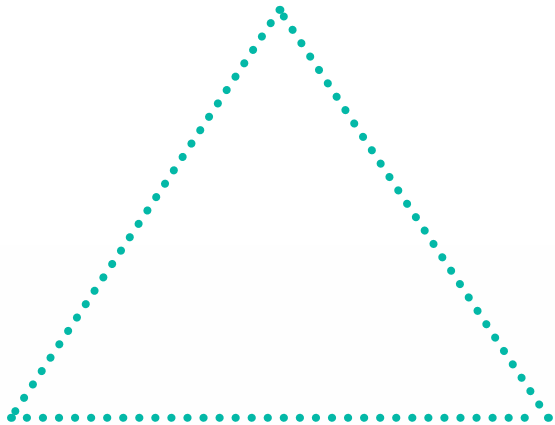
- Draw and colour the shape and write its name.



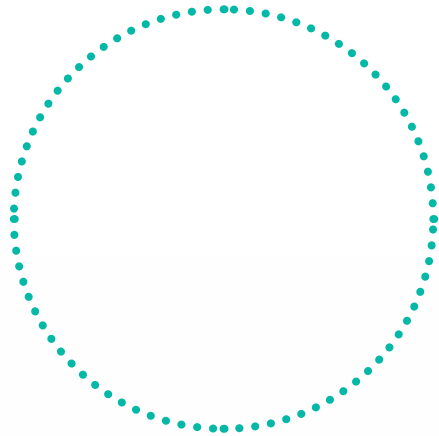
R _ _ _ _ e



S _ _ _ e



T _ _ _ _ e



C _ _ _ e



Trace and write the shapes' names then colour them.
How many corners (vertices) and sides are there each?



Vertices

Sides

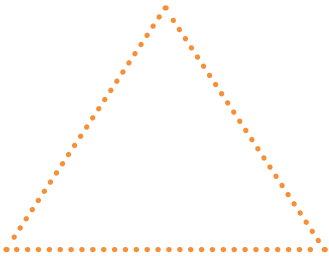
R



Vertices

Sides

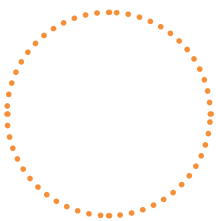
S



Vertices

Sides

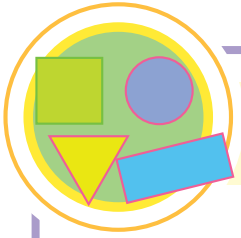
T



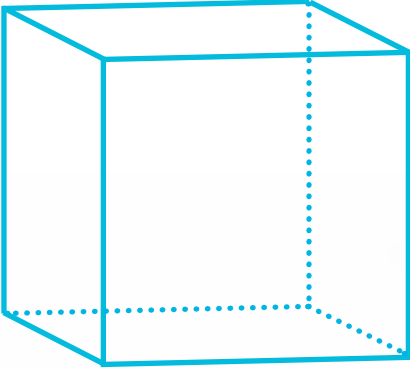
Vertices

Sides

C

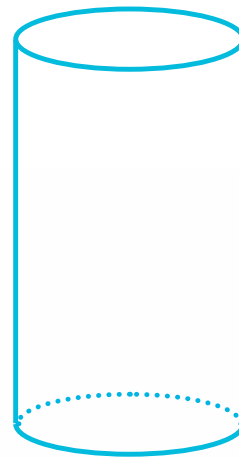


8.2 Solid Shapes



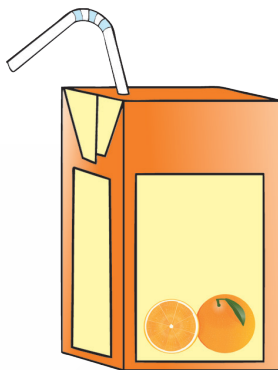
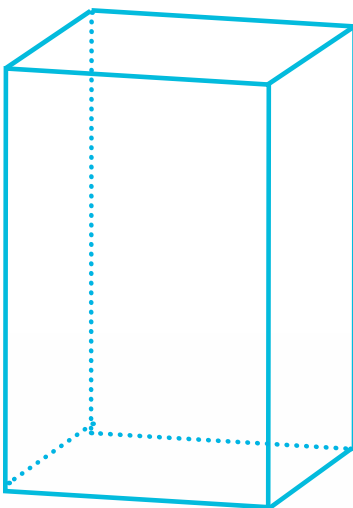
Cube

Can you give other examples from your home or school?



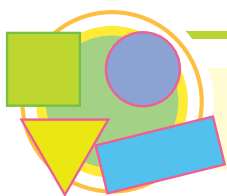
Cylinder

Can you give other examples from your home or school?

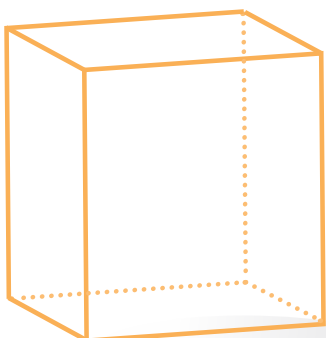


Cuboid

Can you give other examples from your home or school?



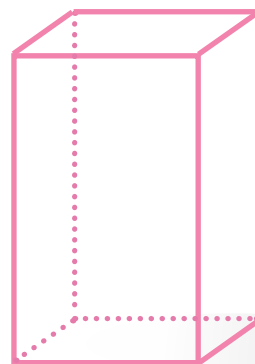
- How many faces can you see in these shapes?



.....

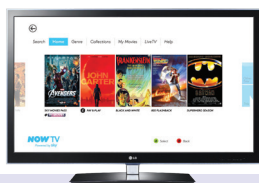


.....



.....

- Match



Square

Rectangle

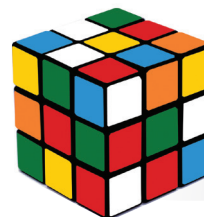
Triangle

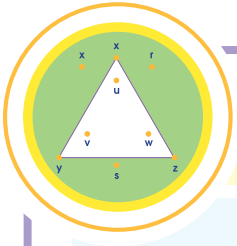
Circle

Cube

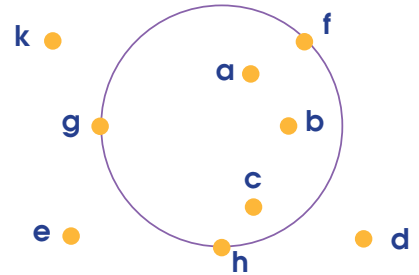
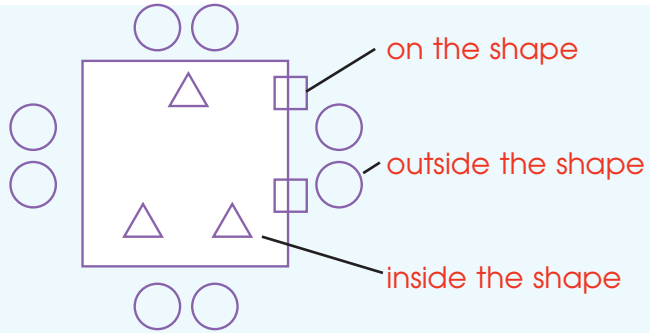
Cuboid

Cylinder





8.3 Positions of Objects



1) Name the points.

Inside the circle

.....

Outside the circle

.....

On the circle

.....

2) Name the points.

Inside the triangle

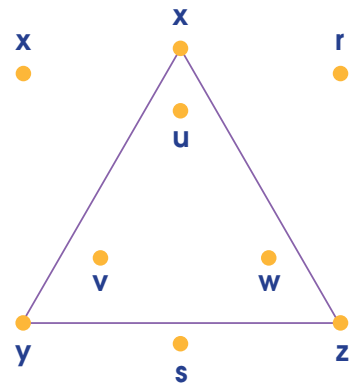
.....

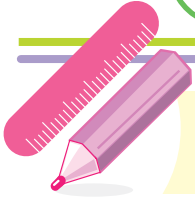
Outside the triangle

.....

On the triangle

.....





9.1 Length

We use a 'meter' to measure how long something is. For example, when we buy a disk, it is usually measured in metres (m), and we use a 'centimeter' to measure how long something is when it's smaller than the previous case. For example, when buy trousers, they are usually measured in centimeter (cm).

a) If one scarf is **2m** long, how long will **4** scarves be?

1 scarf is.....**2**..... m.

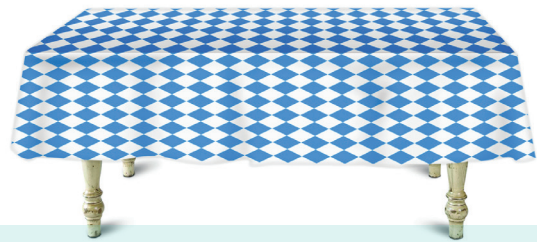
4 scarves are ...**4 X 2 = 8**... m.



b) If one table is **3m** long, how long will **5** tables be?

1 table cloth is m.

5 table cloths are m.



c) I have **10cm** of red ribbon and **5cm** of blue ribbon. How long is the total?

Red ribbon cm.

Blue ribbon cm.

Total length cm.



d I have a scarf that is **3m** long. I cut **1m**. How long is left?

I have**3**..... m.

I cut **m**.

What's left is **m**.



e One table is **3m** long. Another table is **2m** long. What is their total length?

1st table is **m**.

2nd table is **m**.

The total length is **m**.



f A rope is **10m** long. **5m** of the rope was cut. How long is left?





9.2 Weight (Mass)

We use 'kilogram' to measure the weight of something. Fruits, vegetables, sugar, rice and even humans are usually weighed in kilograms (**kg**).

- a) If one packet of sugar weighs **1kg**, what is the total weight of 3 bags?

1 packet weighs **1kg**

3 packets weigh **1 X 3 = 3kg**



- b) If one bag of rice weighs **5kg**, what is the total weight of 2 bags?

1 bag weighs **kg**

2 bags weigh **kg**



c If one basket of oranges weighs **3kg**, what is the total weight of 4 baskets?

1 basket weighskg.

4 baskets weighkg.



d A bag of rice weighs **5kg, 2kg** were used. How much was left?

.....Kg of rice were left in the bag.

e A basket of potatoes weighs **2kg, 1kg** was used. How much was left?

.....Kg of potatoes was left in the basket.

f What is the total weight of **2kg** of salt and **1kg** of sugar?

..... kg.





9.3 Capacity

We use litres to measure the capacity of something. When we buy milk, petrol or oil, we measure them in litres (L).

a. One jug of milk holds **1L**. What is the capacity of **3** jugs?

$$1 \text{ jug} = 1\text{L.}$$

$$3 \text{ jugs} = 1 \times 3 = 3\text{L.}$$



b. One bottle of milk holds **2L**. What is the capacity of **4** bottles?

$$1 \text{ bottle} = 2\text{L.}$$

$$4 \text{ bottles} = \dots\dots\dots\text{L.}$$



c. One tin of oil has **3L**. What is the capacity of **5** tins?

$$1 \text{ tin} = 3\text{L.}$$

$$5 \text{ tins} = \dots\dots\dots\text{L.}$$





d. One pan of milk holds **2L**. One jug of milk holds **3L**

What is the total capacity of both? **L.**



e. One can of petrol has **5L**, **2L** was filled in a car.

How much petrol is left in the can? **L.**



f. Sami had **2L** of juice in a jug. He filled **3L** more.

What is the total amount of filled juice? **L.**

