



Arab Republic of Egypt  
Ministry of Education  
Book Sector

# MATHEMATICS

For Primary Three  
First Term



2016 - 2017

غير مصرح بتداول هذا الكتاب خارج وزارة التربية والتعليم



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# Mathematics

**For Primary 3  
First Term**

**Authors**

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# Introduction

## A foreword to Teachers and Parents

### **Dear teachers and parents,**

We are pleased to present you with this book as part of a developed chain of mathematics textbooks. For maximum benefit, please note the following:

- 1- Before solving the verbal problems, please read them out carefully to your pupils and make sure they are understood.
- 2- There are multiple correct methods of solution to the same problem. It is sufficient for you pupils to mention only one or some according to what is required in the problem. It is with these types of questions that we hope to develop our pupils' creativity.
- 3- An attempt has been made to remove barriers between mathematics and other areas of knowledge and practical life according to what has come to be known as "curriculum integration". If today's scientists are mainly concerned with "the unity of human knowledge", then the best time to start is the primary stage. Therefore, it is expected that every single detail in the book will be given attention and care even if it does not belong to "mathematics" in the narrow sense of the word.
- 4- Some affective aims have been included in this curriculum. This is achieved by forming attitudes towards some social issues (such as the over population) besides developing appreciation and interests towards the study of mathematics. Therefore, required discussions, comments, and other like responses should not be ignored under the pretext that they are not included in school tests.
- 5- It is not only the customary standards of education in Egypt that have been given apparent attention, but also modern trends in the teaching of mathematics. Among these are presenting comprehensive knowledge of numbers before details pertaining to place value and performing arithmetic operations.
- 6- In the course of designing this book, circumstances of Egyptian schools have been taken into consideration. Hence the use of measuring tools and the performance of practical experiments has been kept to a minimum.
- 7- There are activities and exercises at the end of each unit. The exercises are typical of the preplanned output of each unit. The activities, however, might sometimes exceed the contents of the unit with the purpose of reviving extra-curricular activities in mathematics. These, in support the output of the unit and can be viewed as enrichment activities at the same time.

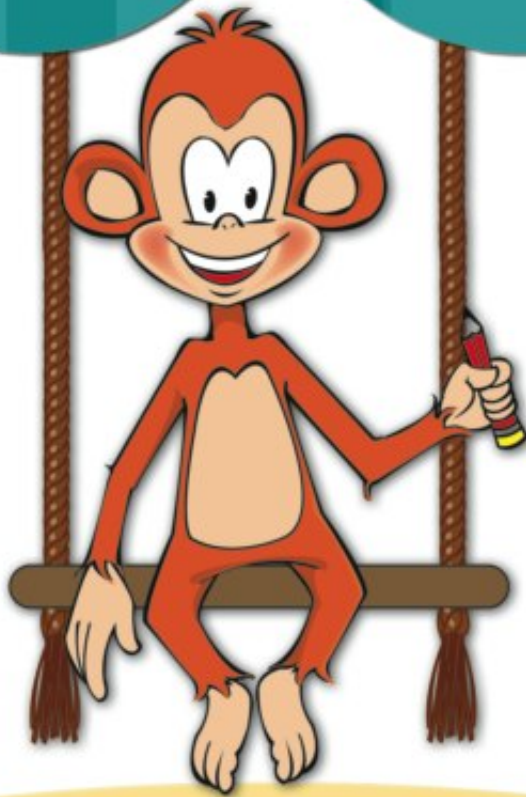
**May God guide us all to what is in the interest of our beloved country.**

**The authors**

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# Revision



# Revision

(1)

(1) Find the result of each of the following:

(a) 
$$\begin{array}{r} 465 \\ + 23 \\ \hline \end{array}$$

(b) 
$$\begin{array}{r} 784 \\ + 208 \\ \hline \end{array}$$

(c) 
$$\begin{array}{r} 365 \\ - 52 \\ \hline \end{array}$$

(d) 
$$\begin{array}{r} 537 \\ - 418 \\ \hline \end{array}$$

(e) 
$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array}$$

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

(g) 
$$4 \overline{) 20}$$

(h) 
$$2 \overline{) 18}$$

(2) Complete using (< or > or =):

(a)  $218 + 97$  .....  $218 + 79$

(b)  $600 - 115$  .....  $600 - 116$

(c)  $3 \times 8$  .....  $4 \times 6$

(d)  $12 \div 3$  .....  $12 \div 4$

(e)  $\frac{1}{5}$  .....  $\frac{1}{4}$

(3) Arrange in ascending order:

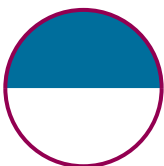
745 , 574 , 754 , 547 , 457

The order: ..... , ..... , ..... , ..... , .....

(4) Maryam bought a book for P.T 350 and the rest was P.T 150 How much money did Mariam give to the sales man?

Maryam gave the sales man = ..... = P.T .....

(5) Write the fraction which represents the shaded part:



# Revision

(2)

(1) Complete the missing digits:

(a) 
$$\begin{array}{r} 32\Box \\ + \Box 7 \\ \hline \Box 50 \end{array}$$

(b) 
$$\begin{array}{r} 727 \\ - 3\Box 1 \\ \hline \Box 4\Box \end{array}$$

(c) 
$$\begin{array}{r} \Box \\ \times 3 \\ \hline 21 \end{array}$$

(d) 
$$\begin{array}{r} \Box \\ 3 \overline{)15} \end{array}$$

(2) Complete:

(a)  $4 + 4 = 4 \times \dots\dots\dots$

(b)  $12 \div 2 = \dots\dots\dots \times 3$

(c) The greatest number formed from digits 5, 8 and 2 is .....

(d) The Shape  $\longrightarrow$  is called .....

(e) 327, 324, 321, ....., ..... (in the same pattern)

(3) Dina bought a dress by L.E 185 and a shoes for L.E 120. Magdy bought a shirt for L.E 90 and a watch for L.E 235. which of them pay more? Calculate the difference.

What Dina paid = ..... = L.E .....

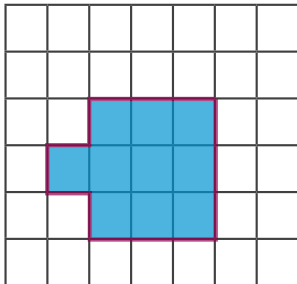
What Magdy paid = ..... = L.E .....

.....

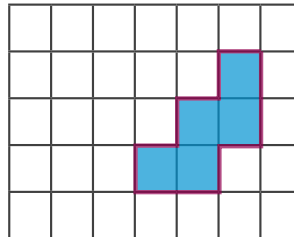
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**(4)** **(a)** If the length of the small square is the unit of length find the perimeter of:



Perimeter = ..... unit length

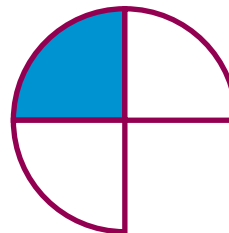


Perimeter = ..... unit length

**(b)** Write the fraction which represent the shaded part.



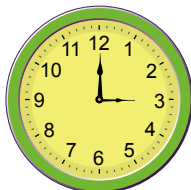
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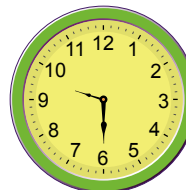
.....

**(5)**

**(a)** Write the time:



.....



.....

**(b)** What is the sum?




The sum = L.E .....

# Revision

(3)

## (1) Choose the correct answer:

- (a) The place value of 3 in the number 321 is .....(units , tens , hundreds)
- (b)  $324 - 0$  .....  $324 - 324$  ( $>$  ,  $<$  ,  $=$ )
- (c)  $6 + 6 + 6 =$  ..... ( $6 \times 3$  ,  $6 \div 3$  ,  $6 + 3$ )
- (d) The shape  represents a ..... (straight line , ray , line segment)

## (2) Complete:

- (a)  $24 \div$  .....  $= 8$
- (b)  $4 \times$  .....  $= 32$
- (c) The smallest number formed from 5, 6, 7 is .....
- (d) 6 metre , 10 cm = ..... cm

## (3) Complete using ( $>$ or $<$ or $=$ ):

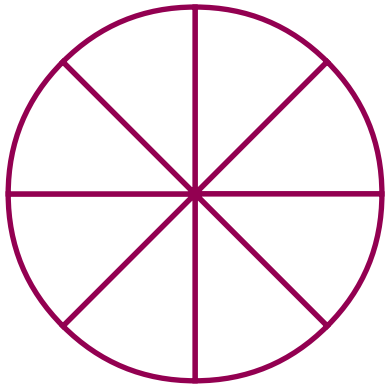
- (a)  $3 \times 5$  .....  $5 \times 3$
- (b)  $148 + 100$  ..... 284
- (c)  $16 \div 2$  .....  $16 \div 4$
- (d)  $\frac{1}{4}$  .....  $\frac{1}{3}$

- (4) In one of the projects of planet trees in the streets there decided to plant 940 tree in a year. if they plant 450 tree up to now what is the remainder of the trees.

The remainder of the trees = .....

= .....

(5) Colour according to the fraction:



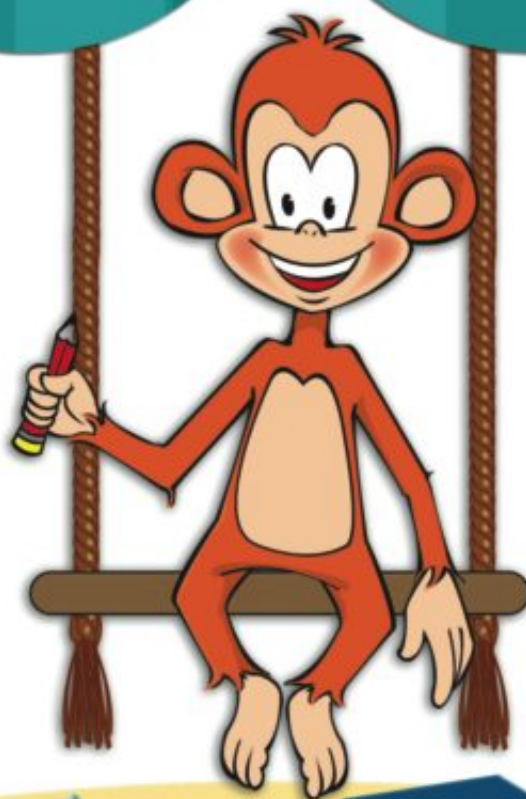
$$\frac{1}{2}$$



$$\frac{1}{4}$$

# Unit One

## Multiplication and Division





## Table (6, 7, 8, 9)

Revision: Complete:

$0 \times 0 = \dots\dots\dots$

$0 \times 1 = \dots\dots\dots$

$0 \times 2 = \dots\dots\dots$

$0 \times 3 = \dots\dots\dots$

$0 \times 4 = \dots\dots\dots$

$0 \times 5 = \dots\dots\dots$

$0 \times 6 = \dots\dots\dots$

$0 \times 7 = \dots\dots\dots$

$0 \times 8 = \dots\dots\dots$

$0 \times 9 = \dots\dots\dots$

$1 \times 0 = \dots\dots\dots$

$1 \times 1 = \dots\dots\dots$

$1 \times 2 = \dots\dots\dots$

$1 \times 3 = \dots\dots\dots$

$1 \times 4 = \dots\dots\dots$

$1 \times 5 = \dots\dots\dots$

$1 \times 6 = \dots\dots\dots$

$1 \times 7 = \dots\dots\dots$

$1 \times 8 = \dots\dots\dots$

$1 \times 9 = \dots\dots\dots$

$2 \times 0 = \dots\dots\dots$

$2 \times 1 = \dots\dots\dots$

$2 \times 2 = \dots\dots\dots$

$2 \times 3 = \dots\dots\dots$

$2 \times 4 = \dots\dots\dots$

$2 \times 5 = \dots\dots\dots$

$2 \times 6 = \dots\dots\dots$

$2 \times 7 = \dots\dots\dots$

$2 \times 8 = \dots\dots\dots$

$2 \times 9 = \dots\dots\dots$

$3 \times 0 = \dots\dots\dots$

$3 \times 1 = \dots\dots\dots$

$3 \times 2 = \dots\dots\dots$

$3 \times 3 = \dots\dots\dots$

$3 \times 4 = \dots\dots\dots$

$3 \times 5 = \dots\dots\dots$

$3 \times 6 = \dots\dots\dots$

$3 \times 7 = \dots\dots\dots$

$3 \times 8 = \dots\dots\dots$

$3 \times 9 = \dots\dots\dots$

$4 \times 0 = \dots\dots\dots$

$4 \times 1 = \dots\dots\dots$

$4 \times 2 = \dots\dots\dots$

$4 \times 3 = \dots\dots\dots$

$4 \times 4 = \dots\dots\dots$

$4 \times 5 = \dots\dots\dots$

$4 \times 6 = \dots\dots\dots$

$4 \times 7 = \dots\dots\dots$

$4 \times 8 = \dots\dots\dots$

$4 \times 9 = \dots\dots\dots$

$5 \times 0 = \dots\dots\dots$

$5 \times 1 = \dots\dots\dots$

$5 \times 2 = \dots\dots\dots$

$5 \times 3 = \dots\dots\dots$

$5 \times 4 = \dots\dots\dots$

$5 \times 5 = \dots\dots\dots$

$5 \times 6 = \dots\dots\dots$

$5 \times 7 = \dots\dots\dots$

$5 \times 8 = \dots\dots\dots$

$5 \times 9 = \dots\dots\dots$

First: Multiply  $6 \times$  a number or a number  $\times 6$ :

**(1) Complete :**

$$6 \times 1 = \square$$

$$6 \times 2 = \square$$

$$6 \times 3 = \square$$

$$6 \times 4 = \square$$

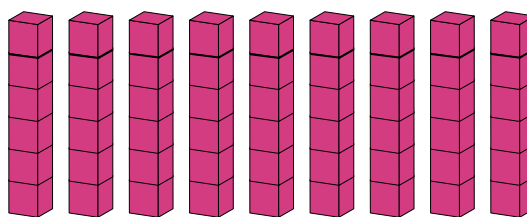
$$6 \times 5 = \square$$

$$6 \times 6 = \square$$

$$6 \times 7 = \square$$

$$6 \times 8 = \square$$

$$6 \times 9 = \square$$



**(2) Complete:**

**(a)**  $6 \times \square = 24$

**(b)**  $6 \times \square = 6$

**(c)**  $6 \times \square = 30$

**(d)**

$$\begin{array}{r} \square \\ \times 7 \\ \hline 42 \end{array}$$

**(e)**

$$\begin{array}{r} \square \\ \times 6 \\ \hline 18 \end{array}$$

**(f)**

$$\begin{array}{r} \square \\ \times 6 \\ \hline 0 \end{array}$$

**(3) Complete using ( < or > or = ):**

**(a)**  $6 + 6 \dots\dots\dots 6 \times 6$

**(d)**  $6 \times 6 \dots\dots\dots 66$

**(b)**  $6 \times 4 \dots\dots\dots 4 \times 6$

**(e)**  $6 \times 8 \dots\dots\dots 42 + 6$

**(c)**  $6 \times 0 \dots\dots\dots 6 + 0$

**(f)**  $30 + 6 \dots\dots\dots 6 \times 5$

## Unit One

(4) A woman works 6 hours daily, for 5 days weakly. How many hours does the woman work weakly?

Number of hours = ..... = .....hour.

(5) Said saves L.E 7 each month How much money he saves in 6 months?

said saves = ..... =L.E .....

Second: Multiply  $7 \times$  a number or a number  $\times 7$ :

(1) Complete :

$$7 \times 1 = \square$$

$$7 \times 2 = \square$$

$$7 \times 3 = \square$$

$$7 \times 4 = \square$$

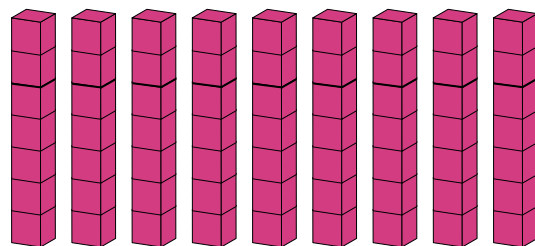
$$7 \times 5 = \square$$

$$7 \times 6 = \square$$

$$7 \times 7 = \square$$

$$7 \times 8 = \square$$

$$7 \times 9 = \square$$



(2) Complete:

(a)

$$\begin{array}{r} \square \\ \times 5 \\ \hline 35 \end{array}$$

(b)

$$\begin{array}{r} 7 \\ \times \square \\ \hline 49 \end{array}$$

(c)

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

(d)

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

(3) If you know that the number of the days of the week is 7 days, complete as in the example:

Example: 3 weeks =  $3 \times 7 = 21$  days.

(a) 5 weeks = .....  $\times$  ..... = ..... days.

(b) 7 weeks = .....  $\times$  ..... = ..... days.

(c) 8 weeks = .....  $\times$  ..... = ..... days.

(4) What the price of 7 sandwiches from each of.....?

(a) eggs

(b) chicken

(c) meat



(d) What is the cheapest kind of sandwiches

(e) What can you buy for 17 pounds from the shop?

(5) How many flowers are there in 8 bunches of flowers if each has 7 flowers?

The number of flowers in the bunches = .....  $\times$  ..... = .....





# Unit One

Third: Multiply  $8 \times$  a number or a number  $\times 8$ :

(1) Complete:

$$8 \times 1 = \square$$

$$8 \times 2 = \square$$

$$8 \times 3 = \square$$

$$8 \times 4 = \square$$

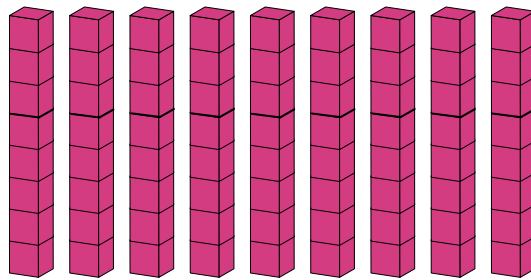
$$8 \times 5 = \square$$

$$8 \times 6 = \square$$

$$8 \times 7 = \square$$

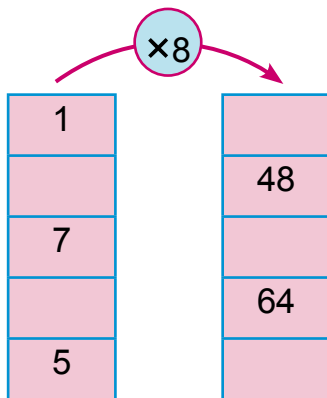
$$8 \times 8 = \square$$

$$8 \times 9 = \square$$

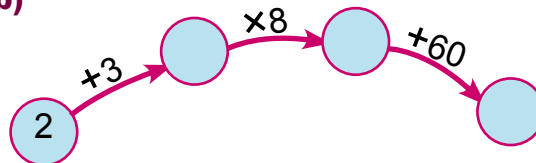


(2) Complete each of the following:

(a)



(b)

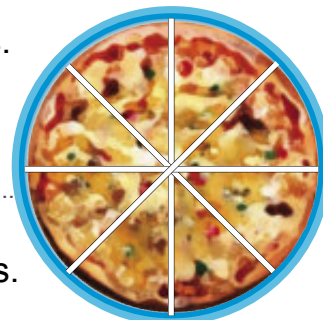


(3) The shop owner divided each pizza into 8 pieces.

What is the number of pieces of four pizzas?

The number of pieces in 4 pizzas = .....

= ..... triangular pieces.

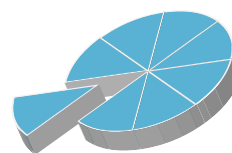


- (4) A box of spread cheese has 8 pieces triangles.

What is the number of triangles in 9 boxes?

The number of pieces in 9 boxes = .....

= .....



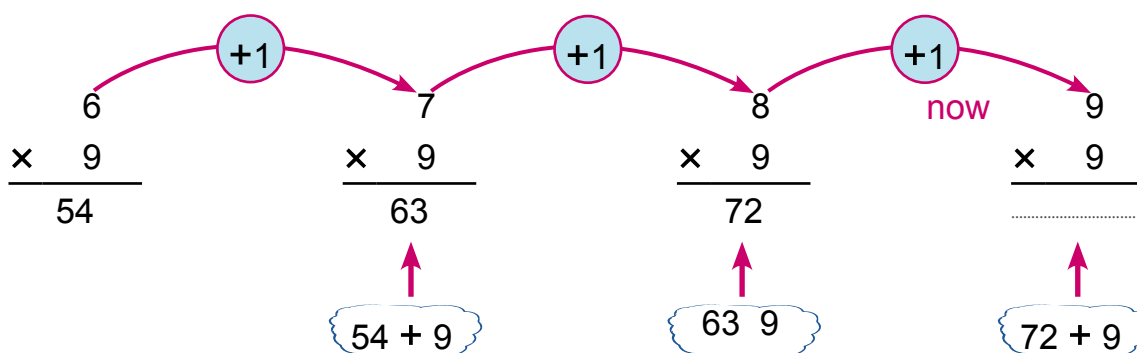
- (5) The pupils of one of the third primary classes stood in 5 lines with 8 pupils in each line. How many pupils are there in this class?

Number of the pupils = .....

= .....

Fourth: Multiply  $9 \times$  a number or a number  $\times 9$ :

(1) you know that:



(2) Complete:

(a) 
$$\begin{array}{r} 9 \\ \times \square \\ \hline 45 \end{array}$$

(b) 
$$\begin{array}{r} 8 \\ \times \square \\ \hline 72 \end{array}$$

(c) 
$$\begin{array}{r} 9 \\ \times \square \\ \hline 54 \end{array}$$

(d)  $9 \times 9 = \square$

(e)  $1 \times \square = 9$

(e)  $3 \times \square = 27$

## Unit One

(3) Complete using ( < or > or = ):

(a)  $0 \times 9$    $9 + 0$

(d)  $9 \times 9$   80

(b)  $6 \times 9$   45

(e)  $7 \times 9$    $54 + 9$

(c)  $7 \times 8$    $8 \times 9$

(4) Girgis bought seven books for 9 pounds each. What the price of all books?

The books cost = ..... = ..... pounds.

(5) A box of colouring pens has 9 pens. What is the number of pens in the 9 boxes?

The number of pens in 9 boxes = ..... = .....

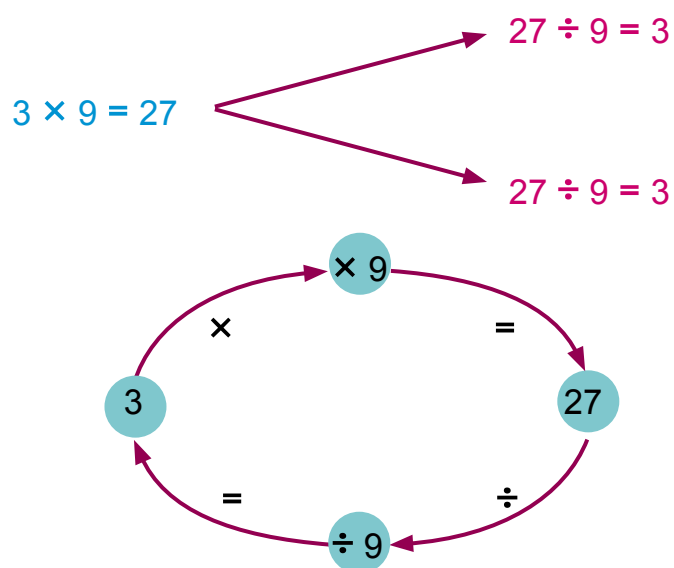
# Lesson Two

## Division

### Division

Last year you have studied that the division operation is the converse operation for multiplication.

for example:



(1) Complete as the example:

Example:

$$6 \times 7 = 42$$

$$42 \div 6 = 7$$

$$42 \div 7 = 6$$

$$8 \times 9 = 72$$

$$\dots \div 8 = 9$$

$$72 \div 9 = \dots$$

$$7 \times 8 = 56$$

$$56 \div \dots = 7$$

$$56 \div \dots = 8$$

$$7 \times \dots = 49$$

$$49 \div 7 = \dots$$



# Unit One

## (2) find the result:

- (a)  $9 \times 9 = \square$       (b)  $7 \div 1 = \dots\dots$       (c)  $0 \div 2 = \dots\dots$   
(d)  $1 \div 1 = \dots\dots$       (e)  $0 \div 1 = \dots\dots$

## (3) Find the result:

- (a)  $45 \div 9 = \dots\dots$       (d)  $8 \div 1 = \dots\dots$       (g)  $48 \div 8 = \dots\dots$   
(b)  $54 \div 9 = \dots\dots$       (e)  $7 \div 7 = \dots\dots$       (h)  $81 \div 9 = \dots\dots$   
(c)  $36 \div 6 = \dots\dots$       (f)  $0 \div 9 = \dots\dots$       (i)  $64 \div 8 = \dots\dots$

## (4) Find the result:

- (a)  $3 \overline{)21}$       (d)  $6 \overline{)42}$       (g)  $7 \overline{)56}$   
(b)  $4 \overline{)32}$       (e)  $8 \overline{)72}$       (h)  $9 \overline{)63}$   
(c)  $5 \overline{)30}$       (f)  $7 \overline{)49}$       (i)  $6 \overline{)48}$

## (5) Complete :

- (a)  $15 \div 5 = \square$       (f)  $27 \div \square = 3$   
(b)  $28 \div 4 = \square$       (g)  $\square \div 6 = 6$   
(c)  $18 \div 3 = \square$       (h)  $\square \div 7 = 7$   
(d)  $48 \div \square = 8$       (i)  $\square \div 8 = 9$   
(e)  $56 \div \square = 7$

**(6) Complete using ( < or > or = )**

(a)  $42 \div 6$    $42 \div 7$

(b)  $9 \div 3$    $9 \times 3$

(c)  $8 \div 1$    $8 \div 8$

(d)  $24 \div 8$    $21 \div 7$

(e)  $0 \div 7$    $0 \times 6$

**(7) Complete using ( + or - or  $\times$  or  $\div$  ) :**

(a)  $3 \times 4 = 10$   2

(e)  $16 \div 2 = 32$   4

(b)  $3 \times 8 = 6$   4

(f)  $6$    $5 = 7 \div 7$

(c)  $18 \div 2 = 3$   3

(g)  $36 \div 6 = 2$   3

(d)  $1 \times 7 = 49$   7

(h)  $5$    $8 = 45 - 5$

- (8)** There are 42 pupils in the class. The teacher wanted to distribute it into 6 groups How many pupils are there in each group?

number of pupils = ..... = .....

- (9)** There is a box in front of Hossam. it has 45 balls. he wants to put 9 balls in each box.

how many boxes does he need? = .....

Number of boxes= .....

- (10)** The headmaster of a school distributes 48 pencils, equally among 6 pupils who got full marks in one of maths tests. How many pencils can each pupil take?

number of pencils which each pupil can take= .....

# Exercises

## on unit one

(1) Find the result:

1  $4 \times 7 =$

15  $9 \times 9 =$

29  $7 \times 8 =$

2  $9 \times 5 =$

16  $7 \times 5 =$

30  $9 \times 6 =$

3  $7 \times 9 =$

17  $3 \times 6 =$

31  $0 \times 8 =$

4  $8 \times 8 =$

18  $8 \times 7 =$

32  $5 \times 7 =$

5  $3 \times 8 =$

19  $6 \times 9 =$

33  $6 \times 6 =$

6  $6 \times 5 =$

20  $5 \times 6 =$

34  $8 \times 9 =$

7  $4 \times 9 =$

21  $9 \times 7 =$

35  $7 \times 4 =$

8  $8 \times 6 =$

22  $6 \times 7 =$

36  $8 \times 3 =$

9  $5 \times 8 =$

23  $2 \times 8 =$

37  $4 \times 6 =$

10  $9 \times 8 =$

24  $8 \times 5 =$

38  $3 \times 7 =$

11  $6 \times 4 =$

25  $4 \times 8 =$

39  $9 \times 4 =$

12  $7 \times 6 =$

26  $5 \times 9 =$

40  $5 \times 5 =$

13  $9 \times 0 =$

27  $7 \times 7 =$

14  $6 \times 8 =$

28  $3 \times 9 =$

(2) find the result :

	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	$\begin{array}{r} 9 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 0 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 7 \\ \hline \end{array}$
2	$\begin{array}{r} 9 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 2 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 6 \\ \hline \end{array}$
3	$\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 9 \\ \hline \end{array}$
4	$\begin{array}{r} 6 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 5 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$
5	$\begin{array}{r} 7 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 7 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ \times 4 \\ \hline \end{array}$
6	$\begin{array}{r} 4 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ \times 3 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 9 \\ \hline \end{array}$	$\begin{array}{r} 0 \\ \times 6 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ \times 4 \\ \hline \end{array}$	$\begin{array}{r} 3 \\ \times 8 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ \times 7 \\ \hline \end{array}$



## Unit One

### (3) Find the result:

1  $81 \div 9 =$

15  $56 \div 7 =$

29  $64 \div 8 =$

2  $35 \div 7 =$

16  $72 \div 8 =$

30  $24 \div 3 =$

3  $18 \div 3 =$

17  $36 \div 6 =$

31  $30 \div 6 =$

4  $56 \div 8 =$

18  $8 \div 8 =$

32  $36 \div 4 =$

5  $54 \div 6 =$

19  $48 \div 6 =$

33  $35 \div 5 =$

6  $30 \div 5 =$

20  $0 \div 7 =$

34  $54 \div 9 =$

7  $63 \div 9 =$

21  $42 \div 7 =$

35  $32 \div 8 =$

8  $27 \div 3 =$

22  $24 \div 6 =$

36  $21 \div 3 =$

9  $49 \div 7 =$

23  $72 \div 9 =$

37  $36 \div 9 =$

10  $45 \div 5 =$

24  $40 \div 5 =$

38  $24 \div 4 =$

11  $32 \div 4 =$

25  $48 \div 8 =$

39  $28 \div 7 =$

12  $40 \div 8 =$

26  $28 \div 4 =$

40  $25 \div 5 =$

13  $16 \div 2 =$

27  $45 \div 9 =$

14  $42 \div 6 =$

28  $63 \div 7 =$

(4) Find the result:

	(a)	(b)	(c)	(d)
1	$\begin{array}{r} \text{.....} \\ 6 \overline{) 30} \end{array}$	$\begin{array}{r} \text{.....} \\ 7 \overline{) 42} \end{array}$	$\begin{array}{r} \text{.....} \\ 2 \overline{) 18} \end{array}$	$\begin{array}{r} \text{.....} \\ 8 \overline{) 40} \end{array}$
2	$\begin{array}{r} \text{.....} \\ 6 \overline{) 36} \end{array}$	$\begin{array}{r} \text{.....} \\ 8 \overline{) 24} \end{array}$	$\begin{array}{r} \text{.....} \\ 4 \overline{) 16} \end{array}$	$\begin{array}{r} \text{.....} \\ 5 \overline{) 25} \end{array}$
3	$\begin{array}{r} \text{.....} \\ 8 \overline{) 48} \end{array}$	$\begin{array}{r} \text{.....} \\ 9 \overline{) 63} \end{array}$	$\begin{array}{r} \text{.....} \\ 9 \overline{) 36} \end{array}$	$\begin{array}{r} \text{.....} \\ 3 \overline{) 18} \end{array}$
4	$\begin{array}{r} \text{.....} \\ 3 \overline{) 27} \end{array}$	$\begin{array}{r} \text{.....} \\ 8 \overline{) 56} \end{array}$	$\begin{array}{r} \text{.....} \\ 9 \overline{) 72} \end{array}$	$\begin{array}{r} \text{.....} \\ 4 \overline{) 24} \end{array}$
5	$\begin{array}{r} \text{.....} \\ 7 \overline{) 35} \end{array}$	$\begin{array}{r} \text{.....} \\ 8 \overline{) 64} \end{array}$	$\begin{array}{r} \text{.....} \\ 9 \overline{) 81} \end{array}$	$\begin{array}{r} \text{.....} \\ 8 \overline{) 32} \end{array}$
6	$\begin{array}{r} \text{.....} \\ 7 \overline{) 49} \end{array}$	$\begin{array}{r} \text{.....} \\ 9 \overline{) 45} \end{array}$	$\begin{array}{r} \text{.....} \\ 7 \overline{) 28} \end{array}$	$\begin{array}{r} \text{.....} \\ 9 \overline{) 54} \end{array}$

# Unit One

## (5) Complete :

1  $5 \times \square = 45$

17  $\square \times 8 = 56$

33  $18 \div \square = 9$

2  $\square \times 3 = 18$

18  $4 \times \square = 16$

34  $63 \div \square = 7$

3  $6 \times \square = 30$

19  $\square \times 5 = 40$

35  $28 \div \square = 4$

4  $7 \times \square = 42$

20  $9 \times \square = 81$

36  $\square \div 6 = 0$

5  $\square \times 7 = 28$

21  $\square \times 9 = 18$

37  $56 \div \square = 7$

6  $8 \times \square = 24$

22  $\square \times 6 = 54$

38  $15 \div \square = 3$

7  $\square \times 4 = 24$

23  $6 \times \square = 48$

39  $54 \div \square = 6$

8  $\square \times 8 = 32$

24  $\square \times 7 = 49$

40  $2 \div \square = 2$

9  $9 \times \square = 63$

25  $27 \div \square = 9$

41  $64 \div \square = 8$

10  $\square \times 8 = 64$

26  $20 \div \square = 4$

42  $12 \div \square = 4$

11  $7 \times \square = 35$

27  $16 \div \square = 4$

43  $81 \div \square = 9$

12  $\square \times 6 = 36$

28  $7 \div 1 = \square$

44  $\square \div 8 = 1$

13  $\square \times 6 = 24$

29  $30 \div \square = 6$

45  $42 \div \square = 7$

14  $4 \times \square = 36$

30  $\square \div 7 = 3$

46  $\square \div 7 = 7$

15  $\square \times 3 = 27$

31  $\square \div 7 = 7$

47  $18 \div \square = 3$

16  $8 \times \square = 72$

32  $3 \div \square = 1$

48  $\square \div 8 = 9$

(6) Complete using (+ or – or x or ÷)

1  $6 \times 9 = 9 \square 6$

13  $81 \square 9 = 27 \div 3$

2  $63 \square 9 = 7$

14  $4 \times 7 \square 32 \square 4$

3  $64 \div 8 = 48 \square 6$

15  $28 \div 4 = 42 \square 6$

4  $4 \div 2 = 8 \square 4$

16  $7 \square 7 = 0 \times 7$

5  $32 \div 4 = 4 \square 2$

17  $2 \times 9 = 21 \square 3$

6  $72 \div 8 = 5 \square 4$

18  $24 \square 4 = 30 \div 5$

7  $6 \square 4 = 8 \times 3$

19  $56 \square 8 = 21 \div 3$

8  $8 \div 8 = 4 \square 4$

20  $4 \times 2 = 64 \square 8$

9  $2 \square 3 = 15 \div 3$

21  $35 \square 5 = 10 - 3$

10  $3 \square 2 = 48 \div 8$

22  $18 \square 2 = 27 \div 3$

11  $6 \square 3 = 3 \times 3$

23  $3 \square 8 = 6 \times 4$

12  $9 \square 3 = 6 \times 2$

24  $4 \square 5 = 18 \div 2$

## Unit One

- (7) In one of the parties, there is a table with 4 rows of plates each row has 8 plates. How many plates are there on the table?

Number of plates = .....  
= .....

- (8) A woman puts each 5 pieces of cake in one plate. How many pieces of cakes does she put in 6 plates?

number of pieces = ..... = .....

- (9) A tin of cheese weighs 7 Kg what is the weight of 9 tins?

the weight of tins = ..... = .....Kg

- (10) A father distributes a sum of 27 pounds equally among his three sons. what is the share of each one of them?

A share of each one = ..... = ..... Pounds.

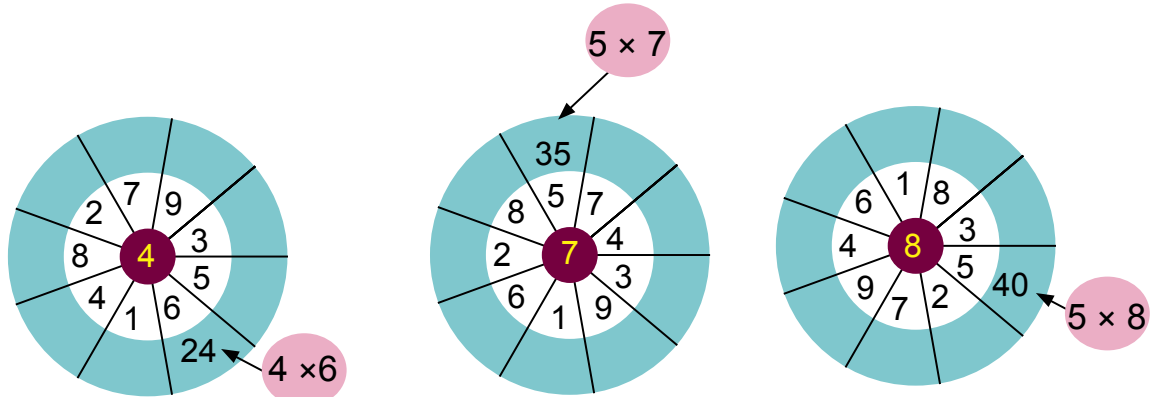
- (11) Huda bought 6 notebooks for 48 pounds. what is the price of each one of them?

the price of a note book = ..... = .....  
pounds.



# Activities on Unit one

**(1)** Multiply the number in the centre of the smaller circle by the numbers around this circle, then write the results:



**(2)** Use the different coloured pens to colour the small rectangles which have the same results by the same colour, then answer the questions below:

$3 \times 8$	$5 \div 1$	$3 \times 2$	$3 \times 3$	$54 \div 9$
$1 \times 9$	$36 \div 6$	$63 \div 7$	$5 \times 1$	$48 \div 8$
$27 \div 3$	$25 \div 5$	$30 \div 6$	$4 \times 6$	$2 \times 3$

- (a)** How many colours does you use?
- (b)** Add the times of using each colour to get the total number of the rectangles?

# Unit One

(3) Sami found a pattern from table (4) as: :

1	2	3	4	5	6	7	8	9
$\times 4$	$\times 4$	$\times 4$	$\times 4$	$\times 4$	$\times 4$	$\times 4$	$\times 4$	$\times 4$
<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
4	8	12	16	20	24	28	32	36

The pattern is : 4 , 8, 2 ,6 ,0

(Notice the unit digit)

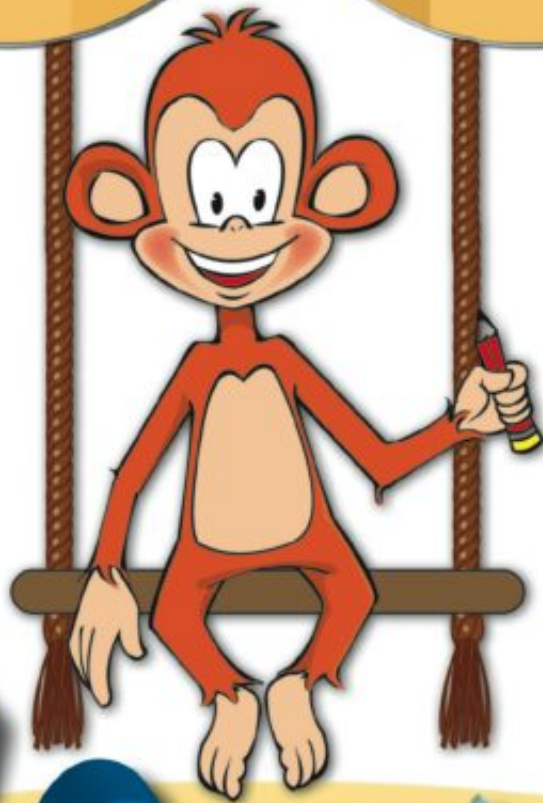
try to find a pattern for table (6) by adding the digits of the number in each answer, then write this pattern.

table 6	the sum of the digits the result
$1 \times 6 = 6$	$6 = 6$
$2 \times 6 = 12$	$1 + 2 = 3$
$3 \times 6 = 18$	$8 + 1 = 9$
$4 \times 6 = \dots\dots\dots$	
$5 \times 6 = \dots\dots\dots$	
$6 \times 6 = \dots\dots\dots$	
$7 \times 6 = \dots\dots\dots$	
$8 \times 6 = 48$	$8 + 4 = 12 \rightarrow 2 + 1 = 3$
$9 \times 6 = \dots\dots\dots$	

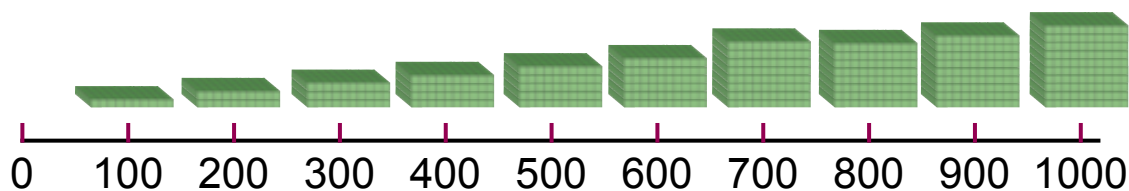
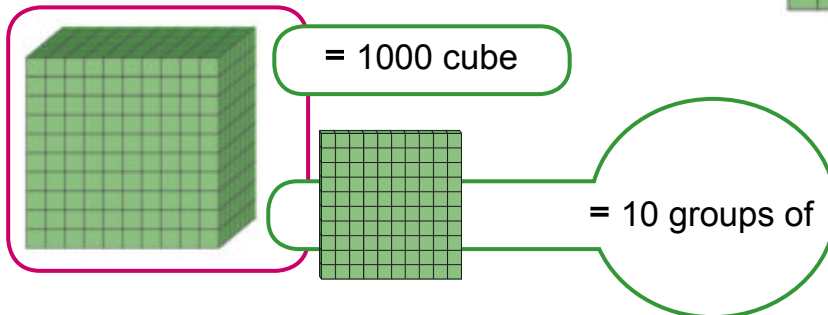
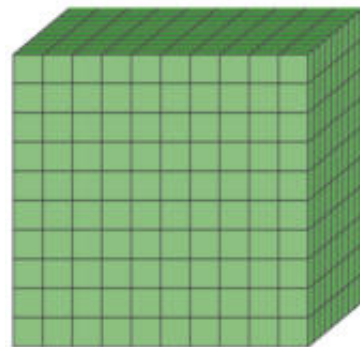
the pattern is: .....

# Unit Two

## Numbers up to 99999



## Thousands



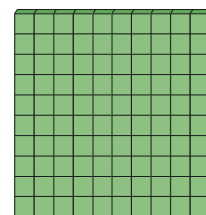
A teacher asks the pupils to express the number 1000 by different ways :

Ahmed answered  $999 + 1$

Fatma answered  $500 \ 500$

Zeinab answered 10 groups of

Now yousef ask his teacher:



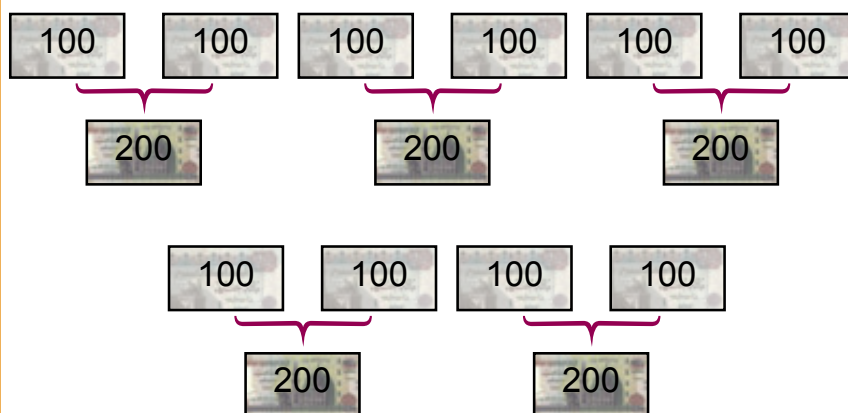
Is the sum of LE 1000 equals 10 papers of 100 bank note?

The teacher: yes.



and when Youssef back to his house, his father asked him: How many papers of 200 bank note does the previous sum contain?:

Youssef:



5 papers of 200 bank note.

**Notice:**

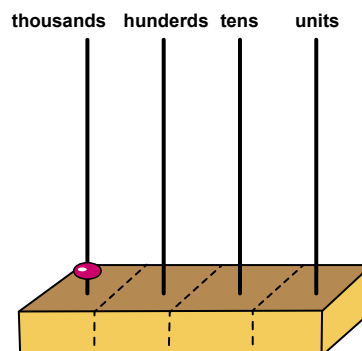
$$999 + 1 = 1000$$

$$\begin{array}{r} 999 \\ + 1 \\ \hline 1000 \end{array}$$

this number is read as “one thousand”.

thousands	hundreds	tens	units
1	0	0	0

and it can be represented as in the opposite figure:



### (1) Complete as in the example

$$1000 = 900 + \underline{100}$$

$$1000 = 800 + \dots\dots\dots$$

$$1000 = 700 + \dots\dots\dots$$

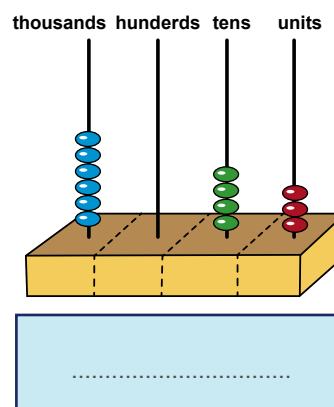
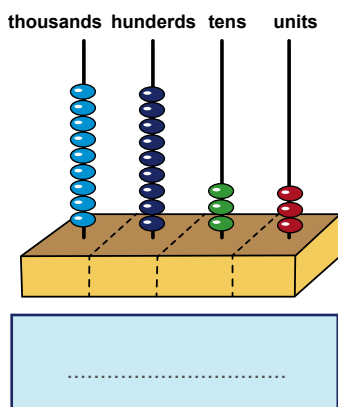
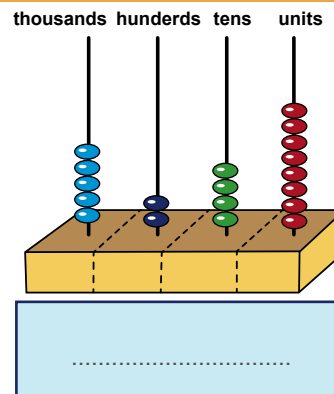
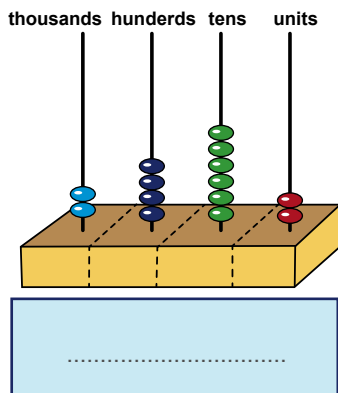
$$1000 = 600 + \dots\dots\dots$$

$$1000 = 500 + \dots\dots\dots$$



# Unit Two

## (2) Write the number:



## (3) Complete:

991 , 992 , ..... , 994 , 995 , ..... , 997 , ..... , 999 , 1000

1001 , 1002 , 1003 , ..... , ..... , 1006 , ..... , 1008 , ..... , 1010

1011 , ..... , ..... , ..... , ..... , ..... , 1017 , 1018 , ..... , 1020

..... , 1022 , 1023 , ..... , ..... , ..... , ..... , 1029 , .....

1031 , ..... , ..... , 1034 , 1035 , ..... , ..... , ..... , ..... , 1040

## (4) Write in digits the following numbers:

Seven thousands and eighty four : .....

Three thousands five hundreds and nine : .....

Two thousands, six hundreds and seventy : .....

Four thousands and seven : .....

**(5) Read the following numbers, then write it as the example:**

**Example:** 995 Nine hundreds and ninety five.

2153 Two thousands, one hundred and fifty three.

6466 .....

1047 .....

978 .....

3007 .....

4499 .....

**(6) Complete:**

1000 , 1100 , 1200 , 1300 , 1400 , 1500 , 1600 , 1700 , 1800 , 1900 , 2000 ,  
 2100 , ..... , ..... , ..... , 2500 , ..... 2700, 2800 , ..... , 3000 ,  
 ..... , ..... , 3300 , 3400 , 3500 , ..... , ..... , ..... , 3900 , ..... ,  
 4100 , 4200, ..... , ..... , ..... , 4600 , 4700 , ..... , ..... , 5000 ,  
 5100 , ..... , ..... , ..... , ..... , ..... , ..... , ..... , 5900

**(7) Complete with respect to the original number:**

Number	add 1	add 10	add 100	add 1000
482	.....	.....	.....	.....
999	.....	.....	.....	.....
2165	.....	.....	.....	.....
4759	.....	.....	.....	.....
7834	.....	.....	.....	.....

## Unit Two

### (8) Complete:

Number	Subtract 1	Subtract 10	Subtract 100	Subtract 1000
9800	.....	.....	.....	.....
6453	.....	.....	.....	.....
7984	.....	.....	.....	.....
1236	.....	.....	.....	.....
2045	.....	.....	.....	.....

### (9) Complete in same pathern:

3905 , 3910 , ..... , ..... , 3925 , ..... , .....  
 2814 , 2824 , ..... , 2844 , ..... , ..... , .....  
 8000 , 7500 , 7000 , ..... , ..... , ..... , .....  
 9417 , 9437 , ..... , 9477 , ..... , ..... , .....

### (10) Complete as the example:

Example:  $6457 = 7 + 50 + 400 + 6000$

$4925 = 5 + 20 + ..... + .....$

$3781 = 1 + ..... + 700 + .....$

$9183 = ..... + ..... + ..... + .....$

$4506 = ..... + ..... + ..... + .....$

$3003 = ..... + ..... + ..... + .....$

### (11) Complete as the example:

$8456 = 6 + 50 + 400 + 8000$

$..... = 7 + 300 + 4000$

$..... = 3 + 9000$

$$\dots\dots\dots = 10 + 100 + 1000$$

$$\dots\dots\dots = 900 + 2000$$

**(12) Write the place value for the circled number:**

Example: 4 **5** 2 8 tens

**2** 2 4 3 .....

7 1 **0** 2 .....

5 **6** 2 9 .....

**3** 4 0 1 .....

4 8 5 **6** .....

**(13) Complete according to the place value as the example:**

	Number	Units	Tens	Hundreds	Thousand
Example	4528	8	2	5	4
	9807				
	2143				
	5664				

**(14) Complete (< , = or > )**

4167 ..... 4097                      1253 ..... 1254

2947 ..... 1947                      9002 ..... 9002

6754 ..... 6751                      8936 ..... 8937

**(15) Arrange the following sets of numbers in ascending then descending order:**

5449 , 6204 , 2917 , 3028 , 3009

Ascending order : ....., ....., ....., ....., .....

Descending : ....., ....., ....., ....., .....

## Unit Two

1224 , 7639 , 8420 , 999 , 4778

Ascending order : ....., ....., ....., ....., .....

Descending : ....., ....., ....., ....., .....

**(16) Join the card that have the same number:**

$$67 + 7000$$

$$7 + 7600$$

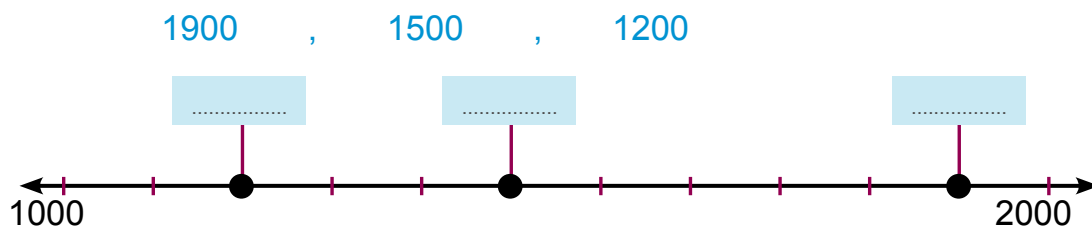
$$7670$$

$$7607$$

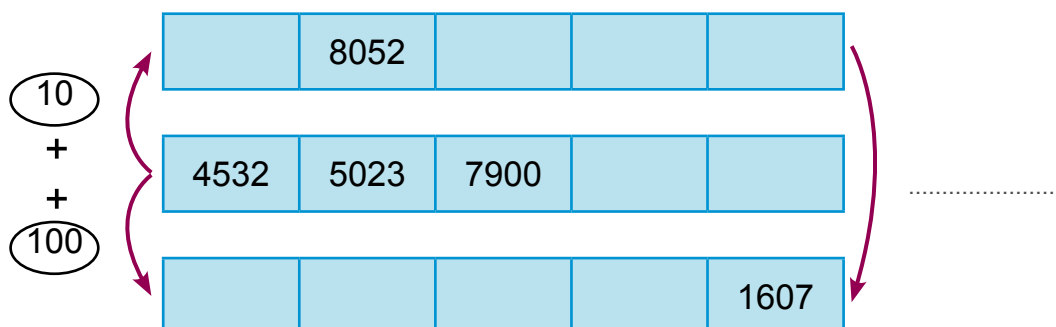
$$7067$$

$$670 + 7000$$

**(17) Write the following numbers in its places on number line:**



**(18) Complete:**





**(19) Recognize the rule, then complete the table:**

7770	7780	7790			
7870				7910	
7970					8020
			8100		

**(20) Write the smallest and greatest number using all the digits in each case:**

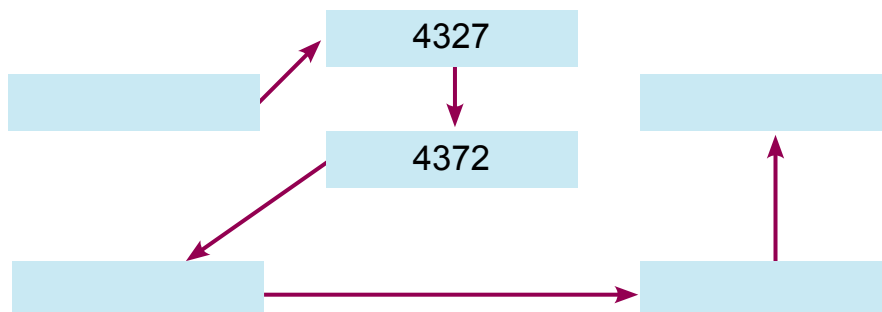
4    7    5    3    Smallest number: .....  
 Greatest number: .....

2    9    6    6    Smallest number: .....  
 Greatest number: .....

6    5    1    8    Smallest number: .....  
 Greatest number: .....

**(21) The arrow means smaller than, then write the number in the suitable rectangles:**

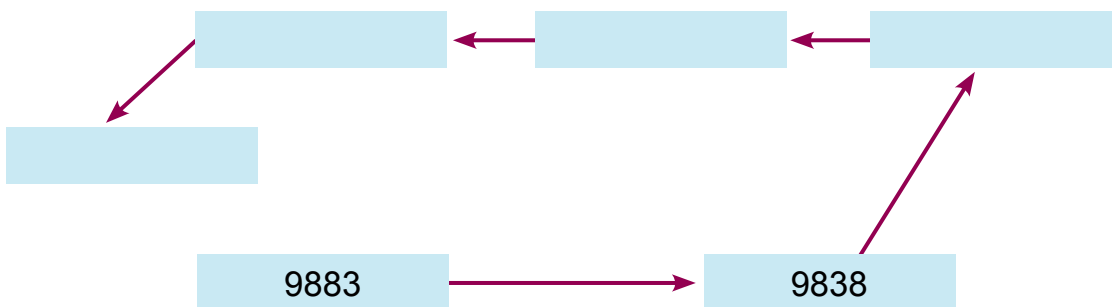
4732 , 4237 , 7432 , 7423



## Unit Two

(22) If the arrow means «greater than», then write the numbers in the suitable rectangles:

9083 , 9803 , 9308 , 9380



(23)

- What is the greatest four digits number? .....
- What is the smallest four digits number? .....
- What is the greatest different four digits number? .....
- What is the smallest different four digits number? .....
- What is the greatest different four digits number and its unit is 6? .....
- What is the greatest different four digits number and its unit is 7? .....

(24) Which of the following sets of numbers are arranged ascendingly

- a) 4721, 5721, 6721, 7721
- b) 6025, 5034, 4027, 3620
- c) 5440, 1732, 7165, 5423
- d) 5621, 1293, 6330, 1257

# Lesson Two

ten thousands

## ten thousands

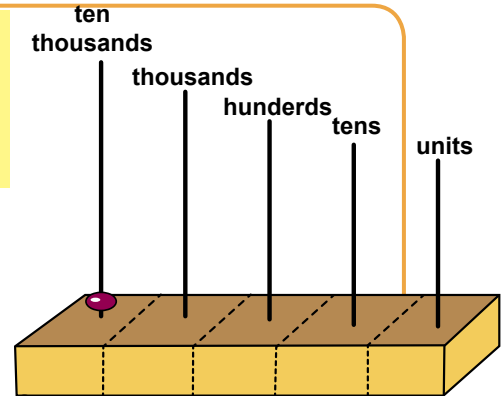
**Notice:**

$$9999 + 1 = 10000$$

this number is read ((ten thousands))

$$\begin{array}{r} 9999 \\ + 1 \\ \hline 10000 \end{array}$$

ten thousands	thousands	hundreds	tens	units
1	0	0	0	0



this number can be shown on the abacus as in the figure.:

Now: the teacher to his pupils 10 000

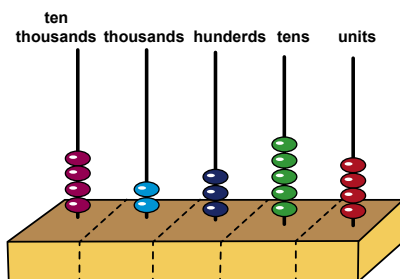
who can express the number 10 000 by different ways?

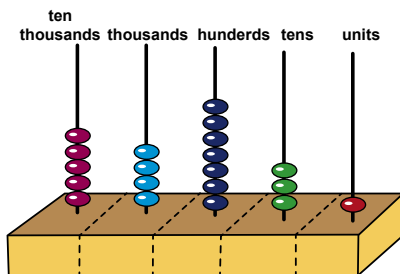
the answers: **Tarek**  $9999 + 1$  **Hoda** 10 groups of 1000

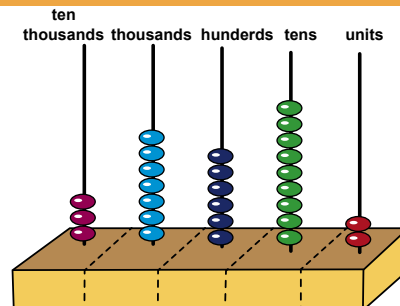
**Adel**  $5000 + 5000$

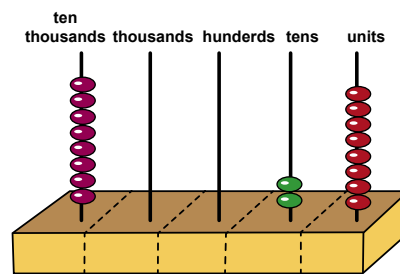
**Reda** the smallest 5-digit number **you**.....

### (1) Write the numbers:









## Unit Two

### (2) Complete the following tables:

52141	52142	52143	52144	52145
52146				52150
		52153		
76920	76930	76940		
76970		76990		
77020				

### (3) Write in digits:

- Seventy two thousands, five hundreds and thirty .....
- Fifty thousands, three hundreds and society four .....
- Twenty four thousands, seven hundreds and one .....
- Ten thousands, two hundreds and thirty four .....

### (4) Read the following number then write it as the example:

Example: 50347 Fifty thousands, three hundreds and forty seven.

26296 .....

84573 .....

96684 .....

31065 .....

**(5) Complete as the example:**

Example:  $23547 = 547 + 23000$   
 $= 7 + 40 + 500 + 3000 + 20000$

$64365 = 395 + \dots$   
 $= 5 + \dots + \dots + \dots + \dots$   
 $50218 = \dots + \dots$   
 $= \dots + \dots + \dots + \dots + 50000$   
 $98760 = \dots + \dots$   
 $= \dots + \dots + \dots + \dots + \dots$

**(6) Complete according to the place value:**

Number	Units	Tens	Hundreds	Thousand	Ten thousand
6278					
40951					
12430					

**(7) Write the place value of the circled digit:**

Example: 6 2 **4** 3 5      hundreds

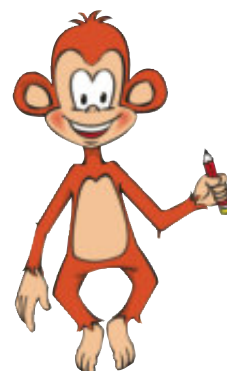
1 7 9 8 **2**      .....

9 4 3 **0** 1      .....

3 4 6 **9** 7      .....

**8** 6 9 4 3      .....

9 8 7 6 **2**      .....



## Unit Two

### (8) Complete the following tables:

16300	16400	16500	16600	16700	16800
16900	17000	17100			
				17900	
99941	99841				
99341			99041		
			98441		

### (9) Complete

Number	add 10	add 100	add 1000	add 10000
86249	86259	86349	87249	
57683				
24378				
Number	- 10	- 100	- 1000	- 10000
64328				
12905				
90457				

### (10) Complete in the same pattern:

51243 , 51253 , 51263 , ..... , .....  
 27811 , 27711 , 27611 , ..... , .....  
 38967 , 38175 , 38983 , ..... , .....  
 77777 , 77666 , 77555 , ..... , .....  
 90102 , 89102 , 88102 , ..... , .....



**(11) Compete ( $<$ ,  $=$  or  $>$ )**

34265	.....	44189	48206	.....	48106
69284	.....	69282	94321	.....	94321
85643	.....	85593	10025	.....	10000

**(12) Arrange the following sets of numbers ascendngly and descendngly:**

52943 , 27657 , 28654 , 32981 , 47564

Ascending order : ....., ....., ....., ....., .....

Descending order : ....., ....., ....., ....., .....

87942 , 87941 , 86847 , 12243 , 15621

Ascending order : ....., ....., ....., ....., .....

Descending order : ....., ....., ....., ....., .....

63456 , 62457 , 71493 , 59538 , 46321

Ascending order : ....., ....., ....., ....., .....

Descending order : ....., ....., ....., ....., .....

**(13) Form the greatest and smallest numbers using all the digits in each case:**

8	2	1	7	9
---	---	---	---	---

 Greatest number: .....  
 Smallest number: .....

4	7	4	1	2
---	---	---	---	---

 Greatest number: .....  
 Smallest number: .....

## Unit Two

(14) Join the cards that have same number:

35035

$35 + 3500$

$35 + 35000$

3535

$35 + 500 + 3000$

$535 + 3000$

$35 + 5000 + 30000$

$5035 + 30000$

(15) By using arrows join in an ascending order:

63528

63852

65832

63258

65382

65823

(16)

Form a number of 5 digits and its hundreds is 9

.....

Form a number of 5 digits its tens digit is twice its units

.....

Form a greatest 5 digits its number and their sum is 3

.....

Form a greatest 5 different digits number and their sum is 12

.....

**( 17 )**

Under line the nearest number to 40000

[ 3999 , 41111 , 39900 ]

Under line the nearest number to 9999

[ 9090 , 10000 , 9900 ]

Under line the nearest number to 10000

[ 9900 , 9990 , 10099 ]

**(18) Complete as the example:**

Example

$$\begin{array}{r}
 \text{24532} \\
 = \text{532} + \text{24000} \\
 = 2 + 30 + 500 + 4000 + 20000
 \end{array}$$

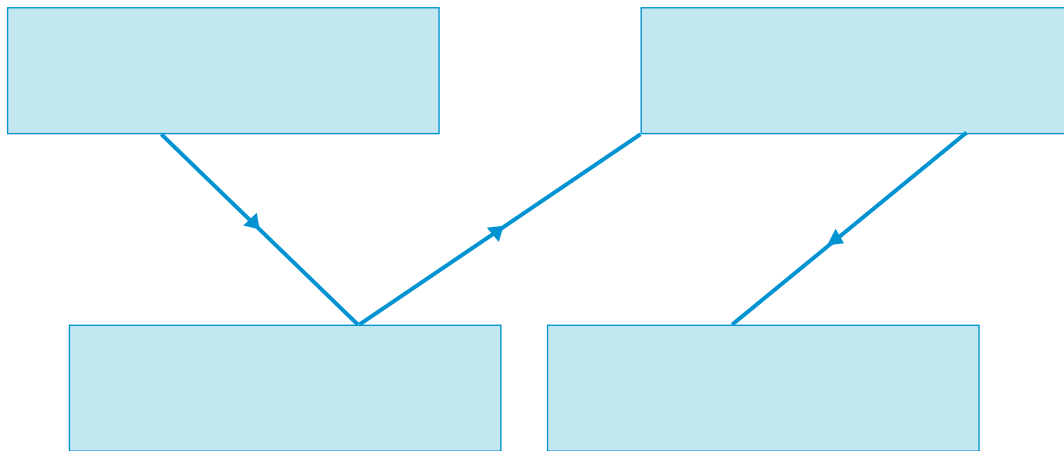
$$\begin{array}{r}
 \text{37649} \\
 = \text{649} + \dots\dots\dots \\
 = 9 + \dots\dots + \dots\dots + \dots\dots + \dots\dots
 \end{array}$$

$$\begin{array}{r}
 \dots\dots\dots \\
 = \text{532} + \text{67000} \\
 = \dots\dots + \dots\dots + \dots\dots + \dots\dots + \dots\dots
 \end{array}$$

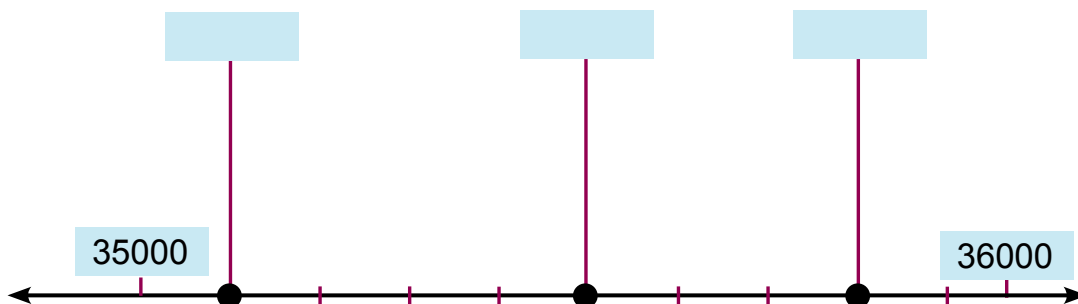
$$\begin{array}{r}
 \dots\dots\dots \\
 = \dots\dots\dots + \dots\dots\dots \\
 = 9 + 50 + 800 + 3000 + 70000
 \end{array}$$

**(19) Write the following numbers inside the rectangles such that the arrow goes from smaller to greater :**

46875 ,    48675 ,    46785 ,    47685



**(20) Put suitable numbers inside the rectangles on the number line :**



# Exercises

## On Unit Two

### (1) Complete:

Number	Units	Tens	Hundreds	Thousand	Ten thousand
82943					
7532					
43002					

### (2) Write the place value for the circled digit:

2 5 **4** 3 6 .....

8 9 7 **2** 1 .....

7 4 9 2 **3** .....

### (3) Complete in the same pattern:

28530 , 28630 , 28730 , ..... , .....

64578 , 64568 , 64558 , ..... , .....

59678 , 58678 , 57678 , ..... , .....

### (4) Complete using ( $<$ , $=$ or $>$ ):

(a) 12678  44189

(c) 93257  69282

(b) 35894  35904

(d) 65289  65279

**(5) Arrange the following numbers in ascending and descending order:**

17849 , 48928 , 32567 , 94328 , 56394

ascending order: .....

descending order: .....

**(6) Form the greatest and smallest number from the following digits in digits and in words:-**

5 , 3 , 2 , 1 , 8

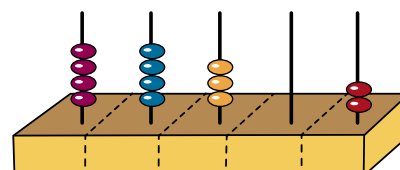
Smallest number in digits: .....

by words: .....

Greatest number in digits : .....

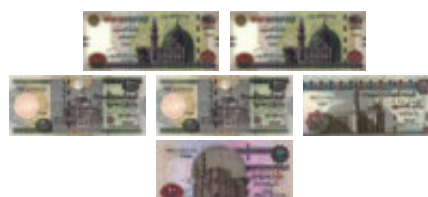
by words : .....

**(7) Complete:**  
the number represented by the opposite abacus is.....



**(8)**  $85124 = 124 + \dots\dots\dots$

**(9)** The sum which represented by the opposite figure = LE .....





# Activities

Numbers and digits

## On Unit Two

### Cross number puzzle:

Write one number in each square so that it satisfies the following:

	a	b	c	d	e
1		6			
2			2		
3					
4		0			
5				9	

### Horizontal numbers

- 1 The greatest number of 5 different digits.
- 2 The smallest number of 5 different digits.
- 3 The greatest number lying between 40000 and 50000 and its unit digit is 8
- 4 The smallest 5 digit number. 5 A 5-digit number whose sum is 27.

### Vertical numbers

- (a) A 5-digit number whose sum is 20
- (b) A 5-digit number whose sum is 22
- (c) A 5-digit number whose sum is 24
- (d) A 5-digit number whose sum is 24
- (e) A 5-digit number whose sum is 20

## Numbers and digits

(1) Put the two digits 2 and 7 in the empty spaces in the number 4  9  3 so that the resulting number is:

- (a) as great as possible: .....
- (b) as small as possible: .....

## Unit Two

**(2) Rearrange the digits of the number 23157 so that the resulting number is:**

- (a) as great as possible: .....
- (b) as small as possible: .....

**(3) Rearrange the digits of the number 4019 so that the resulting number is:**

- (a) as close as possible to 1000: .....
- (b) as close as possible to 10000: .....

**(4) L.E 1000 (One thousand pound)**

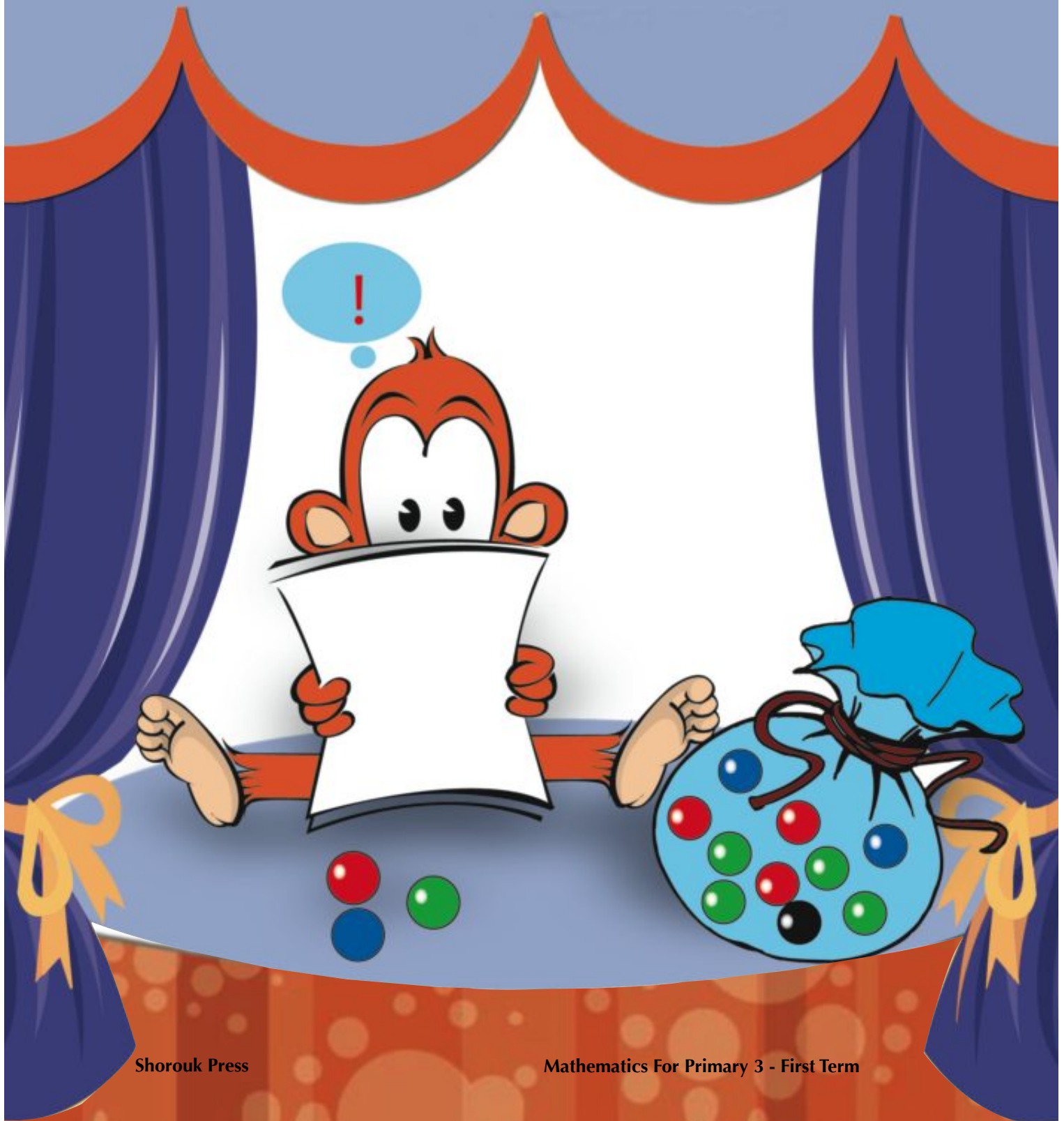
- (a) Equals ..... 100 – bank note
- (b) Equals ..... 200 – bank note
- (c) Equals ..... 50 – bank note
- (d) Equals ..... 10 – bank note
- (e) Equals ..... 20 – bank note
- (f) Equals ..... 5 – bank note

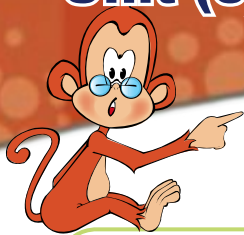
**(5) L.E 10000:**

- (a) Equals ..... 100 – bank note
- (b) Equals ..... 200 – bank note
- (c) Equals ..... 50 – bank note
- (d) Equals ..... 10 – bank note
- (e) Equals ..... 20 – bank note

# Unit (3)

**Adding and subtracting up to no more than 99999**





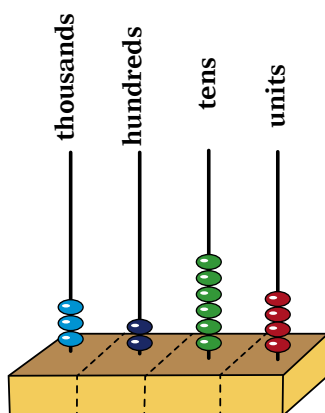
## Finding the sum of two numbers

We need to carry addition operations in many different situations as:

- ▶ A factory produced 745 and 983 units of a certain product in two consecutive months. what is the number of units produced by this factory in the two months together?.
- ▶ Mohamed and markos donate to one of the charities. Mohamed paid 750 pounds and makros paid 420 pounds. the total that was requested which that charity received from the two persons together. And the following examples show the sum of two numbers.

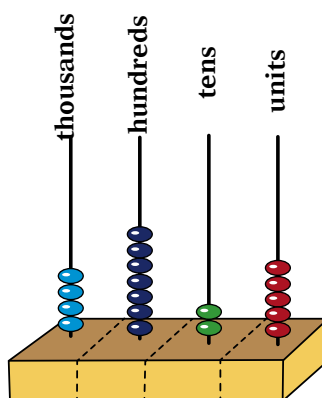
### Example 1:

$$\begin{array}{r} 3264 \\ + 4725 \\ \hline \end{array}$$



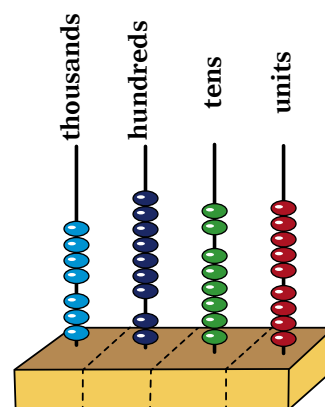
3264

+



4725

=



7989

$$3264 + 4725 = 7989$$

$$\begin{array}{r} 3264 \\ + 4725 \\ \hline 7989 \end{array}$$

$$3 + 4 = 7 \text{ thousands}$$

$$2 + 7 = 9 \text{ hundreds}$$

$$6 + 2 = 8 \text{ tens}$$

$$4 + 5 = 9 \text{ units}$$

This can also be expressed as:

	thousands	hundreds	tens	units
	3	2	6	4
+	4	7	2	5
	7	9	8	9

The result is read: seven thousands nine hundred and eighty nine.

**Example 2:** Add:

$$\begin{array}{r} 2148 \\ + 1435 \\ \hline \end{array}$$

$$\begin{array}{r} \textcircled{1} \\ 2148 \\ \vee 1435 \\ \hline 3583 \end{array}$$

$$2 + 1 = 3 \text{ thousands}$$

$$1 + 4 = 5 \text{ hundreds}$$

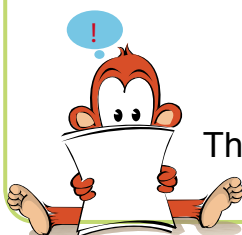
$$\textcircled{1} + 4 + 3 = 8 \text{ tens}$$

$$8 + 5 = 3 + \textcircled{10}$$

$$2148 + 1435 = 3583$$

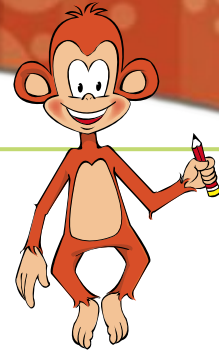
This can also be expressed as:

	thousands	hundreds	tens	units
	2	1	4	8
+	1	4	3	5
	3	5	8	3



The result is read: three thousand five hundred and eighty three.

# Unit (3)

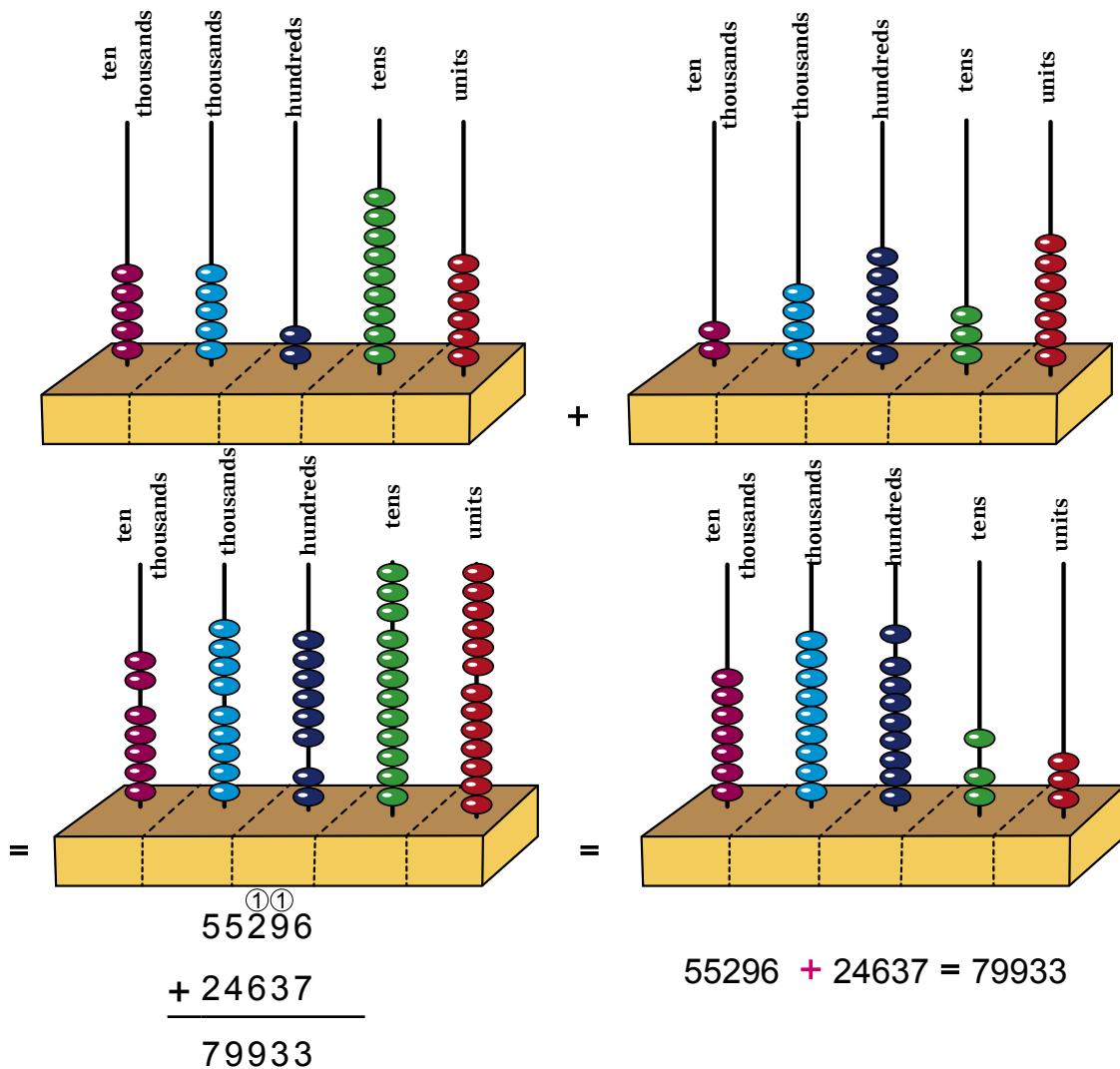


**Example 3:**

Add

$$\begin{array}{r} 55296 \\ + 24637 \\ \hline \end{array}$$

Look at the following figures and find out the steps used to obtain the result:



This can also be expressed as:

	Ten thousands	thousands	hundreds	tens	units
55296	5	5	2 <sup>①</sup>	9 <sup>①</sup>	6
+	2	4	6	3	7
	7	9	9	3	3

The result is read: Seventy nine thousands, nine hundred and thirty three.



# Exercises

## (1) Add:

$\begin{array}{r} 6345 \\ + \quad 3 \\ \hline \end{array}$	$\begin{array}{r} 2083 \\ + \quad 7 \\ \hline \end{array}$	$\begin{array}{r} 6946 \\ + \quad 9 \\ \hline \end{array}$	$2341 + 7 =$  $3856 + 4 =$
$\begin{array}{r} 2842 \\ + \quad 16 \\ \hline \end{array}$	$\begin{array}{r} 3092 \\ + \quad 44 \\ \hline \end{array}$	$\begin{array}{r} 4376 \\ + \quad 65 \\ \hline \end{array}$	$2146 + 31 =$  $1492 + 48 =$
$\begin{array}{r} 4370 \\ + \quad 123 \\ \hline \end{array}$	$\begin{array}{r} 2227 \\ + \quad 181 \\ \hline \end{array}$	$\begin{array}{r} 2619 \\ + \quad 398 \\ \hline \end{array}$	$3041 + 628 =$  $1546 + 616 =$
$\begin{array}{r} 6284 \\ + 2513 \\ \hline \end{array}$	$\begin{array}{r} 5627 \\ + 2546 \\ \hline \end{array}$	$\begin{array}{r} 4391 \\ + 3583 \\ \hline \end{array}$	$7154 + 1845 =$  $4584 + 2428 =$

## (2) Add as in the example:

$\begin{array}{r} \textcircled{1}\textcircled{1}\textcircled{1} \\ 2468 \\ + 4372 \\ + 1543 \\ \hline 8383 \end{array}$	$\begin{array}{r} 3604 \\ + 2125 \\ + 2461 \\ \hline \end{array}$	$\begin{array}{r} 1786 \\ + 3127 \\ + 2542 \\ \hline \end{array}$	$\begin{array}{r} 5231 \\ + 2190 \\ + \quad 809 \\ \hline \end{array}$
---	---	---	--

$1257 + 493 + 3600 = \dots\dots\dots$

$3908 + 2743 + 2829 = \dots\dots\dots$

## Unit (3)

### (3) Add:

$$\begin{array}{r} 36854 \\ + 49142 \\ \hline \end{array}$$

$$\begin{array}{r} 28957 \\ + 24892 \\ \hline \end{array}$$

$$\begin{array}{r} 29876 \\ + 34659 \\ \hline \end{array}$$

$$\begin{array}{r} 38276 \\ + 41724 \\ \hline \end{array}$$

$27665 + 38967 = \dots\dots\dots$

$69210 + 26428 = \dots\dots\dots$

### (4) Complete as in the example:

$$\begin{array}{r} 53116 \\ + 24432 \\ + 12234 \\ \hline 89782 \end{array}$$

$$\begin{array}{r} 23792 \\ + 26341 \\ + 35629 \\ \hline \end{array}$$

$$\begin{array}{r} 36798 \\ + 15347 \\ + 29843 \\ \hline \end{array}$$

$$\begin{array}{r} 9735 \\ + 30102 \\ + 777 \\ \hline \end{array}$$

$44536 + 17312 + 22305 = \dots\dots\dots$

$25441 + 36822 + 29789 = \dots\dots\dots$

### (5) Find the result (mentally ) for each of the following

(a)  $4375 + 1000 = \dots\dots\dots$

(b)  $79245 + 30 = \dots\dots\dots$

(c)  $394 + 58000 = \dots\dots\dots$

(d)  $7 + 600 + 12000 = \dots\dots\dots$

(e)  $497 + 99 = \dots\dots\dots$

(f)  $71564 + 1001 = \dots\dots\dots$

- (6) 2345 primary school children were vaccinated against polio in one department and 1664 in another department. What is the total of vaccinated children in the two departments on that day?

The total of vaccinated = ..... = ..... child

- (7) 26453 and 32349 economic flats were built in two governorates in one year. What is the total number of economic flats built by the two governorates?

total number of flats built by the two governorates = .....

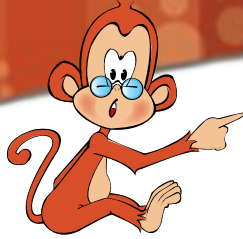
= .....

- (8) Samir saved 875 piastres in one month, 225 piastres in the next month and 950 piastres in the third month. What is the total amount Samir saved?

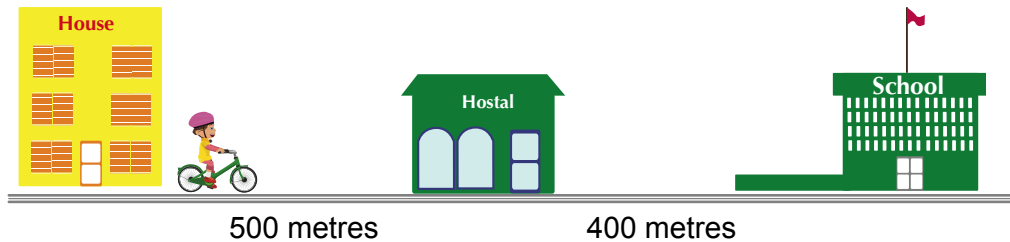
Total amount Samir saved = ..... = ..... piastres

- (9) Ahmed, Nagy and Said decided to be partners in a small business. They paid respectively 25000, 15000, 30000 pounds. What is the total sum they paid?

Total sum paid = ..... = ..... Pounds.



## The properties of the addition operation



First: Omar lives in one of sohag's villages. He is used to going to school by bike. the distance between his house to the hostel "on road" is 500m. then from the hostel to the school is 400m. So the distance which omar takes is:

= The distance from house to the hostel + the distance from the hostel to the school

$$= 500 + 400 = 900 \text{ m}$$



The distance which omar takes in return =

= the distance from school to the hostel + the distance from the hostel to the house

$$= 400 + 500 = 900 \text{ mètres}$$



What do you notice?

$$500 + \dots = 400 + \dots$$

So we can exchange the numbers in adding and get the same result



Complete as in the example:

Example:  $3652 + 127 = 127 + 3652$

(a)  $2700 + 358 = \dots + 2700$       (b)  $6315 + \dots = 1230 + 6315$

(c)  $\dots + 6210 = 6210 + 741$

(1) Complete as in the example:

$$(1000 + 2000) + 700 = 1000 + (2000 + 700)$$

(a)  $(6350 + 650) + 3000 = 6350 + (650 + \dots)$

(b)  $(4320 + \dots) + 180 = 4320 + (1250 + 180)$

Second :

(2) Notice and complete :

$$\begin{aligned} 2194 + 1209 + 4354 \\ = (2194 + 1209) + 4354 \\ = 3403 + \dots \\ = \dots \end{aligned}$$

$$\begin{aligned} 2194 + 1209 + 4354 \\ = 2194 + (1209 + 4354) \\ = 2194 + \dots \\ = \dots \end{aligned}$$

$$(2194 + 1209) + 4304 = 2194 + (1209 + \dots)$$

$$(1789 + 24559 + \dots) = 1789 + (\dots + 5016)$$

$$(\dots + 3282) + 2943 = 3174 + (3282 + \dots)$$

$$(5210 + \dots) + 3539 = 5210 + (\dots + 3539)$$

(3) Mohamed found out that  $6275 + 65483 = 71758$  and that  $346 + 654 = 1000$  he immediately concluded that the results of the following addition operations are:

(a)  $65483 + 6275 = \dots$

(b)  $654 + 346 = \dots$

(c)  $6275 + 346 + 654 = \dots$

(d)  $65483 + 346 + 654 = \dots$

(e)  $6275 + 65483 + 346 + 654 = \dots$



## Subtracting two numbers

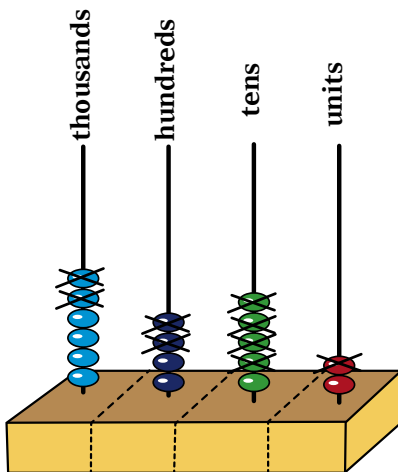
We need to carry subtracting operations in many different situations as:

- In a school of 793 pupils, 348 pupils participate in the scouting activity, how many pupils do not participate in this activity?

The number of pupils whom do not participate in this activity =  $793 - 348 = 445$   
And the following examples show the subtraction operation:

### Example 1:

$$\begin{array}{r} 6452 \\ - 2241 \\ \hline \end{array}$$



$$\begin{array}{r} 6452 \\ - 2241 \\ \hline 4211 \end{array}$$

Notice that this result (4211) can be expressed in any of the following ways:

$$6452 - 2241$$

the decreased of 2241 than 6452

the increased of 6452 than 2241

the remainder of subtracting  
2241 from 6452

the difference between 6452  
and 2241

the difference between 2241 and  
6452

In this case we subtract from the greater and the answer can be written as:

	thousands	hundreds	tens	units
–	6	4	5	2
	2	2	4	1
	4	2	1	1

The result is read: four thousand two hundred and eleven .

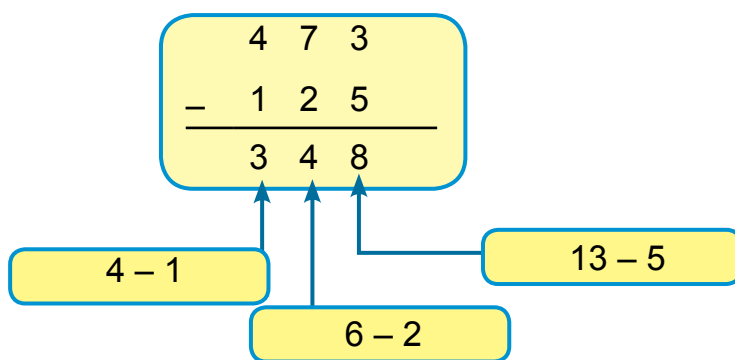


## Example 2:

Subtract

$$473 - 125$$

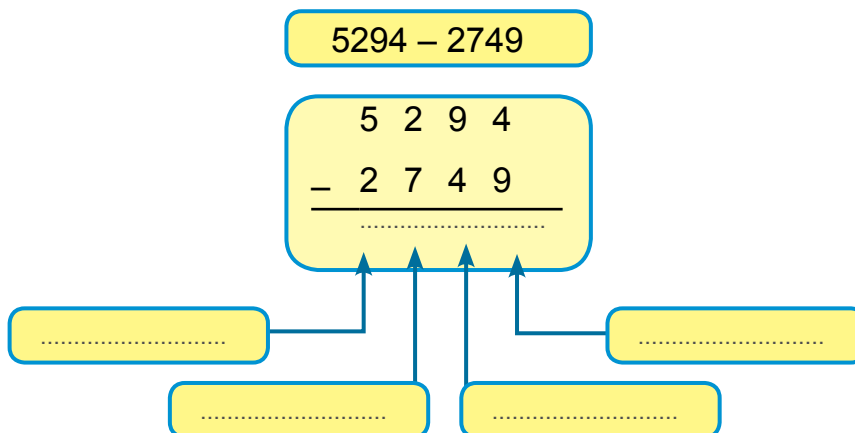
the answer is written as:



hundreds	tens	units
4	<del>7</del> <sup>⑥</sup>	<del>3</del> <sup>⑬</sup>
1	2	5
3	4	8

$$473 - 125 = 348$$

Complete as the example(2):



The answer may also be written as:

thousands	hundreds	tens	units
<del>5</del> <sup>④</sup>	<del>2</del> <sup>①</sup>	<del>9</del> <sup>⑧</sup>	<del>4</del> <sup>⑭</sup>
2	7	4	9
2	5	4	5

$$5294 - 2749 = \dots\dots\dots$$

# Exercices

## (1) Subtract

$$\begin{array}{r} 3987 \\ - 1652 \\ \hline \end{array}$$

$$\begin{array}{r} 5734 \\ - 2568 \\ \hline \end{array}$$

$$\begin{array}{r} 76053 \\ - 5296 \\ \hline \end{array}$$

$$\begin{array}{r} 24305 \\ - 3071 \\ \hline \end{array}$$

$2654 - 1431 = \dots\dots\dots$

$7326 - 5296 = \dots\dots\dots$

$49438 - 36776 = \dots\dots\dots$

$35670 - 2558 = \dots\dots\dots$

- (2) Ali has 1525 piastres. if he buys a box of cheese for 750 piastres, how money be left with him?

The left money with Ali =  $\dots\dots\dots - \dots\dots\dots = \dots\dots\dots$  piastres.

- (3) Hanan had 3647 pounds in her saving account now? she take away 1258 pounds. How much money is in her account after the with drawal?

The remaining amount of money in Hanan's savings account after the withdrawal =  $\dots\dots\dots - \dots\dots\dots = \dots\dots\dots$  pounds.

## (4) Complete according to the same sequence:

(a) 2675 , 2668, 2661 ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$

(b) 9146 ,  $\dots\dots\dots$  , 8946 , 8846 ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$

(c) 63669 , 63659 , 63649 ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$

(d) 6954 , 6974 , 6994,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$

(e) 75072 , 74972 , 74872 ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$  ,  $\dots\dots\dots$

**(5) Circle the closest number to the correct answer (without performing the subtraction operation):**

- |                          |                           |
|--------------------------|---------------------------|
| <b>(a)</b> $6134 - 2965$ | 1000 ; 2000 ; 3000 ; 4000 |
| <b>(b)</b> $4372 - 1278$ | 1000 ; 2000 ; 3000 ; 4000 |
| <b>(c)</b> $9586 - 5542$ | 1000 ; 2000 ; 3000 ; 4000 |

**(6) Find the result (mentally) for each of the following:**

- (a)**  $4976 - 500 =$  .....
- (b)**  $4976 - 30 =$  .....
- (c)**  $6258 - 258 =$  .....
- (d)**  $6258 - 6250 =$  .....
- (e)**  $7583 - 99 =$  .....
- (f)**  $7583 - 1001 =$  .....

## the relation between addition and subtraction

- (1) Eman saved 130 pounds her father gave her 20 pounds on her birthday. how much money does she saved now?

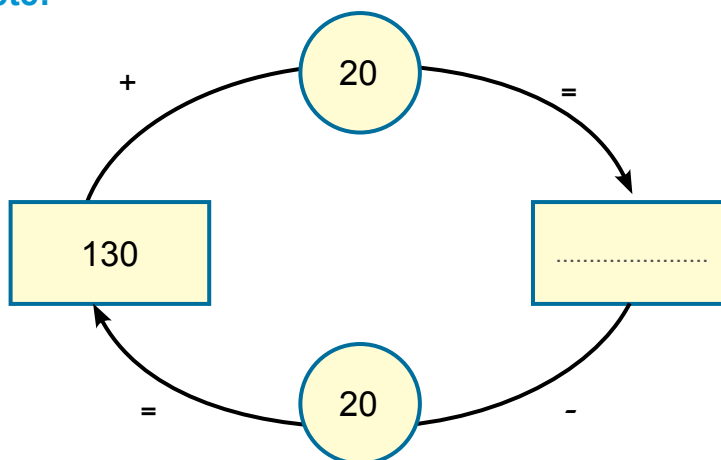
Complete: 130 + ..... = .....pounds

Eman took 20 pounds out of her saving to buy some stories. how much money does she save now?



Complete: ..... - 20 = .....

Complete:



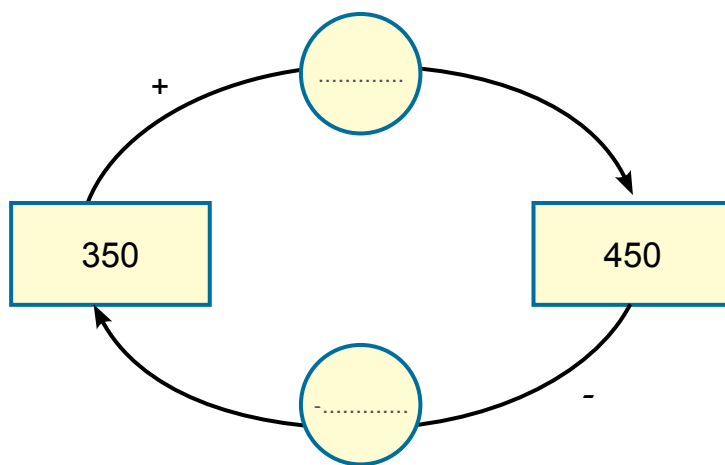
- (2) The opposite figure shows 350 pounds. how much money we need unit the amount becomes 450 pounds.

Complete the following:

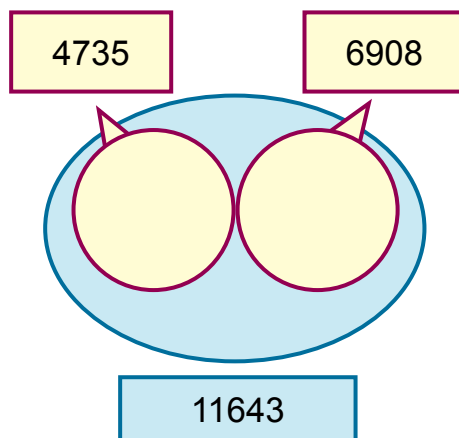
The total = ..... + .....

The complemented amount = ..... - .....

Complete:



- (3) use the following figure to Complete:



$$6908 + 4735 = \dots\dots\dots$$

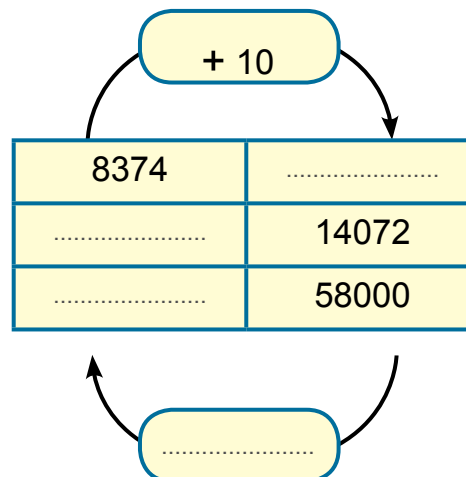
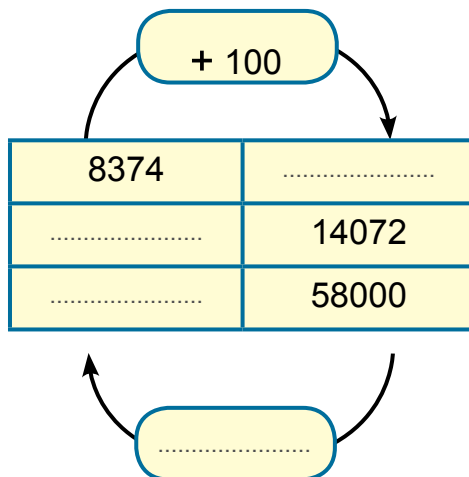
$$4735 + 6908 = \dots\dots\dots$$

$$11643 - 6908 = \dots\dots\dots$$

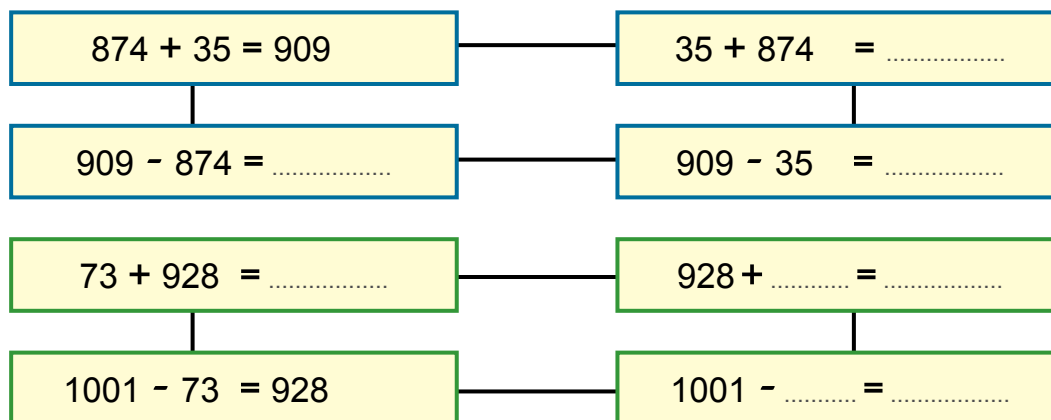
$$11643 - 4735 = \dots\dots\dots$$

## Unit (3)

(4) Complete:



(5) Complete:



(6)

- (a) What is the number which if subtracted from 500, the result is 99 ? .....
- (b) What is the number added to 734 to make 1000? .....
- (c) If we subtracted 400 from a number the result is 400. Find the number ? .....



# Exercises on unit (3)

(1) Complete using one of the signs ( $<$ ,  $=$ ,  $>$ ): without doing addition or subtraction :

- (a)  $5487 + 1623$    $9000$   
 (b)  $85732 + 874$    $85730 + 876$   
 (c)  $71206 + 61352$    $72000 + 62000$   
 (d)  $3294 - 2000$    $1000$   
 (e)  $1987 - 425$    $1987 - 452$   
 (f)  $7400 - 2700$    $8400 - 3700$

(2) Complete using the suitable numbers:

- (a)  $1654 + 3729$   $>$   $1654 + \dots\dots\dots$   
 (b)  $80235 + \dots\dots$   $<$   $90000$   
 (c)  $7864 - 2135$   $=$   $7865 - \dots\dots\dots$   
 (d)  $\dots\dots\dots + 10000$   $>$   $1000 + 8999$   
 (e)  $9999 = \dots\dots\dots - 1$

(3) Circle the closest number to the result (without doing the addition or subtraction):

(a)	$594 + 357$	1000	2000	3000	4000	5000	6000	7000	8000	9000
(b)	$1213 + 2394$	1000	2000	3000	4000	5000	6000	7000	8000	9000
(c)	$7235 - 1143$	1000	2000	3000	4000	5000	6000	7000	8000	9000
(d)	$4670 - 3569$	1000	2000	3000	4000	5000	6000	7000	8000	9000

## Unit (3)

(4) Subtract 2357 from 23194 and add 4209 to the result:

Subtraction operation: .....

-

Addition operation: .....

+

(5) Find the result of each of the following:

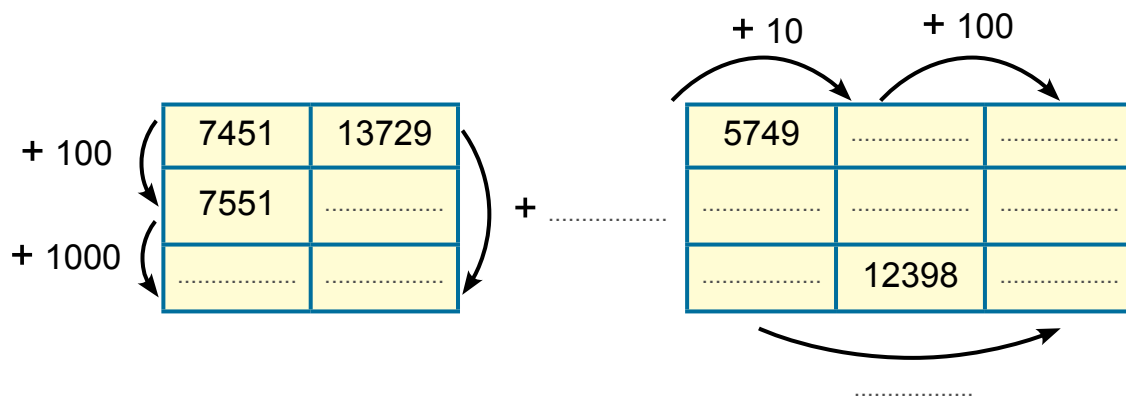
(a)  $8175 + 6243 - 9751 = \dots\dots\dots$

(b)  $73208 + 1045 - 2045 = \dots\dots\dots$

(c)  $14293 - 8093 - 250 = \dots\dots\dots$

(d)  $64587 - 1487 + 8253 = \dots\dots\dots$

(6) Complete:



(7) Choose the correct answer:

(a) Hossam has LE 4236, his sister has LE 8135, they have altogether:

(i)  $8135 - 4236$       (ii)  $8135 + 4236$       (iii)  $4236 - 8135$

(b) Adel has LE 3540 in his saving account, then he take a way LE 1310 from it:

(i) Subtraction      (ii) Multiplication      (iii) Addition

**(8) Complete:**

- (a) The number must be added to 4235 so the result will be 7235 is .....
- (b)  $1000 + \dots > 999 + 137$
- (c) If  $153 + 547 = 700$  ,  $259 + 741 = 1000$ , then  $153 + 259 + 547 + 741$   
= .....

**(9) Arrange the following sets of numbers ascendingly and descendingly and find the sum of the smallest and the greatest numbers:**

(a) 12647 , 30625 , 9487 , 91278, 62368

Ascendingly:....., ....., ....., ....., .....

Descendingly: ....., ....., ....., ....., .....

The greatest number is: ..... The smallest number is: .....

The sum of the greatest and the smallest numbers = ..... + ..... = .....

(b) 51634 , 34527 , 12389, 8024, 95632

Ascendingly:....., ....., ....., ....., .....

Descendingly: ....., ....., ....., ....., .....

the greatest number is: ..... The smallest number is: .....

The sum of the greatest and the smallest numbers = ..... + ..... = .....

(c) 49953 , 10728 , 27835 , 86264 , 35867

Ascendingly:....., ....., ....., ....., .....

Descendingly: ....., ....., ....., ....., .....

The greatest number is: ..... The smallest number is: .....

The sum of the greatest and the smallest numbers = ..... + ..... = .....

**(10) Complete in the same sequence:**

5234 , 5334 , 5434 , ....., ....., .....

8778 , 8678 , 8578 , ....., ....., .....

58442 , 58542 , 58642 , ....., ....., .....

## Unit (3)

(11) Write each of the following numbers in the form of the sum of its components as in the Example:

Example:

thousands	hundreds	tens	units
4	7	3	6

$$\begin{array}{r}
 = \begin{array}{|c|c|c|c|} \hline 4 & 0 & 0 & 0 \\ \hline \end{array} \\
 + \begin{array}{|c|c|c|c|} \hline & 7 & 0 & 0 \\ \hline \end{array} \\
 + \begin{array}{|c|c|c|c|} \hline & & 3 & 0 \\ \hline \end{array} \\
 + \begin{array}{|c|c|c|c|} \hline & & & 6 \\ \hline \end{array}
 \end{array}$$

$$4736 = 4000 + 700 + 30 + 6$$

thousands	hundreds	tens	units
9	5	1	8

$$\begin{array}{r}
 = \begin{array}{|c|c|c|c|} \hline \dots & \dots & \dots & \dots \\ \hline \end{array} \\
 + \begin{array}{|c|c|c|c|} \hline & 5 & 0 & 0 \\ \hline \end{array} \\
 + \begin{array}{|c|c|c|c|} \hline & & \dots & \dots \\ \hline \end{array} \\
 + \begin{array}{|c|c|c|c|} \hline & & & \dots \\ \hline \end{array}
 \end{array}$$

(a)  $9518 = \dots + \dots + \dots + \dots$

(b)  $4637 = \dots + \dots + \dots + \dots$

(c)  $2907 = \dots + \dots + \dots + \dots$

(12) The total amount of deposits in the savings account at a post office in a moth was 54786 pounds and in the next month it was 44234 pounds. what is the total amount of deposits in the two months?

The total amount of deposits in two months = ..... = ..... pound

(13) A hospital received 39825 pounds of donations in one week and 46774 in the next week. what is the total amount of donations in the two weeks?

The total amount of donations in the two weeks =

..... = ..... pound

**(14)** 1053 cars were parked in a parking lot. Another 408 cars were parked there. the remaining places can take another 37 cars. Find the number of cars this parking lot can accommodate?

The numbers of cars this parking can accomodate .....

**(15)** 76123 tourists visited Egypt in one month and next month 87679 tourists visited it. What is the difference between the numbers of tourists in the two months?

The difference between the numbers of tourists in the two months = .....  
= ..... tourists



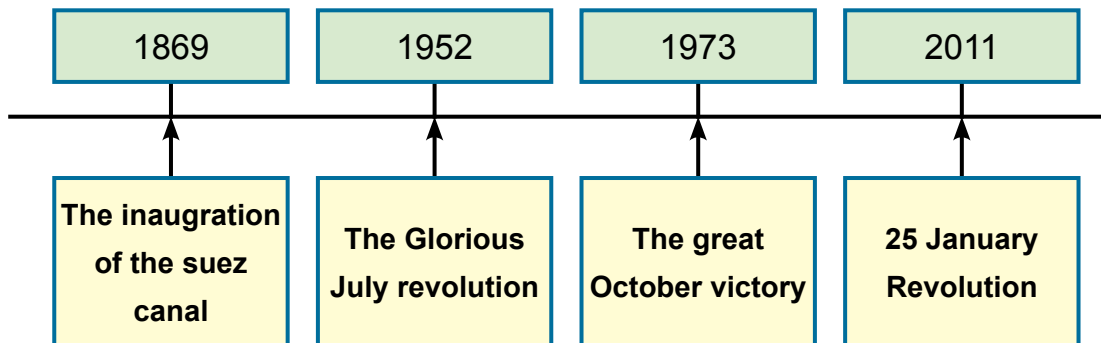
**(16)** The number of economical flats built in a year in a year in one of the governorates was 36024 flats and 31192 flats were built in another governorates in the same year. What is the difference between the number of economical flats built that year in the two governorates?

The difference between the number of flats = .....  
= .....



## Unit (3)

**(17)** The following are the years in which some important historical events took place in Egypt:



With the help of the previous data, answer the following questions:

- (a)** How many years passed between the july revolution and the october victory?  
.....
- (b)** Calculate the time that passed between the inauguration of the suez canal and the october victory.  
.....
- (c)** How many years passed since the july Revolution up till now?  
.....
- (d)** How many years have passed since the 23 July 1952 until 25 january 2011?  
.....

**(18)** Using the properties of addition to find:

$$4372 + 614 + 3648 + 386$$

$$= \dots\dots\dots + \dots\dots\dots + \dots\dots\dots + \dots\dots\dots$$

$$= \dots\dots\dots + \dots\dots\dots$$

$$= \dots\dots\dots$$

# Activities

## On Unit 3

(1) Replace each shape with a digit to obtain a correct addition operation:

$$\begin{array}{rcc}
 \triangle & \bigcirc & \square \\
 + & \bigcirc & \square & 3 \\
 \hline
 9 & \bigcirc & \triangle
 \end{array}$$



$\square = \dots\dots\dots$  ,  $\bigcirc = \dots\dots\dots$  ,  $\triangle = \dots\dots\dots$

(2) Find two consecutive numbers whose sum is 10001.

$\dots\dots\dots$  ,  $\dots\dots\dots$

(3) Think , then find the result.

■ Find  $36 - 9$

**Think:** 9 is less than 10 by 1

**Subtract 10:**  $36 - 10 = \dots\dots\dots$

**Then add 1:**  $\dots\dots\dots + 1 = \dots\dots\dots$

**Then**  $36 - 9 = \dots\dots\dots$

■ Find  $423 - 99$

**Think:** 99 is less than 100 by 1

**Subtract 100:**  $423 - 100 = \dots\dots\dots$

**Then add 1:**  $\dots\dots\dots + 1 = \dots\dots\dots$

**Then**  $423 - 99 = \dots\dots\dots$

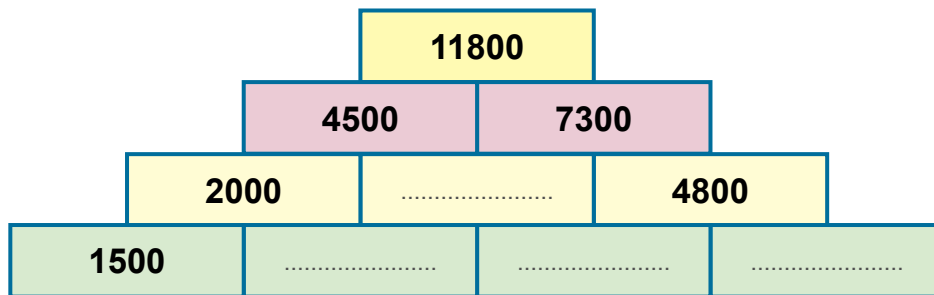


## Unit (3)

(4) Find out the pattern and complete:

(a) 20000, 19000, 17000, ..... , 10000 , .....

(b) 20000, 15000, 11000, ..... , ..... , 5000



# Unit (4)

# Geometry



## Solids

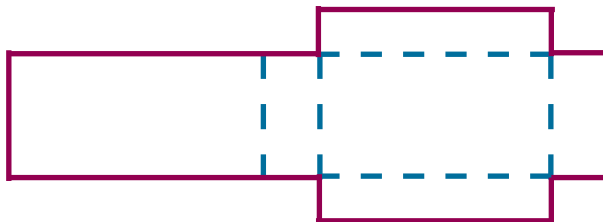


**Practical Exercises: How can we make a box out of cardboard?**

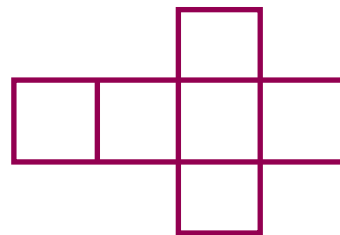
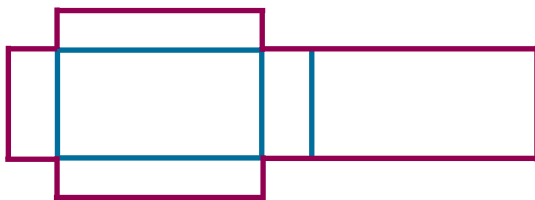
Fold the cardboard and glue it to make a box without a lid.



Fold the cardboard and glue it to make closed box.

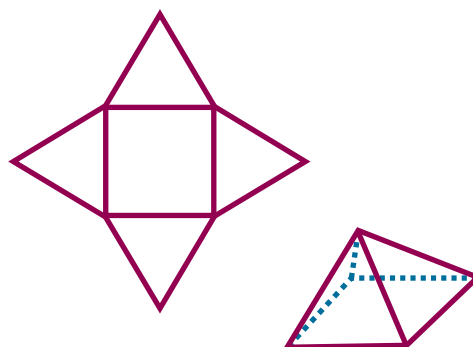


**Match each of the following figures to the solid we can make out of it:**



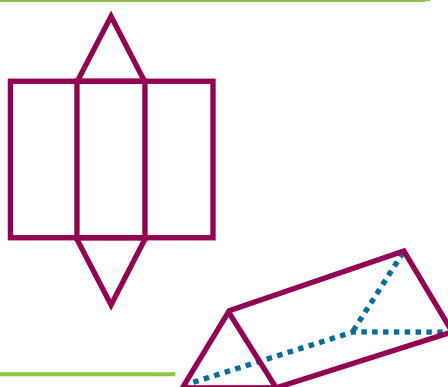
### Making a pyramid out of cardboard

Fold the cardboard and glue it to make a pyramid as in the following figure

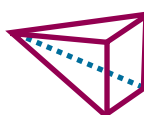
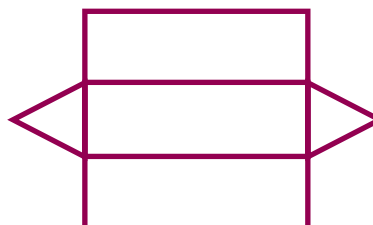
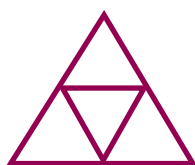
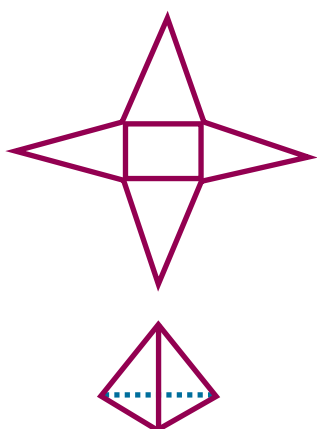


### Making a prism out of cardboard.

Fold the cardboard and glue it to make a prism as shown in the opposite figure.



Match each of the following figures to the solid we can make out of it:

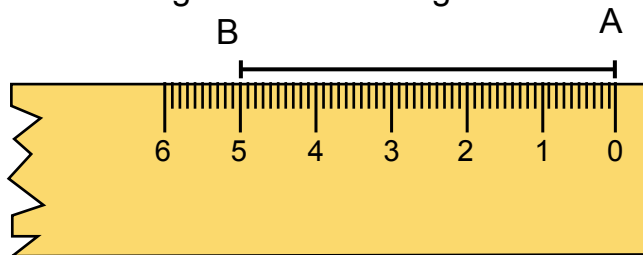


## Using a ruler to measure the length of a line segment

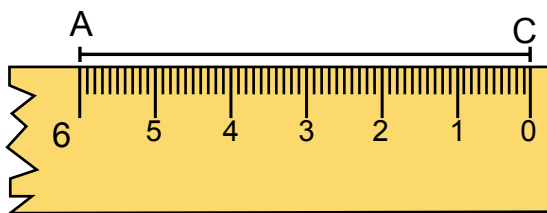


In the opposite figure you will find that the length of this line segment = 5 centimeters.

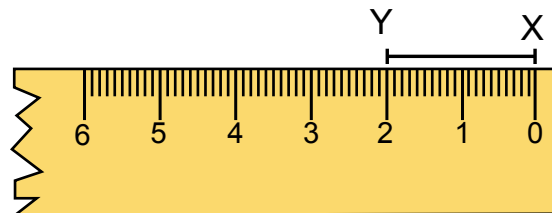
Therefore  $AB = 5$  cm.



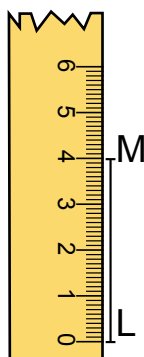
(1) In each of the following figures, read the measure on the ruler and complete:



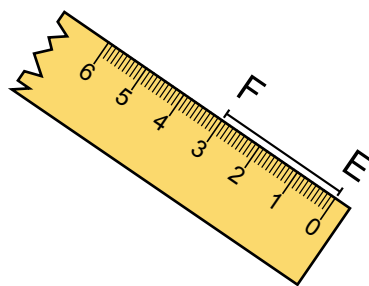
$CA = \dots\dots\dots$  cm



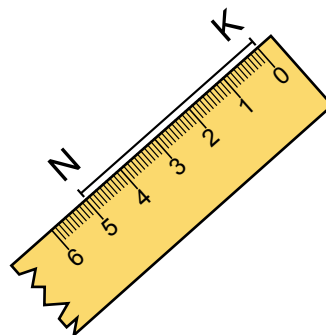
$XY = \dots\dots\dots$  cm



$LM = \dots\dots\dots$  cm

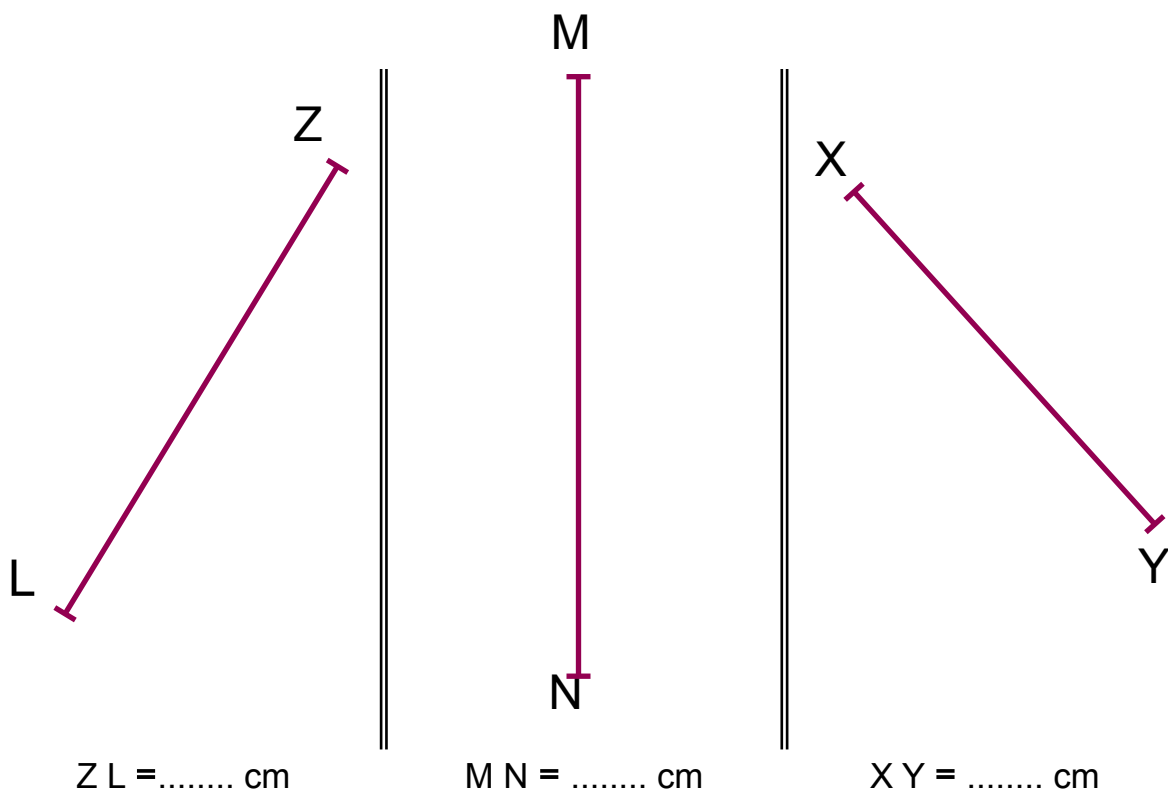
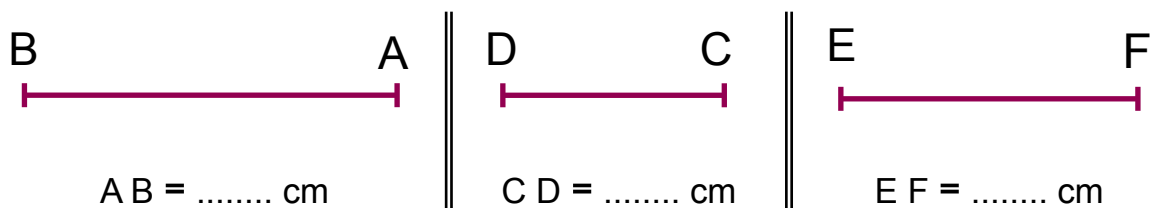


$EF = \dots\dots\dots$  cm



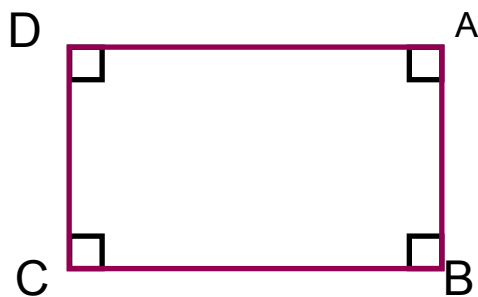
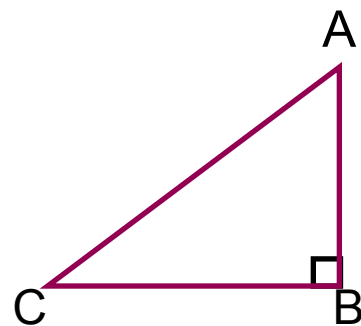
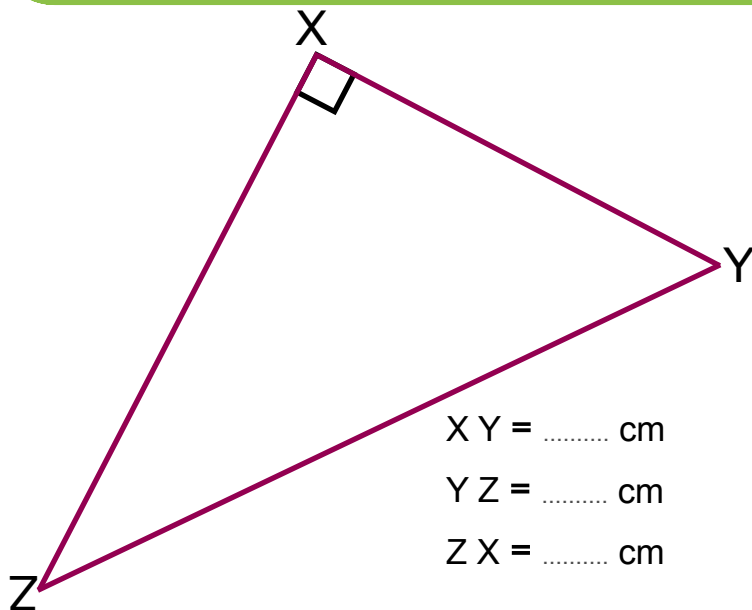
$KN = \dots\dots\dots$  cm

(2) Use a graded ruler to measure the length of each of the drawn line segments in the following figures:



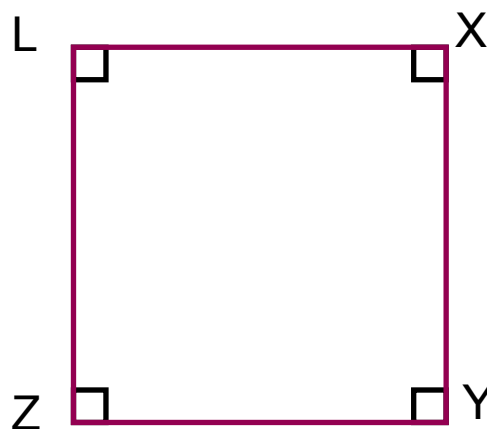
## Unit Four

(3) Use a graded ruler to measure the length of each of the following:



What do you notice ? .....

The figure A B C D is a .....



What do you notice ? .....

The figure X L Y Z is a .....



# Lesson 3



## Geometric constructions

### First: Drawing a line segment of a known length

Draw the line segment AB of length 5 cm use the graded ruler and a pencil

**First step:** Mark a point (A) on the ruler edge at the beginning of the graduation (0), then count gradually up to 5, then mark the second point (B).

**Second step:** join the two points A, B, to get the line segment AB, of length 5 cm.



B  A  
5 cm

**Remark:** it is denoted for the line segment AB by the symbol  $\overline{AB}$ ,

also the length of  $\overline{AB}$  by AB

it means that :  $AB = BA = 5 \text{ cm}$

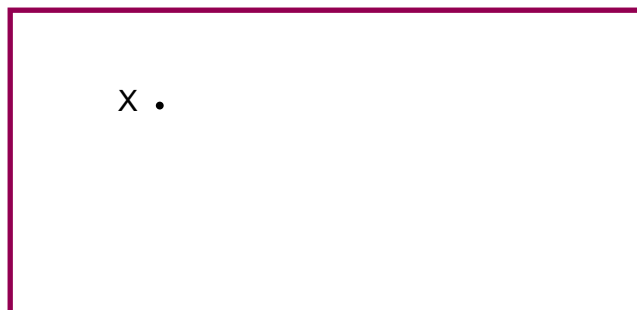
in the previous example(  $\overline{AB} = 5 \text{ cm}$  is not true)

**(1) Draw a line segment AB with length 4 cm long inside the following rectangle.**

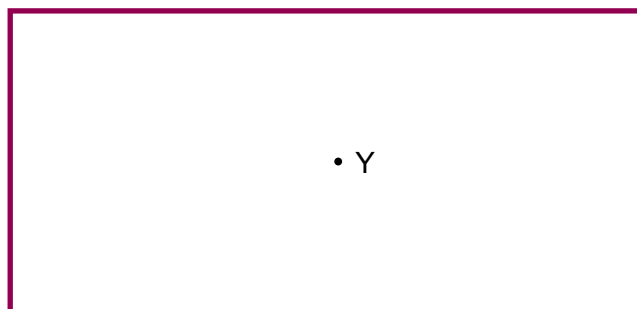


## Unit Four

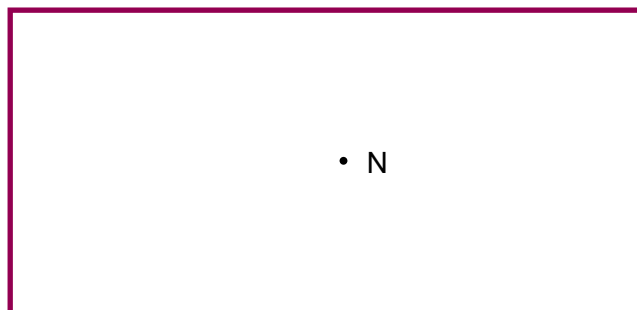
- (2) Inside the following rectangle draw a line segment, with length 4 cm long which the point X is one of its ends and the other end is Y.



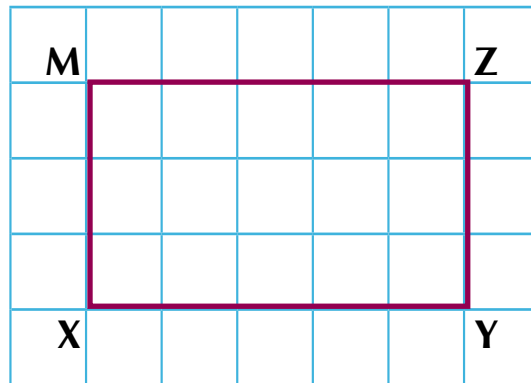
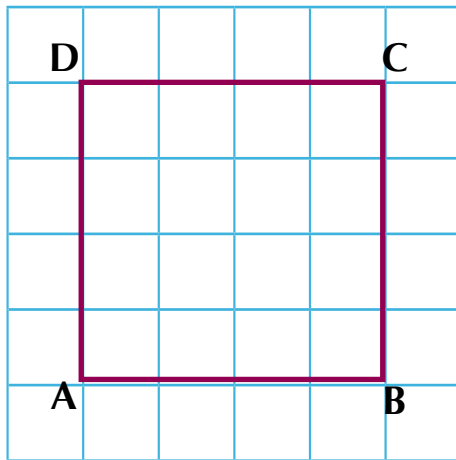
- (3) Inside the following rectangle draw two line segments ( $\overline{AB}$ ,  $\overline{CD}$ ), each with length 5 cm long and intersecting at the point Y.



- (4) Inside the following rectangle draw a line segment  $\overline{AB}$  with 4 cm long with the point N at its midpoint.



### Second: drawing squares and rectangles on a lattice:

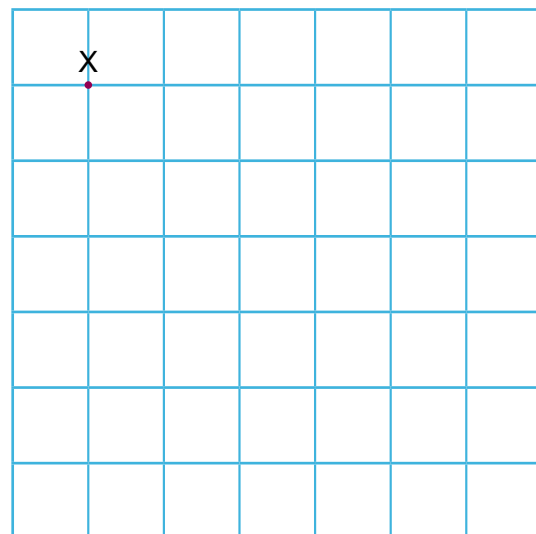


The two figures drawn on this lattice are the square ABCD and the rectangle XYZM. If we take the length of the side of the small square of the lattice as one unit of the length, then the length of the side of ABCD is 4 units. The lengths of the two dimensions of the rectangle XYZM are 5 and 3 of these units (i.e. the length is 5 units and the width is 3 units)

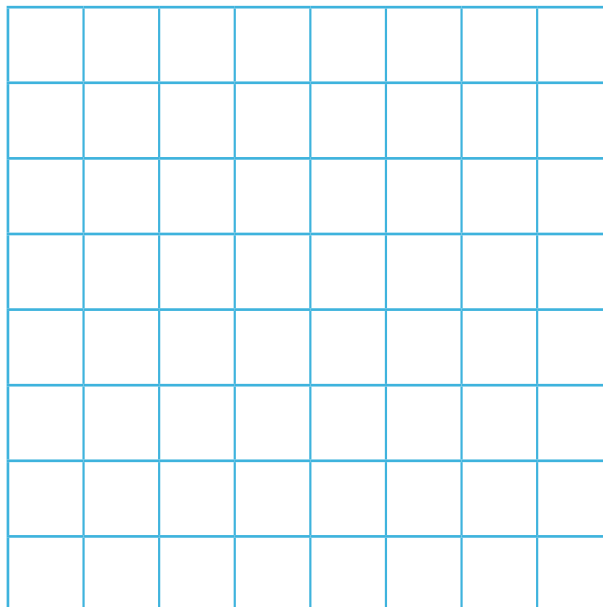
### Drill

In the opposite lattice if we take the length of the small square as a length unit, draw the following shapes:

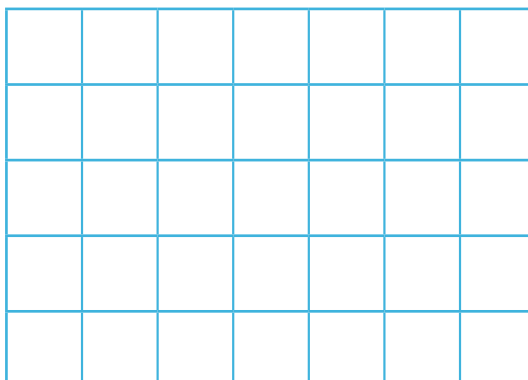
- 1 Draw the square XYZL of side length 5 units long.



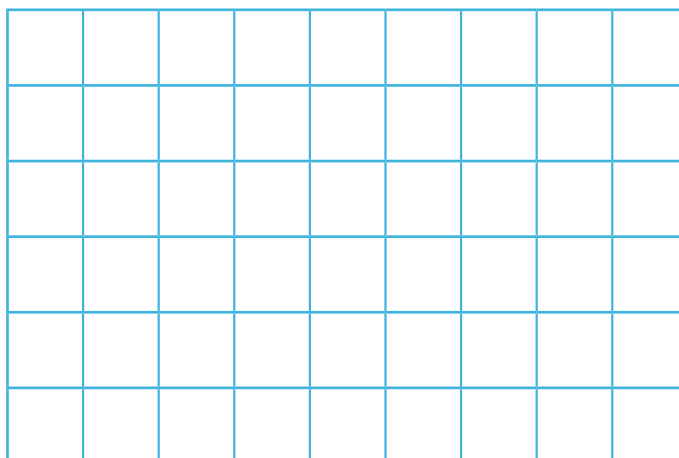
- 2 Draw the square ABCD of side length 6 units long.



- 3 Draw the rectangle ABCD whose dimensions are 5,3 units long.



- 4 Draw the rectangle XYZL whose dimensions are 7,4 units long.



# Lesson 4

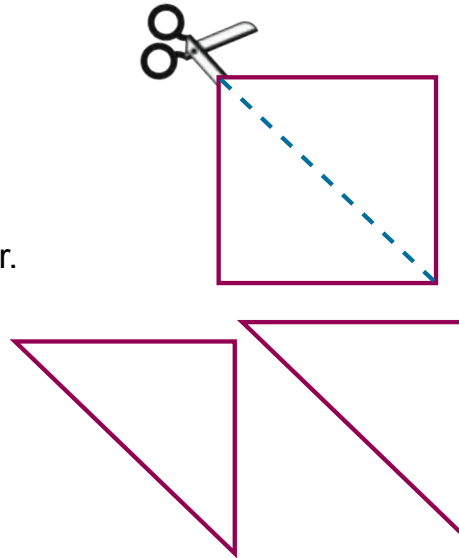
## Congruency of Two Geometric Figures



### Practical Exercise (1)

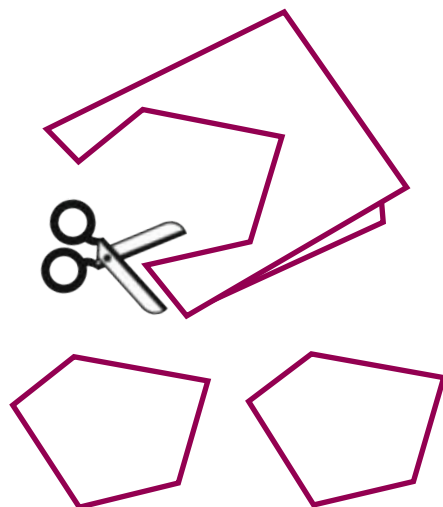
- 1 Bring a square piece of paper.
- 2 Use scissors to cut this paper into two triangle-shaped pieces of paper.
- 3 Put one of the pieces on top of the other. Make sure that these two triangles are exactly the same.

Therefore, these 2 triangles are **congruent**.



### Practical Exercise (2)

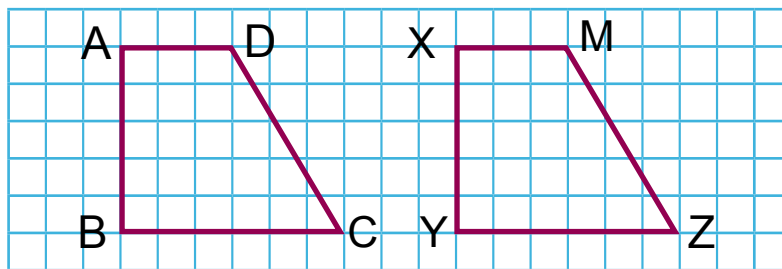
- 1 Bring two pieces of paper. put one of them on the other.
- 2 Use scissors to cut out any figure you like (out of the two papers at the same time)
- 3 Remove the two figures from the two papers to get two **congruent** figures.
- 4 Check out that these two figures are exactly the same practically.



## Unit Four

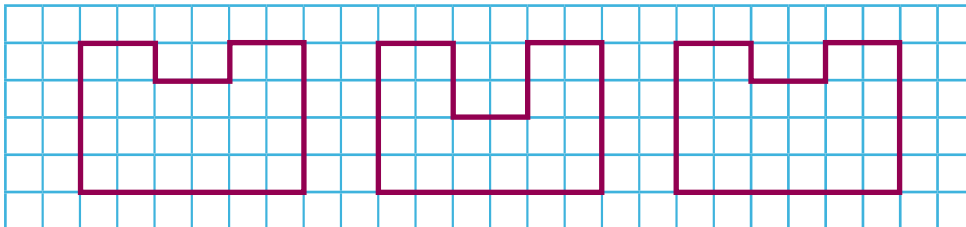
### Practical Exercise (3)

- 1 Bring tracing paper and copy the figure A B C D.
- 2 Put it on top of the figure XYZM. Move it until vertex A is on top of vertex X, B on Y, C on Z, and D on M.  
You are now sure that the two figures are congruent

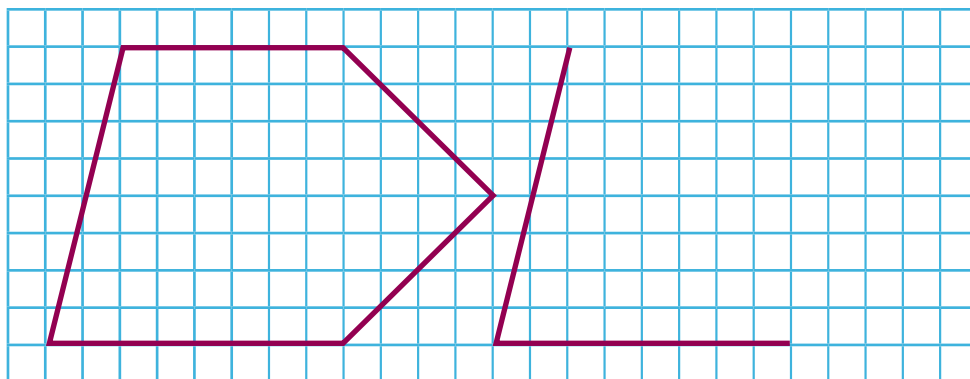


## Exercises

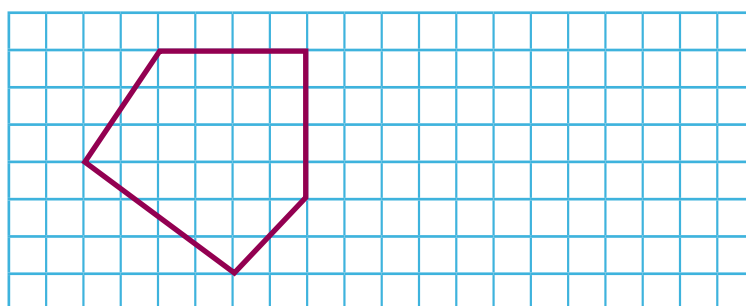
- (1) Identify the two congruent figures and colour them using the same colour:



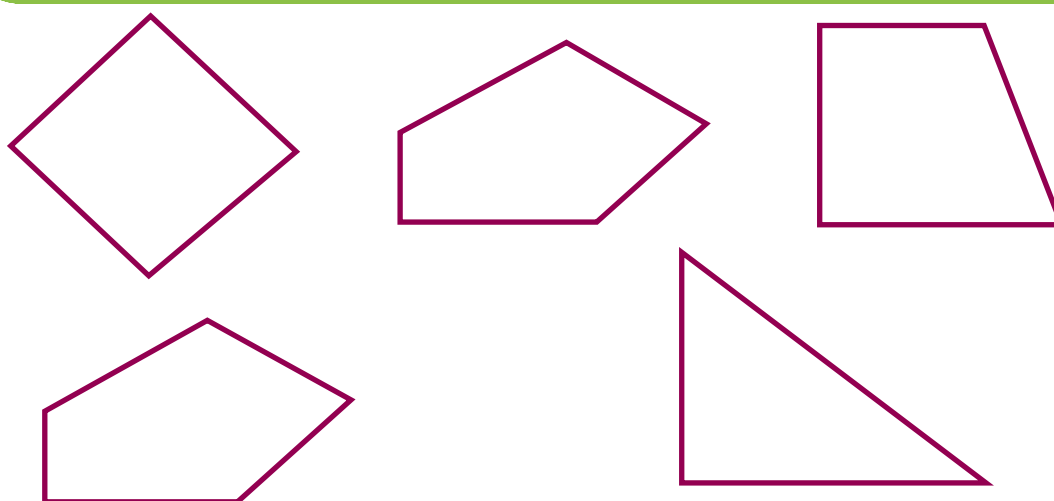
(2) Complete drawing the right figure to make it congruent with the left figure. (use tracing paper to check that they are congruent).



(3) Draw a figure congruent with the drawn figure in the opposite lattice.



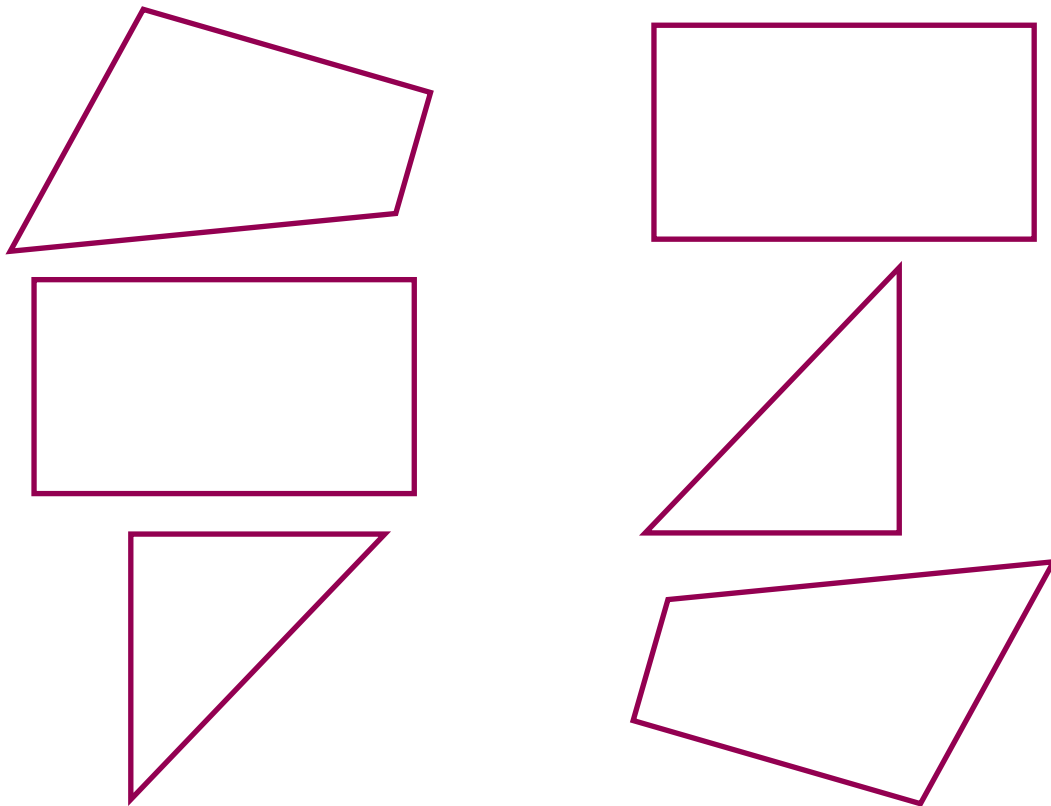
(4) There are two congruent figures among the following figures. Find them and put (✓) in side each one:



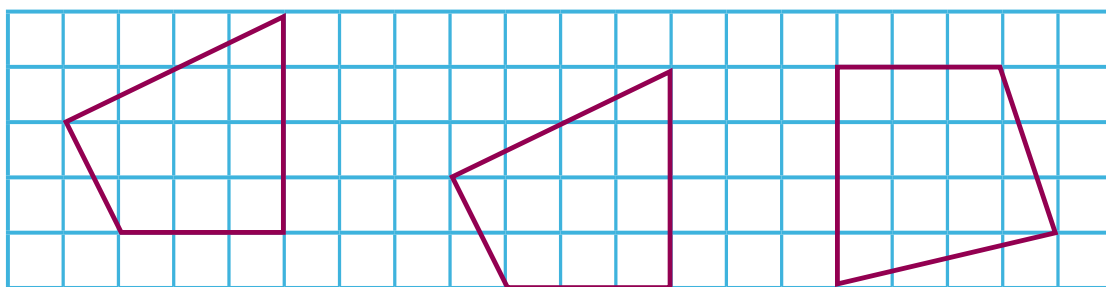


## Unit Four

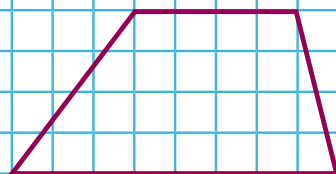
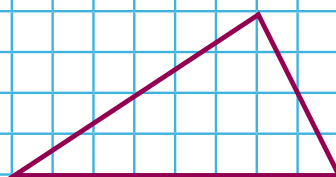
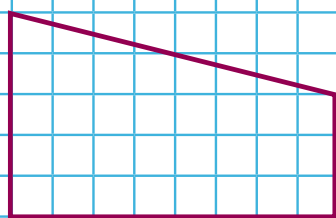
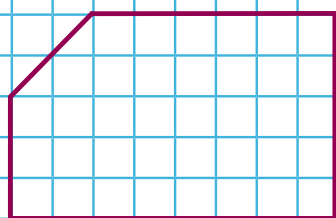
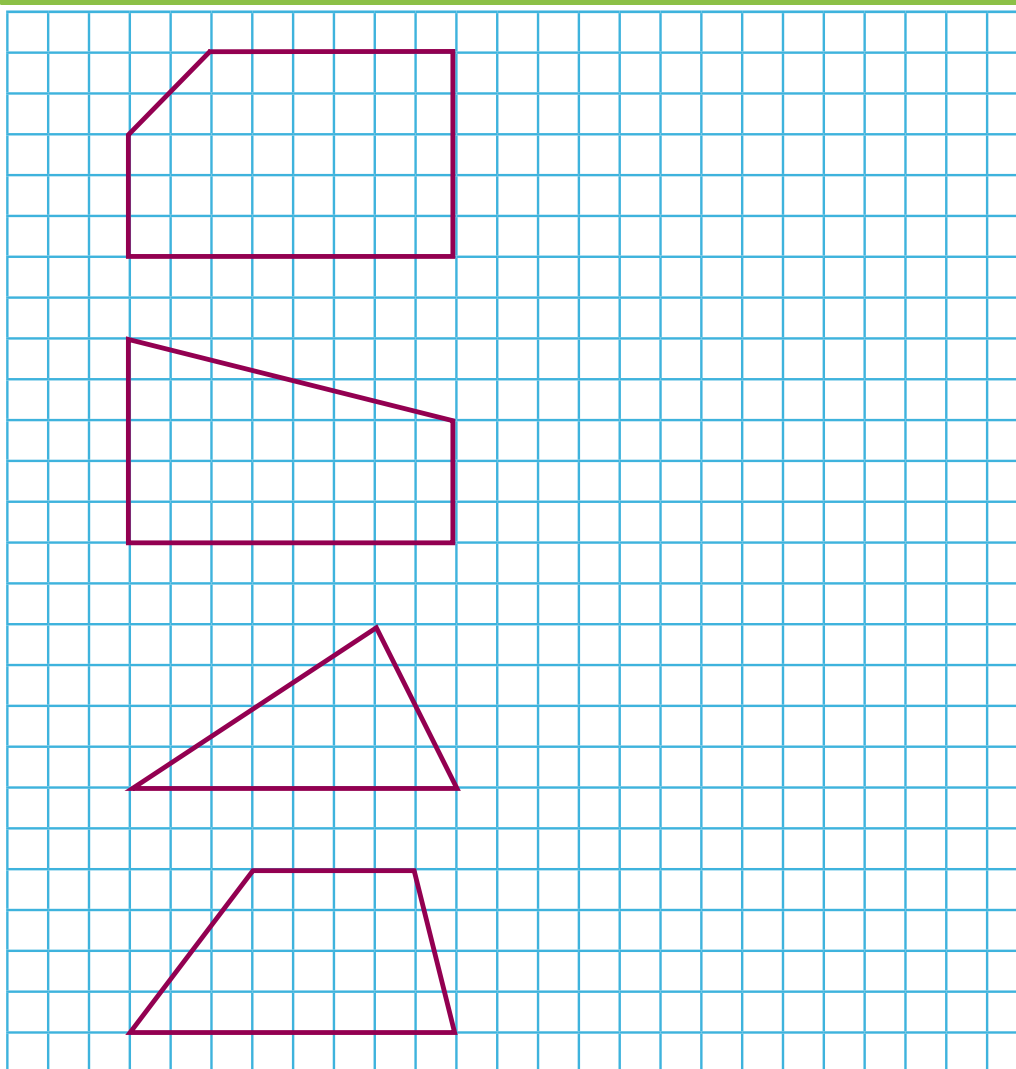
(5) Colour each two congruent figures in the same colour:



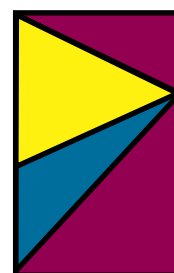
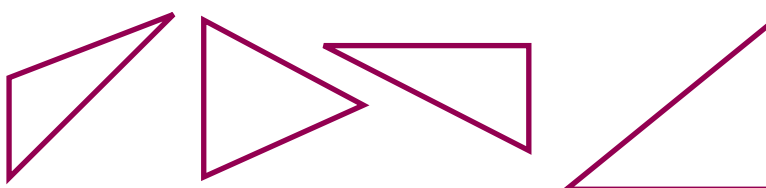
(6) Two of these three polygons are congruent. Put (✓) in side the congruent polygons:



(7) On the right side draw a figure congruent with the polygon on the left side:



(8) A rectangle piece of paper is cut into 4 triangles and colour them with the same colours as in the original figure :



## Visual paatterns (recognizing and building them)

(1) Notice that the groups of figures follow each other according to a certain pattern.

Describe the pattern and complete by drawing the three following figures in each case:

Group One:



The pattern is .....

Group Two:



The pattern is .....

Group Three:



The pattern is .....

Group Four:



The pattern is .....

Group Five:



The pattern is .....

Group Six:



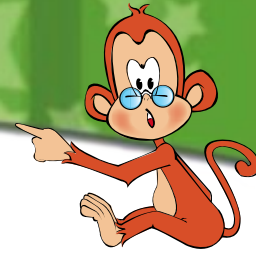
The pattern is .....

Group Seven:

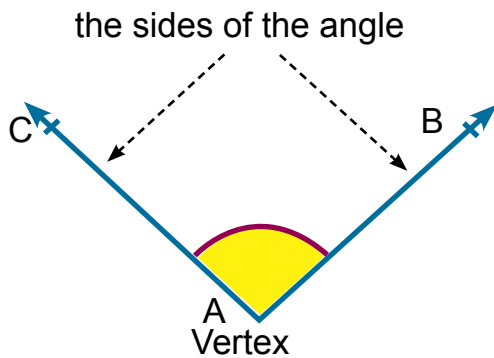
A B    A B B    A B B B    A B B B B    A

The pattern is .....

**(2) Form patterns of your own and draw 8 elements for each.**



# The angle



The previous figure is an angle whose vertex is the point A

and its sides are  $\overrightarrow{AB}$  and  $\overrightarrow{AC}$ .

## Notice that:

The ray A B



denoted by  $\overrightarrow{AB}$  starting from A, extended from B.

The ray B A



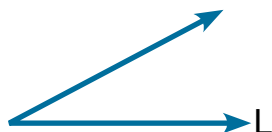
denoted by  $\overrightarrow{BA}$  starting from B, extended from A.

## Complete the table:

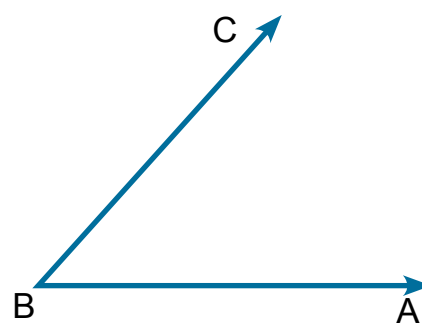
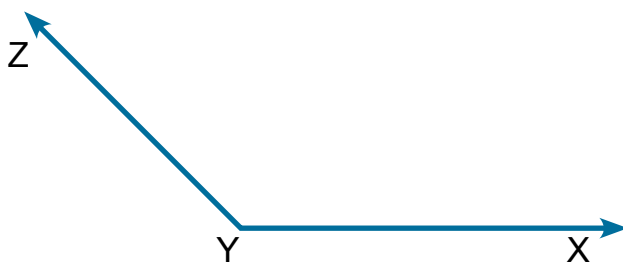
The figure	Name of the angle	The vertex	The sides of the angle
<p>Example</p>	$\angle ABC$ or $\angle CBA$ or $\angle B$	B	$\overrightarrow{BA}$ and $\overrightarrow{BC}$
	..... or ..... or .....	Y	..... and .....
	..... or ..... or .....	.....	..... and .....
	..... or ..... or .....	.....	..... and .....

### Measuring angles:

**First:** Using  $\angle L$  as a measuring unit:

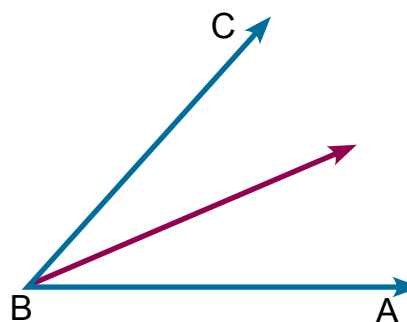
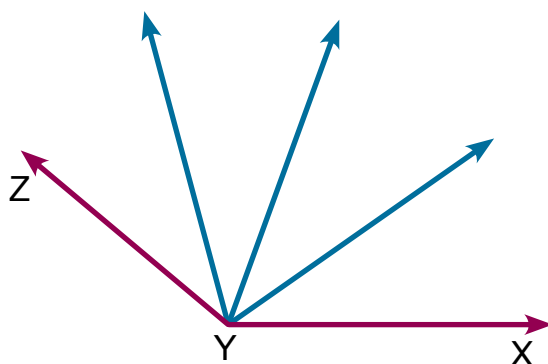


Compare between  $\angle ABC$  and  $\angle XYZ$



For comparing: notice the number of times of  $\angle L$  for each of the two angles containment.

### Notice and complete:



$\angle ABC$  has ..... of the measuring ( $\angle L$ )

$\angle XYZ$  has ..... of the measuring.

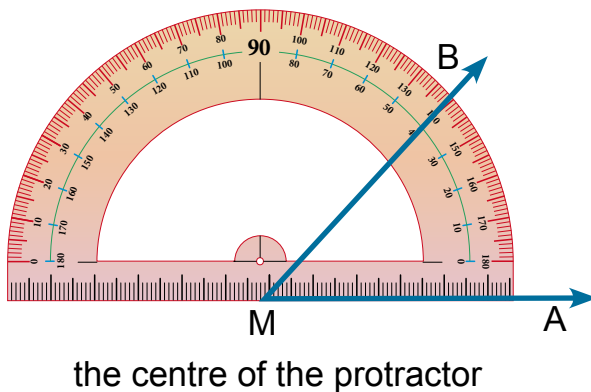
and therefore the measure of  $\angle ABC$  ..... the measure of  $\angle XYZ$ .

( < or > or = )

## Unit Four

### Second: The protractor:

The protractor is a geometric tool used for measuring angles. The straight angle is divided into 180 equal parts each part is 1 degree. Therefore the

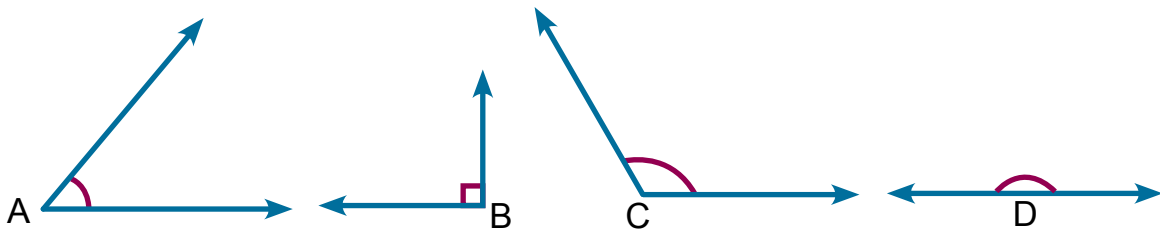


measuring unit of angles is the degree and is written as  $1^\circ$ .

The opposite figure shows how a protractor is used for measuring an angle.

The measure of  $(\angle A M B) = 50^\circ$ .

(1) Use the protractor to measure the shown angles and complete the table:



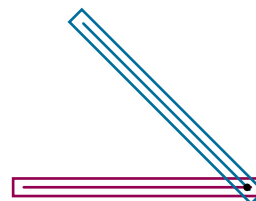
Angle	The measure
$\angle A$	.....
$\angle B$	.....
$\angle C$	.....
$\angle D$	.....




## Types of the angles:

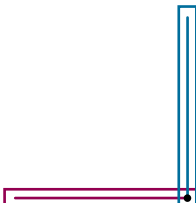
### Practical exercise:

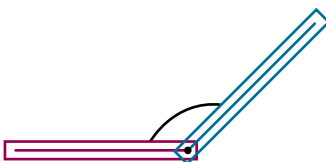
Move the card board bars as shown in the opposite figure:




1  expresses the angle  $0^\circ$ .

2  expresses the acute angle.  
examples:  $20^\circ$ ,  $30^\circ$ ,  $60^\circ$ ,  $79^\circ$

3  expresses the right angle, its measure  $90^\circ$

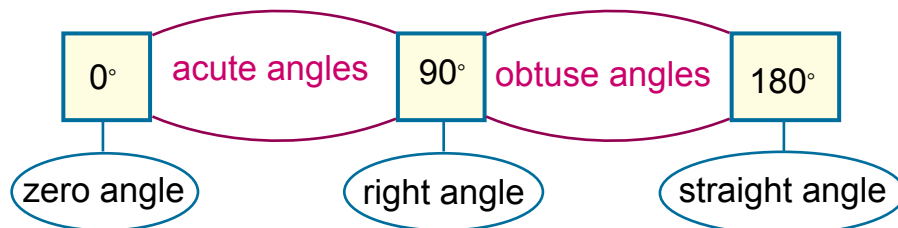
4  expresses the obtuse angle, its measure is greater than  $90^\circ$  and less than  $180^\circ$   
examples:  $95^\circ$ ,  $100^\circ$ ,  $150^\circ$ ,  $179^\circ$

5  expresses the straight angle, its measure is  $180^\circ$  (2 right angles)

We will study later more angles getting from moving the bars.

## Unit Four

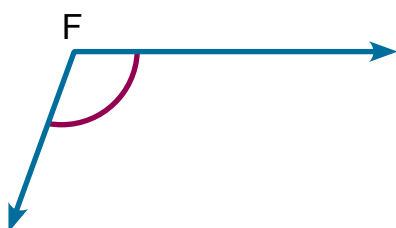
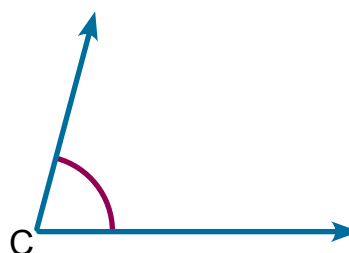
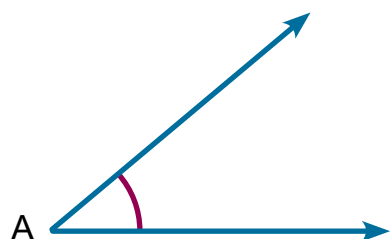
The following figure shows the types of the angles:



(2) Complete the following table as in the example:

	The measure of the angle	Its type
Example	50°	acute
	120°	.....
	90°	.....
	45°	.....
	135°	.....
	100°	.....
	7°	.....
	91°	.....
	180°	.....
	108°	.....

(3) use the protractor to find the measure of each of the following angles, then complete:



Measure of  $\angle A = \dots\dots\dots^\circ$  , and its type is .....

Measure of  $\angle D = \dots\dots\dots^\circ$  , and its type is .....

Measure of  $\angle X = \dots\dots\dots^\circ$  , and its type is .....

Measure of  $\angle C = \dots\dots\dots^\circ$  , and its type is .....

Measure of  $\angle F = \dots\dots\dots^\circ$  , and its type is .....

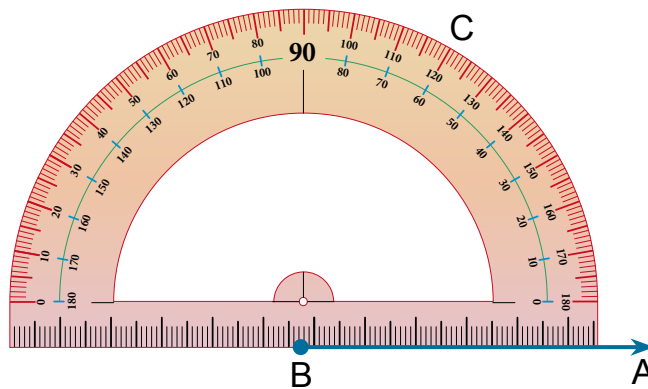
Measure of  $\angle Z = \dots\dots\dots^\circ$  , and its type is .....

## Unit Four

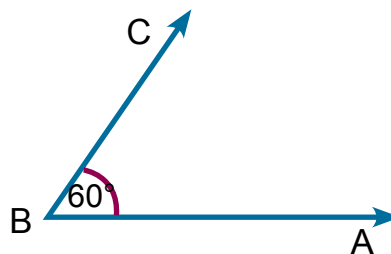
### Drawing an angle of known measure:

**Example:** Draw  $\angle ABC$  of measure  $60^\circ$

- 1 Draw the ray  $\overrightarrow{BA}$
- 2 put the centre of the protractor on point B and its base on  $\overrightarrow{BA}$ , then put a mark at point C at  $60^\circ$



- 3 Draw the ray  $\overrightarrow{BC}$  you will get  $\angle ABC$  with measure  $60^\circ$



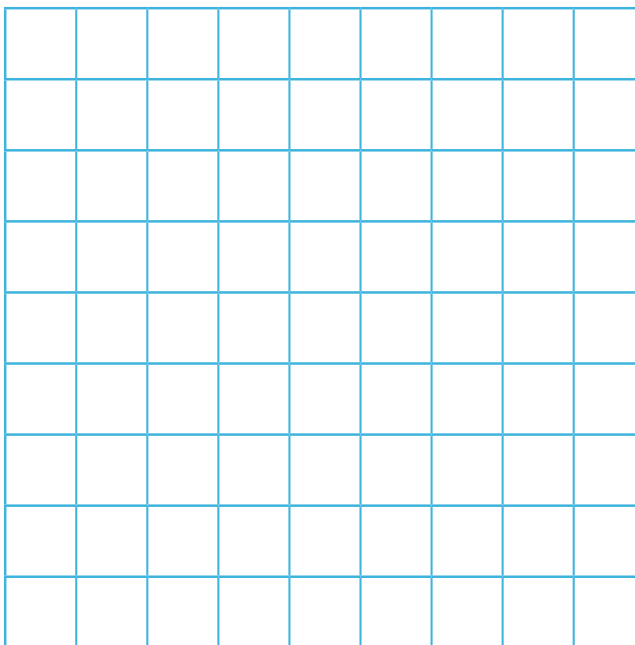
Draw angles with the following measures:

$50^\circ$  ,  $90^\circ$  ,  $95^\circ$  ,  $47^\circ$  ,  $86^\circ$  ,  $150^\circ$

# Exercises

## (1) On the opposite lattice draw:

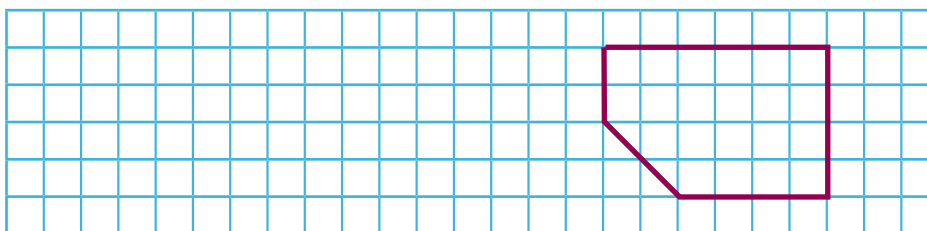
- (a) A line segment 7 units long.
- (b) Square whose side length is 4 units long.
- (c) A rectangle whose dimensions are 2 and 7 units long.  
(Consider the length of the small square as a unit length).



## (2) Underline the correct answer

- (a) The Measure of an acute angle. (90°, less than 90°, more than 90°)
- (b) The Measure of right angle is. (90°, less than 90°, more than 90°)
- (c) when it is seven o'clock, the angle between the hands of the clock is ..... ( acute, right, obtuse)
- (d) The angle between the hands of the clock is a right angle when it is ..... O'clock. ( 2, 3, 6).

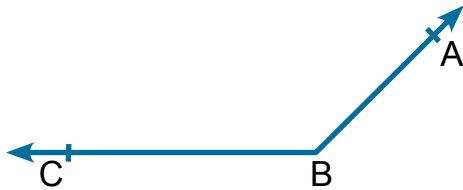
## (3) On the following lattice, draw a congruent shape to the drawn shape.



## Unit Four

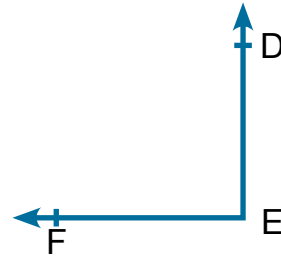
(4) Use the protractor, measure each of the following, then complete:

(a)



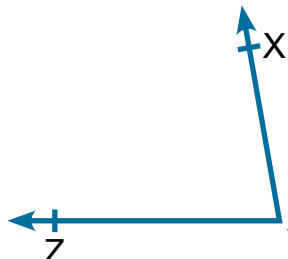
$$m(\angle ABC) = \dots\dots\dots^\circ$$

(b)



$$m(\angle DEF) = \dots\dots\dots^\circ$$

(c)



$$m(\angle XYZ) = \dots\dots\dots^\circ$$

(d)



$$m(\angle LMN) = \dots\dots\dots^\circ$$

(5) Use the ruler, pencil and the protractor Draw

(a)  $\angle ABC$  where  $m(\angle ABC) = 70^\circ$

(b)  $\angle XYZ$  where  $m(\angle XYZ) = 130^\circ$

(6) Complete:

(a) The base of the cylinder is in the form .....

(b) The number of the edges of a cuboid = the number of the edges of a .....

(c) The angle between the hands of the clock is a straight when it is ..... O'clock

# Activites

## On Unit (4)

The following are three congruent triangles:



- 1 Each of the following figures is made up of these three triangles by assembling them in different positions. Draw 2 line segments inside each figure to divide it into the three triangles:



### (2) Visual patterns using matchtick:

Matchsticks can be used to form different geometric figures.

Look at the following table. Find out the pattern. then complete and answer the questions:

Order	Shape	Number of matchsticks
1		4
2		7
3		.....

- (a) How many matchsticks are needed to form the 6th, 7th and 8th from figures of the same pattern?

The Sixth: ..... , The seventh..... , The eighth: .....

- (b) According to this pattern, what is the order of the shape formed from 34 matchsticks? .....

- (c) Form a similar pattern using triangles instead of squares. Write the number of matchsticks needed to form the first five shapes.

Shape	First	Second	Third	Fourth	Fifth
Number of matchsticks	3	5	.....	.....	.....



# General Exercises on the units

## Exercises On Unit (1)

(1) Complete:

1  $8 \times 8 = \dots\dots\dots$

2  $6 \times 7 = \dots\dots\dots$

3  $9 \times 3 = \dots\dots\dots$

4  $8 \times 7 = \dots\dots\dots$

5  $\dots\dots\dots \times 5 = 45$

6  $6 \times \dots\dots\dots = 36$

7  $9 \times \dots\dots\dots = 81$

8  $\dots\dots\dots \times 9 = 63$

9  $\dots\dots\dots \times \dots\dots\dots = 40$

10  $36 \div 6 = \dots\dots\dots$

11  $42 \div 7 = \dots\dots\dots$

12  $35 \div \dots\dots\dots = 5$

13  $\dots\dots\dots \div 5 = 9$

14  $56 \div 7 = \dots\dots\dots$

15  $24 \div \dots\dots\dots = 4$

16  $7 \times \dots\dots\dots = 21$

17  $21 \div \dots\dots\dots = 7$

18  $9 + 9 + 9 + 9 + 9 = 9 \times \dots\dots\dots$

19  $6 + 6 + 6 = \dots\dots\dots \times \dots\dots\dots$

20  $7 \times 4 = \dots\dots\dots + \dots\dots\dots + 7 + \dots\dots\dots$

21  $3 \times 6 = \dots\dots\dots$

(2) Choose the correct answer in each of the following :

1  $4 \times 9 = \dots\dots\dots$

(36 , 27 , 54)

2  $\dots\dots\dots \times 7 = 49$

(6 , 7 , 8)

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

(5  $\times$  5 , 5  $\times$  6 , 5  $\times$  4)

4  $6 + 6 + 6 + 6 = \dots\dots\dots$

(6  $\times$  4 , 6  $\times$  5 , 6  $\times$  6)

- 5  $2 \times 6 = \dots\dots\dots$  (12 , 24 , 18)
- 6  $4 \times \dots\dots\dots = 28$  (6 , 5 , 7)
- 7  $\dots\dots\dots \times 8 = 72$  (7 , 8 , 9)
- 8  $30 \div 6 = \dots\dots\dots$  (4 , 5 , 6)
- 9  $28 \div 7 = \dots\dots\dots$  (4 , 5 , 6)
- 10  $\dots\dots\dots \div 9 = 9$  (1 , 18 , 81)
- 11  $45 \div 5 = \dots\dots\dots$  (4 , 6 , 9)
- 12  $24 \div 4 = \dots\dots\dots$  (4 , 5 , 6)
- 13  $\dots\dots\dots \times 3 = 24$  (4 , 6 , 8)

### (3) Compare using (< or > or =)

- 1  $4 \times 5$    $3 \times 7$
- 2  $5 \times 7$   49
- 3  $6 \times 8$    $5 \times 9$
- 4 54   $8 \times 8$
- 5  $7 \times 9$    $9 \times 7$
- 6  $4 \times 7$    $7 + 7 + 7 + 7$
- 7 30   $6 + 6 + 6 + 6$
- 8  $3 + 15$    $4 \times 6$
- 9  $38 - 18$    $3 \times 7$
- 10  $24 \div 4$    $35 \div 5$
- 11  $21 \div 7$    $1 \times 4$
- 12  $6 + 6 + 6$    $2 \times 9$
- 13  $49 \div 7$   7
- 14  $24 \div 3$    $24 \div 8$
- 15 35   $7 \times 5$
- 16  $30 \div 5$    $3 \times 3$

**(4) Complete in the same pattern :**

1 6, 12, 18 , ..... , ..... , .....

2 54 , 48 , 42, ..... , ..... , .....

3 63, 54, 45, ..... , ..... , .....

(5) Amr is a good pupil, he studies 6 hours everyday. How many hours does he spend in studying in 9 days.

The number of studying in hours = ..... = ..... hours.

(6) A box of colours, it contains 5 colours. How many colours are there in 7 boxes?

The number of colours = ..... = .....

(7) If the price of a sandwich of chicken is 8 pounds. What is price of 6 sandwiches?

The price of sandwiches = ..... = ..... pounds.

(8) Ahmed saves 7 pounds every week. How much money does Ahmed save in 4 weeks?

What Ahmed saves = ..... = ..... pounds.

(9) Salma bought 4 books of 6 pounds for each. How much money did Salama pay?

What Salama paid = ..... = ..... pounds.

(10) A man distribute 45 pounds among his 5 sons, how much money does each son take?

What each son take = ..... = ..... pound.

(11) 54 oranges is divided equally on 6 plates. How many oranges are there in each plate?

Number of oranges = ..... = .....

# Exercises

## On Unit (2)

### (1) Complete the following :

- 1 Six thousands, five hundreds and fifty .....
- 2 Four thousands, six hundreds and thirty .....
- 3 Seventeen thousands, nine hundred and thirty.....
- 4 Thirty seven thousands, one hundred and thirty four.....
- 5 Five thousands and one.....
- 6 Eight thousands and nine.....
- 7 Twenty six thousands , one hundred and fifty .....
- 8 Sixty three thousands and eight .....
- 9 Ten thousands, one hundreds and one .....
- 10 One thousands, two hundreds and forty .....

### (2) Write in letters each of the following :

- 1 8576 is written in letters as .....
- 2 9009 is written in letters as .....
- 3 3030 is written in letters as .....
- 4 2678 is written in letters as .....
- 5 9531 is written in letters as .....
- 6 1528 is written in letters as .....
- 7 8576 is written in letters as .....
- 8 25552 is written in letters as .....
- 9 80000 is written in letters as .....

10 11064 is written in letters as .....

11 60044 is written in letters as .....

12 10010 is written in letters as .....

**(3) Complete each of the following**

1  $4965 = \dots + \dots + \dots + \dots$

2  $18146 = \dots + \dots + \dots + \dots + \dots$

3  $75432 = \dots + \dots + \dots + \dots + \dots$

4  $6587 = \dots + 6000$

5  $12430 = 30 + 400 + \dots$

6  $87981 = 81 + 900 + \dots$

7  $43191 = 1 + \dots + \dots + \dots + 40000$

8  $6523 = 500 + \dots + \dots + \dots$

**(4) Write the place value of the encircled digit:**

1 9 5 (4) 3 2 .....

8 (7) 6 5 9 6 .....

2 4 (3) 2 1 7 .....

9 9 8 (1) 6 2 .....

3 4 (0) 0 3 9 .....

10 9 5 (6) 0 0 .....

4 3 7 5 (9) 4 .....

11 4 (6) 8 0 1 .....

5 (5) 0 0 9 5 .....

12 6 5 (4) 9 4 .....

6 0 1 8 7 (9) .....

13 2 4 5 (1) 3 .....

7 (8) 9 6 2 5 .....

**(5) Write the place value of the encircled digit:**

1 8 6 (4) 3 2 .....

8 (7) 8 5 0 6.....

2 5 (3) 2 3 7.....

9 7 8 (1) 6 2 .....

3 6 (0) 9 6 9 .....

10 4 5 (6) 0 9 .....

4 4 3 5 (9) 4 .....

11 4 (6) 8 0 8 .....

5 (5) 0 7 5 5.....

12 7 5 (4) 9 9 .....

6 8 7 4 7 (9) .....

13 1 7 5 (1) 3 .....

7 (8) 9 5 3 5 .....

**(6) Rearrange the following numbers ascendingly and descendingly:**

6524 , 4524 , 7624 , 1624

Ascendingly: .....

Descendingly: .....

9434 , 9344 , 9734 , 9334

Ascendingly: .....

Descendingly: .....

8721 , 8235 , 8324 , 8887

Ascendingly: .....

Descendingly: .....

6819 , 6813 , 6713 , 6820

Ascendingly: .....

Descendingly: .....

**(7) Complete in the same pattern:**

- 1 6542 , 6553 , 6564 , ..... , .....
- 2 2225 , 3235 , 4245 , ..... , .....
- 3 5686 , 5675 , 5664 , ..... , .....
- 4 9866 , 9856 , 9846 , ..... , .....
- 5 2211 , 3322 , 4433 , ..... , .....
- 6 7979 , 6868 , 5757 , ..... , .....
- 7 4400 , 4600 , 4800 , ..... , .....
- 8 ..... , ..... , 6000 , 8000 , 10000
- 9 ..... , 3000 , 3100 , 3200 , .....
- 10 ..... , ..... , 5000 , 7000 , 9000



# Exercises

## on unit

### (3)

#### (1) Add

(a) 
$$\begin{array}{r} 1253 \\ + 2324 \\ \hline \end{array}$$

(b) 
$$\begin{array}{r} 6052 \\ + 781 \\ \hline \end{array}$$

(c) 
$$\begin{array}{r} 4704 \\ + 3176 \\ \hline \end{array}$$

(d) 
$$\begin{array}{r} 7126 \\ + 2008 \\ \hline \end{array}$$

(e) 
$$\begin{array}{r} 1975 \\ + 5062 \\ \hline \end{array}$$

(f) 
$$\begin{array}{r} 12111 \\ + 14659 \\ \hline \end{array}$$

(g) 
$$\begin{array}{r} 18087 \\ 12301 \\ + 12001 \\ \hline \end{array}$$

(h) 
$$\begin{array}{r} 627 \\ 8023 \\ + 2643 \\ \hline \end{array}$$

(i) 
$$\begin{array}{r} 430 \\ 1834 \\ + 4089 \\ \hline \end{array}$$

#### (2) Choose the suitable relation ( $>$ , $<$ , $=$ )

1  $4567 + 2135$

$2135 + 4567$

2  $5289 + 1000$

$5389 + 1000$

3  $6340 + 2320$

$6340 + 4320$

4  $7234 + 1320$

$5234 + 4320$

5  $8527 - 2500$

$8527 - 3500$

6  $6266 - 266$

$4000 + 2000$

7  $9736 - 8736$

$400 + 700$

8  $2020 + 1000$

$3020 - 1000$

9  $2010 - 2008$

$3$

10  $9215 - 43$

11  $72163 - 3363$

12  $2516 + 384$

13  $85632 - 7289$

14  $8615 - 2419$

15  $45698 + 34302$

16  $(6300 + 89) - 89$

17 7 unit ; 5 ten, 7 thousands









$43 + 9215$

$68800$

$4000 - 384$

$78343$

$3450 + 1250$

eighty thousands

$6300$

$757$

### (3) Add:

1  $1452 + 8023 =$

3  $2789 + 4211 =$

5  $17077 + 5725 =$

7  $5482 + 4517 =$

9  $31239 + 8549 =$

2  $4580 + 3029 =$

4  $20268 + 11673 =$

6  $8435 + 777 =$

8  $2358 + 87641 =$

10  $14527 + 1523 + 287 =$

### (4) Complete:

1  $5643 + 4125 = 4125 + \dots$

2  $2008 + \dots = 2010 + 2008$

3  $(7004 + 8657) + 2153 = \dots + (8657 + 2153)$

4  $(2005 + 3450) + \dots = 2005 + (3450 + 7878)$

5  $(12356 + \dots) + 8400 = \dots + (3005 + 8400)$

6  $(36572 + 52132) + 40008 = \dots + (\dots + 40008)$

**(5) Encircle the closest number to the result ( without adding ) :**

- 1  $3287 + 2732 = \dots\dots\dots$  [5000 , 4000 , 6000]
- 2  $4009 + 3225 = \dots\dots\dots$  [6000 , 7000 , 8000]
- 3  $7052 + 3806 = \dots\dots\dots$  [10000 , 9000 , 8000]
- 4  $12198 + 3806 = \dots\dots\dots$  [15000 , 16000 , 4000]
- 5  $5302 + 113 = \dots\dots\dots$  [6000 , 5000 , 7000]

**(6) Given that  $24869 + 4251 = 29120$  find the result of the following (mentally):**

- 1  $24869 + 5251 = \dots\dots\dots$
- 2  $24869 + 4251 = \dots\dots\dots$
- 3  $24869 + 2251 = \dots\dots\dots$
- 4  $24859 + 4241 = \dots\dots\dots$
- 5  $24596 + 4251 = \dots\dots\dots$
- 6  $20869 + 8251 = \dots\dots\dots$

**(7) Colour the cards which give equal results with the same colour:**

$17492 + 53978$	$29064 + 18184$	$700 + 90 + 5$
$18180 + 29068$	$(542+317)+151$	$63978 + 7492$
$795$	$53978 + 17492$	$(511+542)+317$

**(8) Use the digits 1 , 7 , 2 , 5 to determine the value of :**

The greatest 4 different number is.....

The smallest digit number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

**(9) If the number of born children in one month in Aswan is 27854 and in Kena is 54069 , find their sun in the two governorates.**

The sum = ..... = ..... people

**(10) Subtract:**

**(a)** 
$$\begin{array}{r} 6534 \\ - 4123 \\ \hline \end{array}$$

**(b)** 
$$\begin{array}{r} 7682 \\ - 453 \\ \hline \end{array}$$

**(c)** 
$$\begin{array}{r} 9842 \\ - 87 \\ \hline \end{array}$$

**(d)** 
$$\begin{array}{r} 42780 \\ - 1239 \\ \hline \end{array}$$

**(e)** 
$$\begin{array}{r} 98247 \\ - 49128 \\ \hline \end{array}$$

**(f)** 
$$\begin{array}{r} 12530 \\ - 10643 \\ \hline \end{array}$$

**(g)** 
$$\begin{array}{r} 46200 \\ - 12483 \\ \hline \end{array}$$

**(h)** 
$$\begin{array}{r} 81008 \\ - 64029 \\ \hline \end{array}$$

**(i)** 
$$\begin{array}{r} 12000 \\ - 7859 \\ \hline \end{array}$$

**(11) Subtract:**

**1**  $4259 - 948 = \dots\dots\dots$

**2**  $6410 - 2389 = \dots\dots\dots$

**3**  $37005 - 51219 = \dots\dots\dots$

**4**  $35797 - 28980 = \dots\dots\dots$

5  $20009 - 16789 = \dots\dots\dots$

6  $50007 - 34160 = \dots\dots\dots$

7  $80054 - 89 = \dots\dots\dots$

8  $10000 - 9999 = \dots\dots\dots$

9  $99991 - 89999 = \dots\dots\dots$

**(12) Encircle the closest number to the result (without adding)**

1  $7157 - 4852 =$  [1000 , 2000 , 3000]

2  $5827 - 952 =$  [4000 , 5000 , 6000]

3  $6928 - 4219 =$  [1000 , 2000 , 3000]

4  $7871 - 3128 =$  [4000 , 3000 , 5000]

5  $23111 - 13216 =$  [1000 , 10000 , 15000]

6  $4272 - 389 =$  [3000 , 4000 , 2000]

**(13) Choose the suitable ( $>$  ;  $<$  ;  $=$ )**

1  $5980 + 3764$    $3764 + 5980$

2  $12897 + 56328$    $56327 + 12898$

3  $8 + 200$    $2008$

4  $7809 + 2098$    $8000$

5  $85732 + 874$    $85752 + 854$

6  $18248 + 17233$    $19154 + 42245$

7  $5029$    $2198 + 2831$

**(14) Rearrange the following numbers ascendingly once and descendingly once, then find the sum of the greatest and the smallest and the difference between them:**

**(a) 2541 , 4251 , 1542 , 4521**

Ascendingly : ....., ....., ....., .....

Descendingly : ....., ....., .....

The greatest number is .....

The smallest number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

**(b) 73638 , 25618 , 93818 , 3620**

Ascendingly : ....., ....., ....., .....

Descendingly : ....., ....., .....

The greatest number is .....

The smallest number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

**(15) Complete the following:**

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

$$\begin{array}{r} \square \ \square \ \square \ \square \\ + \quad 5 \ 9 \ 6 \\ \hline 6 \ 2 \ 8 \ 6 \end{array}$$

$$\begin{array}{r} 1 \ 3 \ 0 \ 8 \ 7 \\ - \quad \square \ \square \ \square \ \square \ \square \\ \hline 2 \ 5 \ 7 \ 6 \end{array}$$

$$\begin{array}{r} \square \ \square \ \square \ \square \ \square \\ - \ 1 \ 1 \ 0 \ 3 \ 1 \\ \hline 1 \ 0 \ 4 \ 0 \ 6 \end{array}$$

$$\begin{array}{r} 3 \ 9 \ \square \ \square \\ - \ \square \ \square \ 8 \ 7 \\ \hline 6 \ 1 \ 3 \end{array}$$

**(16) Complete in the same pattern**

- 1 5819 , 4819 , 3819 , ..... , .....
- 2 6923 , 6823 , 6723 , ..... , .....
- 3 47839 , 47829 , 47819 , ..... , .....
- 4 ..... , 4200 , 4600 , 5000 , .....
- 5 27005 , 27055 , 27105 , ..... , .....
- 6 ..... , ..... , 15500 , 14000 , 12500

**(17) Rearrange the following numbers ascendingly once and descendingly then find the sum of the greatest and the smallest and the difference between them**

(a) 42300 , 6751 , 26075 , 36507 , 27750

The ascending order : ....., ....., ....., .....

The descending order : ....., ....., .....

The greatest number is .....

The smallest number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

(b) 89632 , 40032 , 231981 , 6097 , 9078

The ascending order : ....., ....., ....., .....

The descending order : ....., ....., .....

The greatest number is .....

The smallest number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....



**(18) Use all the following digits to determine the values of the following:**

a) 3, 7, 1, 8, 9

The greatest different digit number is .....

The smallest different digit number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

b) 2, 0, 9, 6, 5

The greatest different digit number is .....

The smallest different digit number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

c) 8, 7, 6, 1, 3

The greatest different digit number is .....

The smallest different digit number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

d) 5, 1, 7, 2, 6

The greatest different digit number is .....

The smallest different digit number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

e) 6 , 2 , 8 , 1 , 7

The greatest different digit number is .....

The smallest different digit number is .....

The sum of the two numbers = ..... + ..... = .....

The difference = ..... - ..... = .....

**(19) If the cash donations for a hospital (57357) is 40932 pounds in one week and 39798 pounds in another week. Find the total donations in the two weeks**

The total = ..... = ..... pounds

**(20) 37939 and 47989 housing units are built in one governorates in two successive year. Find the sum of units built in the two years**

The sum = ..... + ..... = ..... unit

**(21) A shop sold goods for 54786 pounds in one day and for 44243 pounds in the next day. What is the total sales in the days?**

The total sales = ..... = ..... people.

**(22) Ihab bought a car for 22000 pounds, then he sold it with a loss of 6000 pounds. Find the selling price?**

The selling price = ..... = ..... pounds

**(23) If the tax department income from one organisation is 4578 pounds and from another organisation is 3719 pounds. Find the sum of incomes from the two organisations.**

The sum = ..... = ..... pounds

# Exercises

## On unit (4)

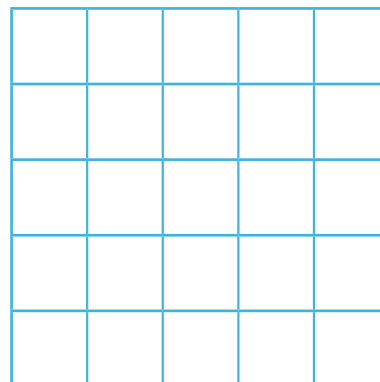
### (1) Complete:

- 1 The base of the cylinder is in the form a.....
- 2 The number of the faces of a cube = .....
- 3 The number of the edges of the cuboid = .....
- 4 The solid which has no vertices, has two circular bases is .....
- 5 The measure of the acute angle ..... the measure of the obtuse angle ( < or > or = ).
- 6 The type of the angle whose measure  $98^\circ$  is..... ( < or > or = )
- 7 The type of the angle whose measure  $150^\circ$  is.....
- 8 The measure of the right angle ..... the measure of the obtuse ( < or > or = )
- 9 The number of the vertices of a cube = ..... ( < or > or = )
- 10 The measure of the right angle = .....
- 11 The number of the vertices of a cube ..... the number of the vertices of a cuboid. ( < or > or = )
- 12 The number of the edges of a cube = .....
- 13 The type of the angle whose measure  $120^\circ$  is.....
- 14 The type of the angle whose measure  $90^\circ$  is .....

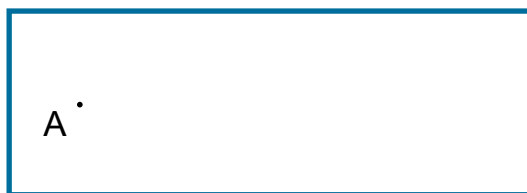
### (2) Draw ABC of measure $60^\circ$ then determine its type :

(3)

Draw the square XYZL of side length 5 unit long on the opposite lattice, (consider the side length of the small square as a unit length).



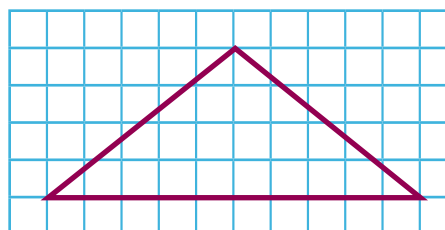
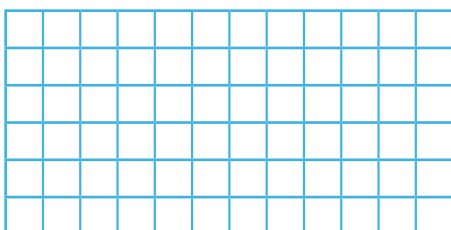
(4) In the opposite rectangle draw the line. Segment AB of length 5cm



(5) Use the protractor to measure each of the following angles , then determine the type of each one

Angle	Its measure	Its type
	.....°	.....
	.....°	.....
	.....°	.....

(6) Draw a congruent figure to the given figure.



# Model Test

## Model 1

### Firstly: Complete:

- 1 Using the properties of addition to find easily:

$$6172 + 5146 + 2818 + 2854$$

$$(6172 + \dots) + (\dots + 5146)$$

$$= \dots + \dots = \dots$$

- 2 Complete in the same pattern: 98970 , 98860 , ..... , ..... , 98530

3  $7 + 40 + 500 + 3000 + 20000 = \dots$

4  $6 \times 9 = 6 \times 3 \times \dots$

5  $65432 + \dots = 90000$

6  $(4793 + \dots) + 1752 = 4793 + (5951 + 1752)$

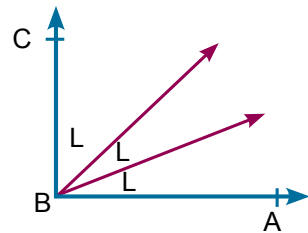
7  $5932 + 49276 = 5931 + \dots$

- 8 Complete in same pattern:

○△□ - ○△△□ - ○△△△□ - .....

- 9 The solid which has 6 faces, each face is in the form of a square is .....

- 10 Use the angle , find the measure of  $\angle ABC$



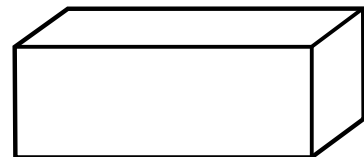
- 11 The opposite figure is:

(a) Its name is .....

(b) Number of its vertices = .....


(c) Number of its faces = .....

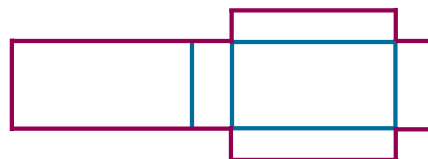
(d) Number of edges = .....



- 12 Draw  $\angle ABC$  of measure  $70^\circ$  and determine its type.

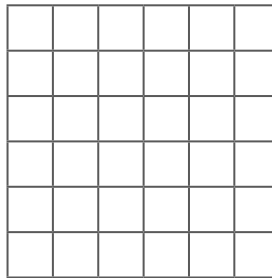
**Secondly: Choose the correct answer:**

- 13) The smallest number from the digits: 8, 0, 5 and 6 is:  
**a)** 6058                      **b)** 5068                      **c)** 8506
- 14) Twenty five thousand and fifteen:  
**a)** 1515                      **b)** 25015                      **c)** 2515
- 15) Ahmed has L.E 1500 and his sister have twice what he has. Then they have:  
**a)**  $1500 - 750$     **b)**  $1500 + 750$   
**c)**  $1500 + 3000$
- 16) The total in the opposite figure is :  
**a)** L.E 270  
**b)** L.E 370  
**c)** L.E 325
- 17) Which of the following is arranged in an ascending order:  
**a)** 76543, 76453 , 76345 76435  
**b)** 44923 , 54822 , 21712, 25346  
**c)** 28654 , 47564 , 52943, 62981
- 18)   $\div 5 = \dots\dots\dots$ :  
**a)** 3                      **b)** 4                      **c)** 5
- 19) After folding the opposite figure and glue it gives a .....  
**a)** cube                      **b)** cuboid  
**c)** prism





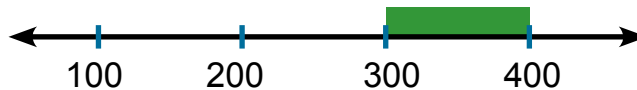
- 20 Draw a square its side is 5 units.



- 21 Which of the following hours represent an acute angle :

a) Six O'clock                      b) Three O'clock  
c) One O'clock

- 22 Which number lies in the shaded area:



a) 471                      b) 271                      c) 371

- 23  $(4 \times 5) + 4$     $4 \times 6$

a)  $>$                       b)  $<$                       c)  $=$

- 24  $1632 + 2435 = \dots\dots\dots$

a)  $67 + 40$                       b)  $76 + 400$                       c)  $7 + 60 + 4000$

- 25 Which of the following statement is correct :

a)  $4167 < 4079$                       b)  $2974 < 3947$                       c)  $8936 = 9396$

- 26  $5 + 5 + 5 + 5 = \dots\dots\dots$ :

a)  $5 \times 5$                       b)  $5 \times 4$                       c)  $5 + 4$

- 27 A number consists of 4 digits its unit 8, tens half units ,hundreds half tens, thousands half hundreds. The number is  $\dots\dots\dots$

a) 2148                      b) 2418                      c) 1248

- 28 Eman Saved 2500 L.E her father gave L.E 1200 in her birthday.

This situation needs .....

- a)** adding                      **b)** subtracting                      **c)** multiplying

- 29 Mazen bought a refrigerator for L.E 3220 and T.V For 740 The total Mazen paid is .....

- a)** 3960                      **b)** 3220                      **c)** 2480

- 30 Ahmed stands ..... Mi

- a)** in the front of                      **b)** behind                      **c)** right



- 31 A father wants to distribute 24 bars of chocolate among his 4 sons, so each of them will take required:

- a)** addition                      **b)** multiplication                      **c)** division

- 32 What is the number that it added to 734 the result will be 1000?

- 33 There are 894 pupils in a school if 256 of them participated in a school trip , How many pupils does not participate in the trip?

Number of pupils = .....

- 34 Samir bought 7 coloured boxes, each contains 6 pens, how many pens are there in these 7 boxes?

Number of pens = ..... = .....

## Model 2

**Firstly: Choose the correct answer:**

1 The smallest number formed from the digits (5, 3, 2, 1 and is 8) .....

- a) 5321                      b) 85321                      c) 12358

2  $90 + 800 + 9000 =$  .....

- a) 9890                      b) 9980                      c) 9098

3 A number consists of 5 digits: units zero, hundreds 3, thousands 9, tens 8 and ten thousands 7 .....

- a) 93780                      b) 79083                      c) 79380

4 Shaimaa has L.E 2120. and she wants to buy a refrigerator for L.E 3220. The previous operation is:

- a) adding                      b) subtracting                      c) multiplying

5 The nearest result to :  $(65 + 340)$  is .....

- a) 900                      b) 500                      c) 400

6 A teacher distributes equally 35 pens among 7 pupils. How many pens does each of them take?

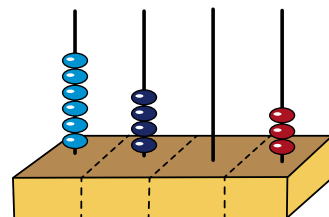
- a) 5 pens                      b) 6 pens                      c) 7 pens

7 The number opposite is: .....

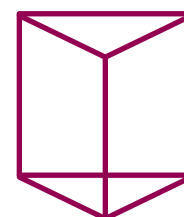
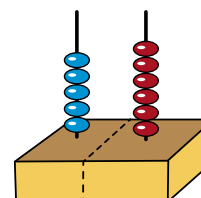
a) 6430





b) 6403

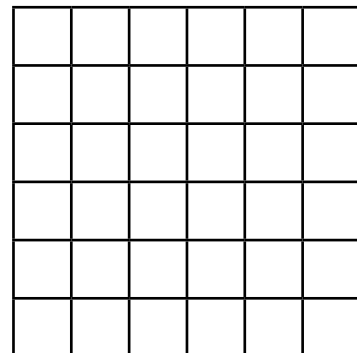
c) 3046



- 8 Adel has 5 coins of L.E 1, 7 note bank of L.E 10 and 3 note bank of L.E 100, then the total .....
- a) 375                      b) 735                      c) 573
- 9  $24 \div 6$  .....  $2 \times 6$
- a) >                      b) <                      c) =
- 10 The remainder of subtracting 3519 from 6417 = .....
- a) 8936                      b) 2800                      c) 2898
- 11  $(6542 + 7500) + 3664 = 6541 + (7500 + \dots)$
- a) 4366                      b) 6643                      c) 3664
- 12 Twenty four thousands, seven hundreds and one is written as .....
- a) 24917                      b) 24701                      c) 24107
- 13 .....  $\times 3 > 6 \times 3$
- a) 4                      b) 5                      c) 8
- 14 When dividing the number represented in the opposite figure by 7, the result is .....
- a) 2                      b) 6                      c) 8
- 15 The base of the opposite prism is in the form .....
- a) Triangle                      b) rectangle                      c) square



- 16 The angle is straight when the clock is: .....  
**a)** 2 O'clock      **b)** 6 O'clock      **c)** 3 O'clock
- 17 The triangular pyramid its base on the shape of:  
**a)** Triangle      **b)** Square      **c)** Circle
- 18 The angle  $91^\circ$  is ..... angle  
**a)** acute      **b)** right      **c)** obtuse
- 19 The next shape in the pattern .....  
 ..... is  
**a)**       **b)**       **c)** 
- 20 The vertices of a cube = ..... verities  
**a)** 6      **b)** 8      **c)** 12
- 21 The number of the vertices of the cuboid = the number of the vertices of the .....  
**a)** cube      **b)** cylinder      **c)** pyramid
- 22 Complete in the same pattern:  
 9700, 8700, 7700, .....
- 23  $47386 + 52613 =$  .....
- 24 The number that must be added to 7435 for the result be 8276 is
- 25  $81 \div 9 =$  .....
- 26  $6 + 6 + 6 + 6 > 5 \times$  .....
- 27 Draw a rectangle of  
 diminsions 3 cm, 4 cm



- 28 A school bought sports games for L.E 217 and a shoe for L.E 138,  
What is the total money did he pry?

.....

.....

.....

.....

- 29 Asmaa bought 7 rabbits, she wants to count their legs. How she can do  
this without using the addition operation?

.....

.....

.....

.....

- 30 Arrange in ascending order:  
7652, 7252, 2352, 9352

.....

.....

.....

.....

- 31 Draw an angle of measure  $^{\circ}70$  and determine its type.

.....

.....

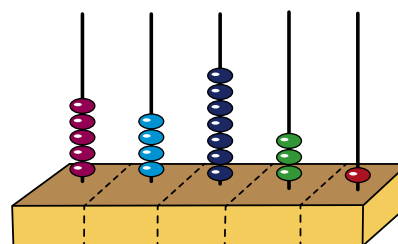
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.....

# Model 3

## Firsty: Choose the correct answer

- 1  $2 + 4 \times 10 + 5 \times 100 + 2 \times 1000 = \dots\dots\dots$   
**a)** 5242                      **b)** 4252                      **c)** 2542
- 2 Which of the following arranged in an descending order  
**a)** 42721 , 36143 , 37143 , 31425  
**b)** 42721 , 36143 , 35143 , 31425  
**c)** 42721 , 43721 , 44621 , 45721
- 3 The name of a supermarket in aday was 5817 and the outame in same day was 3356 , to know the project we do:  
**a)** adding                      **b)** subtracting                      **c)** mutiplication
- 4  $4237 + 1159$  near to:  $\dots\dots\dots$   
**a)** 6000                      **b)** 5000                      **c)** 4000
- 5 The opposite number is:  
**a)** 47531                      **b)** 45731                      **c)** 54731
- 6  $24 \div 4 > \dots\dots\dots \times 2$   
**a)** 2                      **b)** 3  
**c)** 6
- 7 Aly has 6 coins of L.E 1, 7 note bank of L.E 10 and 3 note bank of L.E100. The total is  $\dots\dots\dots$   
**a)** 367                      **b)** 736                      **c)** 376



- 8 Ahmed saves L.E 3423 and his brother Aly L.E 2632 then what they save to gather is .....
- a) 60560                      b) 50650                      c) 60550
- 9  $(6 \times 100) + (6 \times 9) =$  .....
- a) 564                      b) 654                      c) 645
- 10  $(2721 + 6582) + 1730 = 2721 + (6582 + \dots)$
- a) 3170                      b) 1730                      c) 1703
- 11 The remainder of subtracting 38254 from 59223 = .....
- a) 29069                      b) 21031                      c) 20969
- 12  $5 \times 9 = 40 + \dots$
- a) 5                      b) 9                      c) 1
- 13 A farmer wants to distribute 81 Kg of oranges in 9 boxes, the number of Kgs in each box = .....
- a) 7                      b) 8                      c) 9
- 14 Number of edges of  Number of vertices of 
- a) >                      b) <                      c) =
- 15 The base of the cylinder is:
- a) triangle                      b) square                      c) circle
- 16 At 3 O'clock the angle is
- a) obtuse                      b) straight                      c) right



17 The number of edges of a cube is

a) 12

b) 8

c) 6

18 The next in the pattern



**Secondly: Complete**

19  $74835 = 835 + 4000 + \dots$

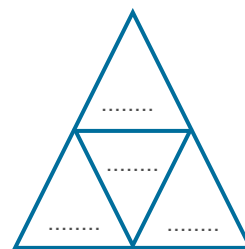
20 Complete in the same pattern:

4386 , 4387 , 4388 , ..... , .....

21  $36 \div \dots < 6 \times 7$

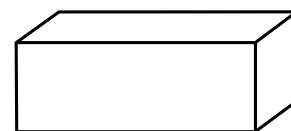
22 The result of  $1064 + 1036 = \dots$

23 The number of triangles = ..... triangle



24 The solid which has six square faces is called .....

25 The opposite solid is called .....



26 The number that if added to 3645 for the result to be 8245 is.....

**Third: Answer the following**

- 27 Hazem bought some food for P.T 6224 and some fruits for P.T 3176  
Fine the total which Hazem paid

.....  
.....  
.....

- 28  $7 + 7 + 7 + 7 + 7 = \dots \times 5$

- 29 Use the properties of addition to find:

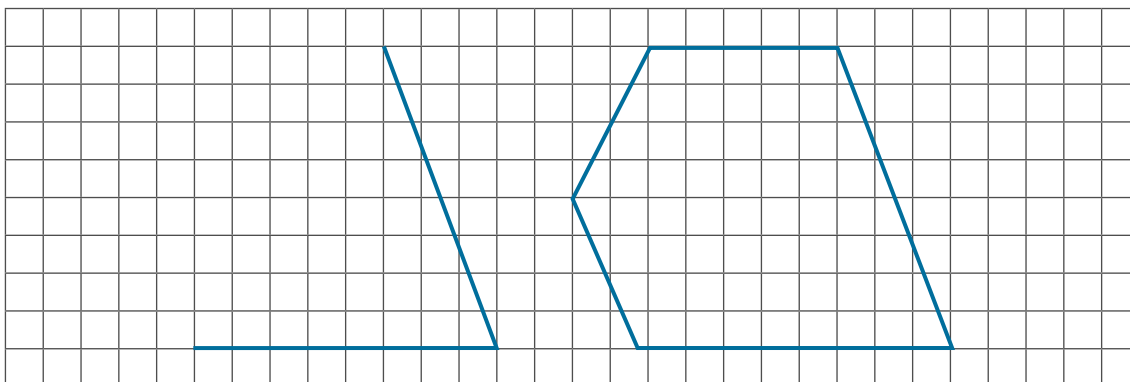
$$1836 + 2376 + 1264 + 3424$$

= .....  
.....  
.....

- 30 use the protractor , ruler draw  $\angle ABC$  of measure 75

.....  
.....  
.....

- 31 Complete then left figure to be congruent to the right figure.



- 32 Find how much money does each one of 8 persons take from the opposite sum?



تم الطبع بالشروق الحديثة - القاهرة  
بالمواصفات الفنية الآتية

عدد الصفحات : ١٤٠ صفحة

المقاس : ٥٧ × ٨٢ سم

نوع الورق : لا يقل الداخلى عن ٨٠ جرام والغلاف ٢٠٠ جرام

ألوان الطبع : ٤ لون للداخلى والغلاف

جميع حقوق الطبع محفوظة لوزارة التربية والتعليم  
داخل جمهورية مصر العربية

**الشروق**

الحديثة للطباعة والتغليف

القاهرة : ٨ شارع سيبيه المصرى - ت : ٢٤٠٢٣٣٩٩ - فاكس : ٢٤٠٣٧٥٦٧ (٠٢)  
مدينة العبور - المنطقة الصناعية