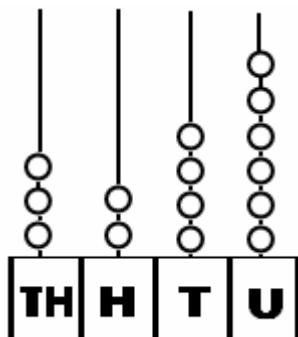




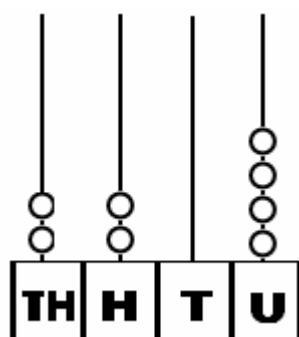
Unit (1) Numbers up to 99 999

Lesson 1: Thousands

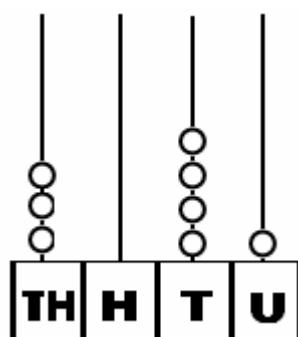
1- Write the numbers:



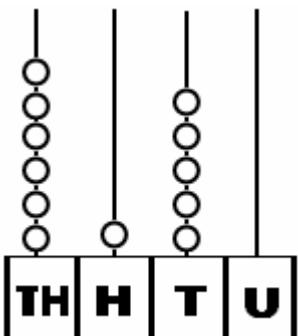
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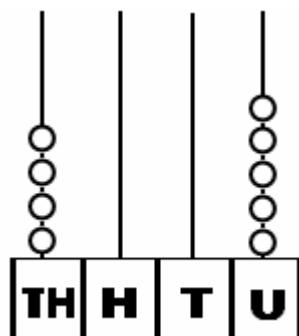
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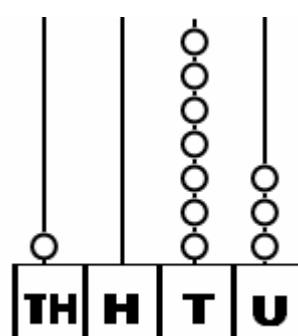
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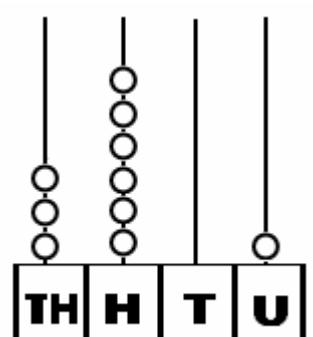
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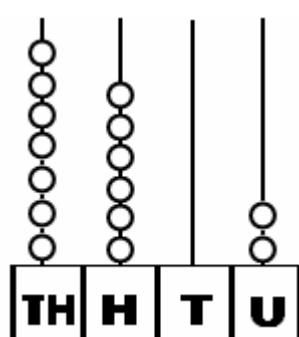
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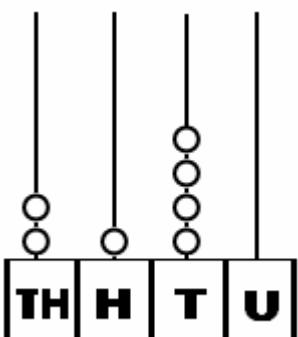
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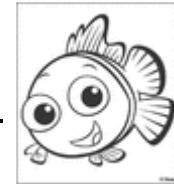
Date: -----

2- Write each of the following numbers in numerals form:

- a- Three thousand, five hundred, and eighty-four (-----)
- b- Seven thousand, and nine hundred (-----)
- c- Eight thousand, three hundred, and four (-----)
- d- Nine thousand and nine (-----)
- e- Three thousand, one hundred, and seventy (-----)
- f- Two thousand, and four (-----)
- g- Four thousand, eight hundred, and eleven (-----)
- h- Fifteen hundred (-----)
- i- 8 thousand (-----)
- j- Four hundred, eight thousand, and one (-----)
- k- 3 units, 5 hundreds, and 4 thousands (-----)
- l- 5 hundreds, and 2 thousands (-----)
- m- 9 thousands, and 5 units (-----)
- n- 3 thousands and 18 units (-----)
- o- 5 thousands, and 2 tens (-----)
- p- 28 hundreds (-----)



Date: -----



3- Write each of the following numbers in letters:

a- 3725 = -----

b- 2012 = -----

c- 5605 = -----

d- 4058 = -----

e- 7002 = -----

f- 4106 = -----

g- 6055 = -----

h- 1007 = -----

i- 3917= -----

j- 7120= -----

Date: -----

4- Complete in the same pattern:



a- 1000 , 1100 , ----- , 1300 , 1400 , -----

b- 5000 , 5100 , ----- , ----- , ----- , 5500 , -----

c- ----- , 7100 , 7200 , ----- , ----- , ----- , 7600

d- 2000 , 2001 , 2002 , ----- , ----- , ----- , -----

e- 6066 , 6067 , ----- , ----- , ----- , 6071 , -----

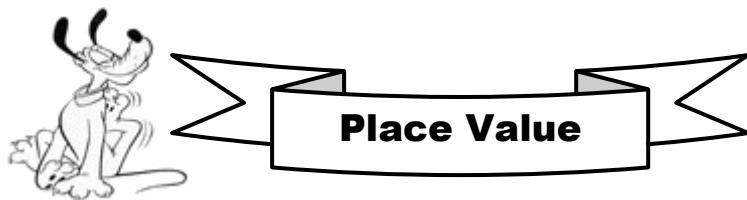
f- 9000 , 7000 , ----- , 3000 , -----

g- 3400 , 3450 , ----- , ----- , ----- , 3650 , -----

h- 7515 , 7615 , ----- , ----- , -----

i- 9500 , 9000 , ----- , 8000 , 7500 , -----

Date: -----



The number	The place value			
	TH	H	T	U
4782	4	7	8	2

1- Write the place value of the digit (6) in the following given numbers:

- a- 6723 (-----) b- 1056 (-----)
c- 2693 (-----) d- 8460 (-----)
-
-

2- Complete the table:

The number	The value of each digit			
	2	4	6	8
6428				
2864				
4682				
8246				
6842				

Date: -----

3- Write the place value of the underline digits:

a- 4657 (-----)

b- 2635 (-----)

c- 6719 (-----)

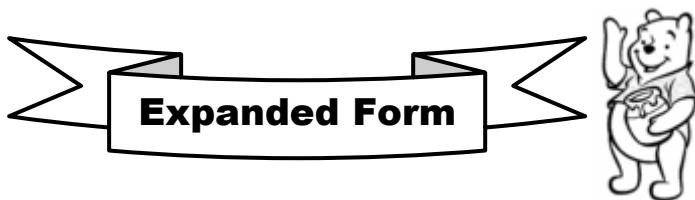
d- 3045 (-----)

e- 2998 (-----)

f- 2037 (-----)

g- 1380 (-----)

h- 1524 (-----)



1- Write in expanded form as the given examples:

Example: $2536 = 2000 + 500 + 30 + 6$

a- $6841 = \text{-----} + 800 + \text{-----} + 1$

b- $3695 = \text{-----} + \text{-----} + 90 + \text{-----}$

c- $8932 = \text{-----} + \text{-----} + \text{-----} + \text{-----}$

d- $2073 = \text{-----} + \text{-----} + \text{-----} + \text{-----}$

e- $1402 = \text{-----} + \text{-----} + \text{-----} + \text{-----}$

f- $5005 = \text{-----} + \text{-----} + \text{-----} + \text{-----}$

g- $2179 = \text{-----} + \text{-----} + \text{-----} + \text{-----}$

h- $467 = \text{-----} + 60 + 400$

Date: -----



1- Complete as in the example:

4823

Example: ----- = $4000 + 800 + 20 + 3$

a- ----- = $9000 + 100 + 30 + 2$

b- ----- = $1000 + 800 + 4$

c- ----- = $3000 + 5$

d- ----- = $8 + 4000 + 20$

e- ----- = $5 + 7000$

f- ----- = $5000 + 80$

2- Complete using > , < , or =:

a- 3150 ----- 3130

b- 2689 ----- 2896

c- 4774 ----- 4774

d- 707 ----- 4004

e- 3950 ----- 3509

f- 5311 ----- 5321

g- 8000 ----- 8 thousands

h- 8548 ----- 8458

Date: -----

3- Arrange the following numbers ascendingly and descendingly:



A- 6987 , 6978 , 6897 , 987

❖ Ascending order = ----- , ----- , ----- , -----

❖ Descending order = ----- , ----- , ----- , -----



B- 8931 , 6799 , 8903 , 5409

❖ Ascending order = ----- , ----- , ----- , -----

❖ Descending order = ----- , ----- , ----- , -----



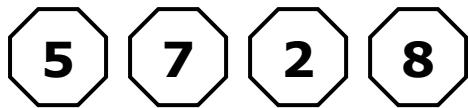
C- 5731 , 3210 , 5713 , 650

❖ Ascending order = ----- , ----- , ----- , -----

❖ Descending order = ----- , ----- , ----- , -----

Date: -----

4- Write the smallest number, and the greatest number which can be formed using each of the cards:



The smallest number = -----

The smallest number = -----

The greatest number = -----

The greatest number = -----

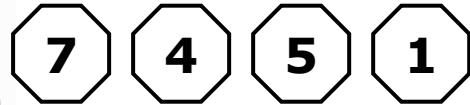


The smallest number = -----

The smallest number = -----

The greatest number = -----

The greatest number = -----



The smallest number = -----

The smallest number = -----

The greatest number = -----

The greatest number = -----



The smallest number = -----

The smallest number = -----

The greatest number = -----

The greatest number = -----

Date: -----

5- Complete:

a- The greatest number formed from 4-digit number is -----

b- The smallest number formed from 4-digit number is -----

c- The greatest number formed from 4-different digit is -----

d- The smallest number formed from 4-different digit is -----

e- The greatest number formed from 4-similar digit is -----

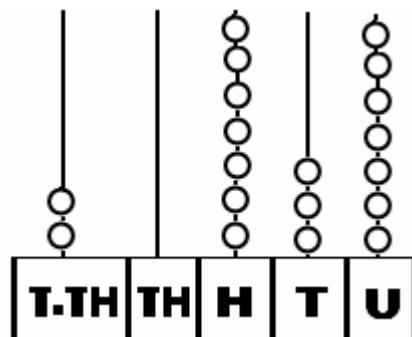
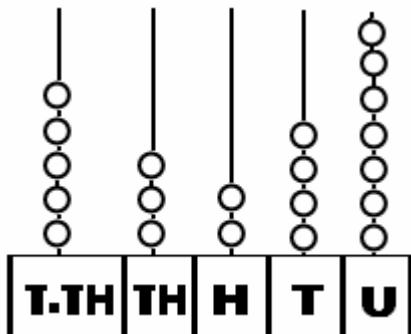
f- The smallest number formed from 4-similar digit is -----

g- The greatest number formed from 4-different digit and its unit
digit is 5 is -----

Date: -----

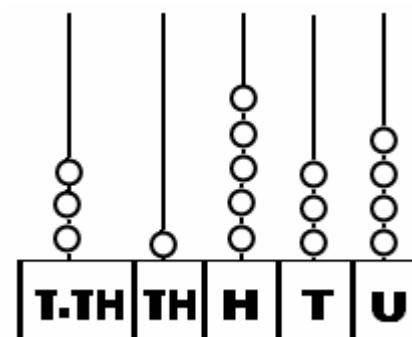
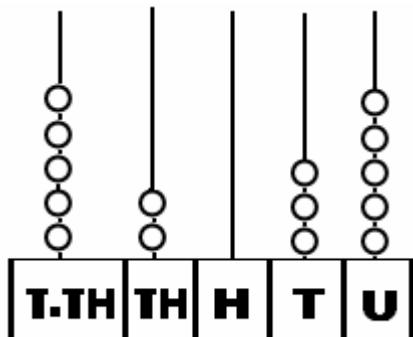
Lesson 2:
Ten thousands (T.TH)

1- Write the numbers:



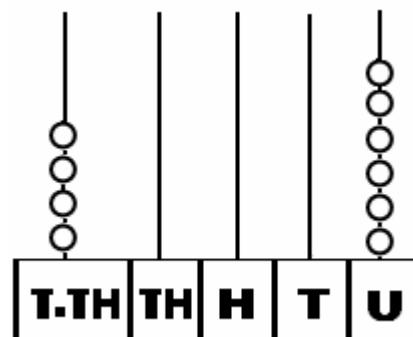
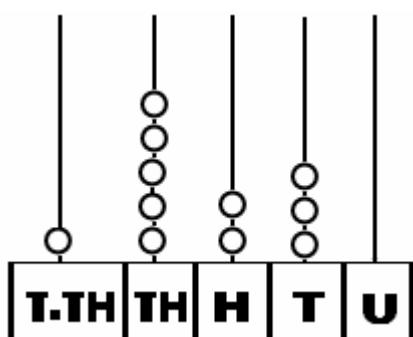
(-----)

(-----)



(-----)

(-----)



(-----)

(-----)

Date: -----

2- Write each of the following numbers in numerals form:

- a- Fifty two thousand (-----)
- b- Ninety one thousand, nine hundred, and fifty seven (-----)
- c- Twenty thousand, three hundred, and fourteen (-----)
- d- Forty thousand, and eight (-----)
- e- Seventy nine thousand, and two (-----)
- f- Seventeen thousand, four hundred, and nine (-----)
- g- Twenty nine thousand, three hundred, and nine (-----)
- h- 75 thousands, 9 hundreds (-----)
- i- 5 units, 6 tens, 9 hundreds, 31 thousands (-----)
- j- 84 thousands, 3 hundreds, 9 units, 3 tens (-----)
- k- 5 units, 8 tens, 43 thousand (-----)
- l- 27 thousands, and 19 (-----)
- m- 65 thousands, and 3 (-----)
- n- 32 thousands, and 970 (-----)
- o- 80 thousand (-----)
- p- 9 units, 7 hundred, 43 thousand (-----)



Date: -----

3- Write each of the following numbers in letters:

a- 50 000 = -----

b- 35237 = -----

c- 30001= -----

d- 27019 = -----

e- 89301= -----

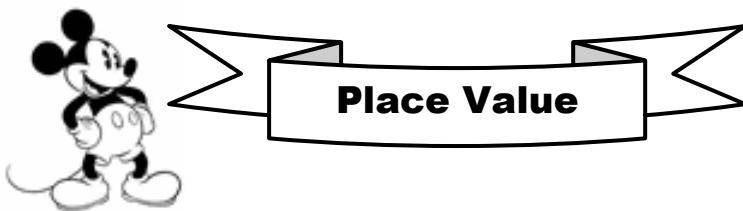
f- 54007 = -----

g- 10070 = -----

h- 10238 = -----

i- 12909= -----

Date: -----



The number	The place value				
	T.TH	TH	H	T	U
87412	8	7	4	1	2

1- Write the place value of the digit (8) in the following given numbers:

a- 97850 (-----)



b- 83402 (-----)

c- 38761 (-----)

d- 16586 (-----)

2- Write the place value of the underline digits:

a- 83100 (-----)



b- 53314 (-----)

c- 67480 (-----)



d- 49699 (-----)

e- 32479 (-----)



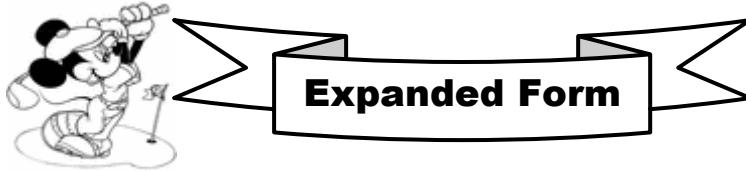
f- 14003 (-----)

g- 13800 (-----)



h- 15242 (-----)

Date: -----



1- Write in expanded form as the given examples:

Example: $92536 = 90\,000 + 2000 + 500 + 30 + 6$

a- $76841 = \text{-----} + 6000 + \text{-----} + \text{-----} + 1$

b- $13695 = \text{-----} + \text{-----} + \text{-----} + \text{-----} + \text{-----}$

c- $89324 = \text{-----} + \text{-----} + \text{-----} + \text{-----} + \text{-----}$

d- $59273 = \text{-----} + \text{-----} + \text{-----} + \text{-----} + \text{-----}$

e- $70452 = \text{-----} + \text{-----} + \text{-----} + \text{-----}$

f- $50005 = \text{-----} + 5$



2- Complete as in the example:

49823

Example: $\text{-----} = 40\,000 + 9000 + 800 + 20 + 3$

a- $\text{-----} = 70\,000 + 3000 + 100 + 20 + 0$

b- $\text{-----} = 5 + 10 + 20\,000$

c- $\text{-----} = 30\,000 + 9000 + 6$

d- $\text{-----} = 80\,000 + 500 + 7$

e- $\text{-----} = 5 + 700 + 8000 + 40\,000$



Date: -----

3- Complete using > , < , or =:

a- 35842 ----- 45631



b- 57844 ----- 56943

c- 9321 ----- 31984

d- 50001 ----- 15678

e- 3945 ----- 39405

f- 27190 ----- 27019

g- 80000 ----- 8 thousands

h- 89301 ----- 89631

3- Arrange the following numbers ascendingly and descendingly:



A- 57380 , 75380 , 58370 , 57800

❖ Ascending order = ----- , ----- , ----- , -----

❖ Descending order = ----- , ----- , ----- , -----



B- 49210 , 6799 , 94280 , 92480

❖ Ascending order = ----- , ----- , ----- , -----

❖ Descending order = ----- , ----- , ----- , -----



C- 43570 , 73540 , 35470 , 74350

❖ Ascending order = ----- , ----- , ----- , -----

❖ Descending order = ----- , ----- , ----- , -----



Unit (2)
Addition up to no more than
99999

Lesson 1 :

The meaning of addition operation

1- Omar saved L.E 2475 in one year, and L.E 2311 in the next year. How much money did he save in the two years together

❖ The money saved = L.E 2475 2311

2- In a school, there are 250 girls, and 135 boys. What is the total number of pupils in the school?

❖ The total number of pupils = L.E 250 135

3- Ahmed bought a sandwich for P.T. 721 and a chocolate bar for P.T. 250 . How much money did he pay?

❖ He paid = P.T. 721 250

4- Mai has P.T. 5352. She saved P.T. 3451. How much money does she have ?

❖ She saved = P.T. 5352 3451

Date: -----



Lesson 2 : Finding the sum of two numbers

(1) Adding

$$\begin{array}{r} 4 \ 5 \ 6 \ 1 \\ + 3 \ 1 \ 2 \ 2 \\ \hline \end{array}$$



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



$$\begin{array}{r} 2 \ 4 \ 3 \ 3 \\ + 3 \ 1 \ 2 \ 1 \\ \hline \end{array}$$

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



$$\begin{array}{r} 2 \ 5 \ 7 \ 1 \\ + 3 \ 2 \ 0 \ 8 \\ \hline \end{array}$$

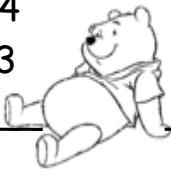


$$\begin{array}{r} 3 \ 2 \ 5 \ 4 \\ + 6 \ 7 \ 2 \ 1 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \ 3 \ 6 \ 0 \\ + 1 \ 2 \ 7 \ 8 \\ \hline \end{array}$$

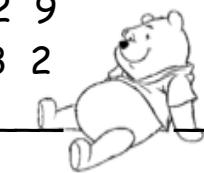


$$\begin{array}{r} 3 \ 0 \ 2 \ 8 \ 4 \\ + 2 \ 5 \ 0 \ 4 \ 3 \\ \hline \end{array}$$

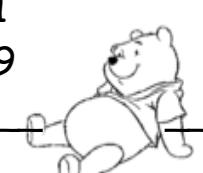


$$\begin{array}{r} 6 \ 3 \ 4 \ 5 \ 6 \\ + 2 \ 1 \ 5 \ 2 \ 4 \\ \hline \end{array}$$

$$\begin{array}{r} 1 \ 6 \ 7 \ 2 \ 9 \\ + 2 \ 1 \ 3 \ 2 \\ \hline \end{array}$$



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



$$\begin{array}{r} 2 \ 5 \ 3 \ 0 \ 8 \\ + 5 \ 6 \ 9 \ 2 \\ \hline \end{array}$$

Date: -----



Story Problems

a- Omar bought 1246 cows and 3120 camels. How many animals did he buy all together?

❖ He bought = -----

b- Mona saved money in a bank. In the first year, she put L.E 6846, in the second year, she put L.E 9856, and in the third year, she put L.E 9297 . How much money did she save after the three years in the bank?

❖ Mona saved = -----

c- Omar reads 2351 papers of a story in one day, 1230 papers in the next day, and 3118 papers in the third day. How many papers did he read?

❖ Omar reads = -----

d- A man bought a house for L.E 75625, and a car for L.E 23515. How much money did he pay?

❖ He paid = -----

Date: -----



Lesson 4: **Mental arithmetic**

1- Find the result mentally:

a- $5623 + 10 =$ -----

b- $5342 + 10 =$ -----

c- $9512 + 30 =$ -----

d- $25716 + 80 =$ -----

e- $54326 + 100 =$ -----

f- $3687 + 200 =$ -----

g- $8543 + 1000 =$ -----

h- $54726 + 3000 =$ -----

2- Calculate the result mentally:

a- $6000 + 182 =$ -----

b- $25100 + 37 =$ -----

c- $57000 + 358 =$ -----

d- $285 + 13000 =$ -----

e- $12000 + 400 =$ -----

f- $95000 + 200 + 80 =$ -----

g- $57000 + 900 + 62 =$ -----

Date: -----



3- Calculate the result mentally, and complete:

a- $243 + 99 =$ -----

b- $4782 + 999 =$ -----

c- $35032 + 999 =$ -----

d- $46821 + 9999 =$ -----

e- $7346 + 199 =$ -----

f- $2943 + 1999 =$ -----

g- $4327 + 2999 =$ -----

h- $51345 + 4999 =$ -----

i- $1564 + 101 =$ -----

j- $5621 + 1001 =$ -----

k- $68231 + 1001 =$ -----



Date: -----

Lesson 5: **Properties of Addition**

1- If you know that $4875 + 1648 = 6523$, and that

$678 + 322 = 1000$. Find the result of the following:

a- $1648 + 4875 = \text{-----}$

b- $322 + 678 = \text{-----}$

c- $4875 + 678 + 322 = \text{-----}$

d- $1648 + 678 + 322 = \text{-----}$

2- Complete the following:

a- $4331 + 2154 = 2154 + \text{-----}$

b- $2035 + \text{-----} = 571 + 2035$

c- $(6012 + 2563) + 300 = 6012 + (2563 + \text{-----})$

d- $(3716 + \text{-----}) + 4516 = 3716 + (2179 + 4516)$

e- $8146 + (1983 + \text{-----}) = (8146 + 311) + \text{-----}$

f- $4598 + (\text{-----} + 3294) = (4598 + \text{-----}) + 600$

g- $(3675 + 2143) + 1476 = 3675 + (\text{-----} + \text{-----})$

Unit (3) Subtraction up to no more than 99 999

Lesson 2 : **Subtracting two numbers**

Without renaming

With renaming

1- Subtract the following numbers:

$$\begin{array}{r} 5 3 5 4 \\ - 4 2 1 2 \\ \hline \end{array}$$



$$\begin{array}{r} 2 5 3 4 \\ - 1 4 1 2 \\ \hline \end{array}$$

$$\begin{array}{r} 5 3 8 1 \\ - 2 3 5 0 \\ \hline \end{array}$$



2- Subtract:

a- $5435 - 2317 = \dots$

b- $3542 - 2731 = \dots$

c- $56470 - 21236 = \dots$

d- $48964 - 32649 = \dots$

Draft

Date: -----

2- Find the increase of:

a- 8243 than 4120

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

b- 729 than 1500

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

c- 96435 than 26864

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Draft

3- Find the decrease of:

a- 3491 than 5995

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

b- 1362 than 6584

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

c- 24358 than 17

$$\underline{\hspace{2cm}} - \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Date: -----



Story Problems

1- In a school of 973 pupils, 328 pupils participate in different activities. How many pupils don't participate in the activities?

❖ Number of activities = -----

2- Ahmed has 1630 piasters. If he wants to buy a bar of chocolate for 750 piasters. How much money will be left with him?

❖ Money left with him = -----

3- A man bought a car for L.E 8985 and **sold** it for L.E 7500. Did the man win or lose? Calculate his profit or loss.

❖ -----

❖ -----

4- A merchant has 35685 kg of wheat. If he **sells** 23485 kg of them, then calculate the **remainder** of wheat.

❖ The remainder = -----

5- A shop has 4326 pairs of shoes, and 3462 bags. If the seller sells 2106 pairs of shoes, and 2031 bags. Find the **rest** of shoes and bags

❖ The rest of the shoes = -----

❖ The rest of the bags = -----

Date: -----

2- Complete in the same pattern:

- a- 3589 , 3583 , ----- , ----- , -----
- b- 9534 , ----- , 9334 , ----- , -----
- c- 84257 , 84207 , ----- , ----- , -----
- d- 64580 , ----- , 64560 , ----- , -----
- e- 29852 , ----- , 29842 , ----- , -----
- f- 4579 , ----- , 4571 , ----- , -----

3- If: $1574 + 3582 = 5156$, then complete:

a- $5156 - \boxed{\quad} = 1574$

b- $5156 - \boxed{\quad} = 3582$

4- From the digits 3 , 0 , 1 , 5 and 9

a- The **greatest** number = -----

b- The **smallest** number = -----

c- The **difference** between them = -----

= -----



Date: -----

Lesson 4:

The relation between addition and subtraction

1- If you know that $2508 + 4735 = 7243$

Then calculate:

a- $4735 + 2508 = \text{-----}$

b- $7243 - 2508 = \text{-----}$

c- $7243 - 4735 = \text{-----}$

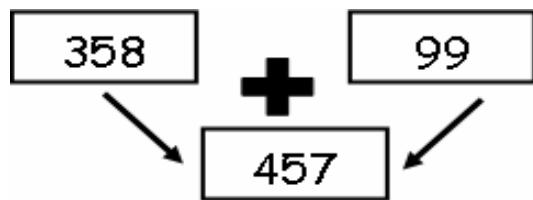


2- Notice the figure, and then complete:

a- $358 + 99 = \text{-----}$

b- $99 + 358 = \text{-----}$

c- $457 - 358 = \text{-----}$



d- $457 - 99 = \text{-----}$

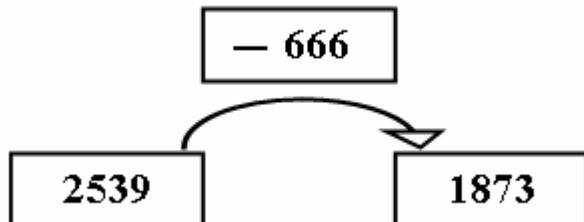


3- Notice the figure, and complete:

a- $2539 - 666 = \text{-----}$

b- $2539 - 1873 = \text{-----}$

c- $1873 + 666 = \text{-----}$



d- $666 + 1873 = \text{-----}$

Date: -----

4- Subtract: $25928 - 12351 = \text{-----}$

Now deduce:

$$\text{a- } 25928 - \text{-----} = 12351$$

$$\text{b- } 25928 = \text{-----} + 12351$$

5- Complete:

a- What's the number which if subtracted from 250 the result is 200?

b- What's the number which if added to 200 to make is 580?

Date: -----



Lesson 5: Mental Arithmetic

1- Find the result directly, without performing subtraction operation:

Case 1

Example: $8352 - 1000 = 7352$

a- $5362 - 2000 =$ -----

b- $2357 - 100 =$ -----

c- $6935 - 30 =$ -----

Case 2

Example: $54738 - 38 = 54700$

a- $25326 - 26 =$ -----

b- $93862 - 862 =$ -----

c- $67293 - 7293 =$ -----

d- $35692 - 690 =$ -----

f- $52936 - 2930 =$ -----

Date: -----

Case 3

Example: $3589 - 1000 = 2589$

a- $6798 - 1000 =$ -----

b- $3627 - 100 =$ -----

c- $52679 - 200 =$ -----

d- $86357 - 4000 =$ -----

e- $73284 - 70000 =$ -----



Case 4

Example 1: If $6235 - 1000 = 5235$
then $6235 - 999 = 5236$

a- If $253 - 100 =$ -----

b- If $648 - 100 =$ -----

c- If $3789 - 1000 =$ -----

d- If $8256 - 1000 =$ -----

Example 2: If $2784 - 1000 = 1784$
then $2784 - 1001 = 1783$

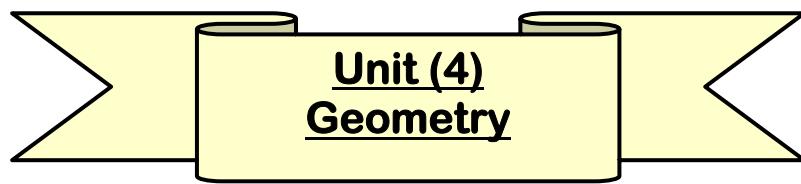
a- If $789 - 100 =$ -----

b- If $235 - 100 =$ -----

c- If $5678 - 1000 =$ -----

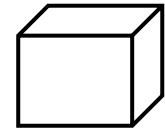
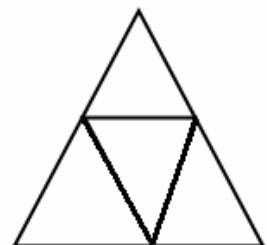
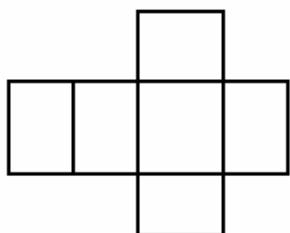
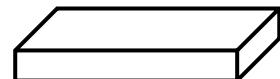
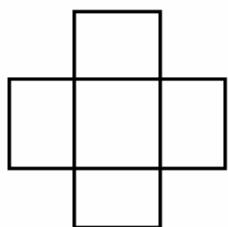
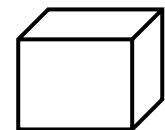
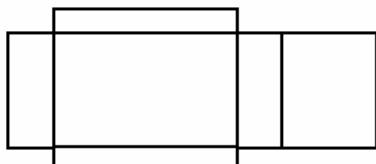
d- If $8329 - 1000 =$ -----

Date: -----



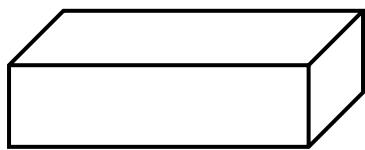
Lesson 1 :
Solids

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



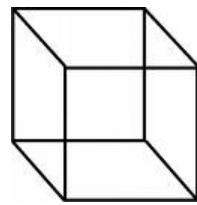
Date: -----

2- Write the name of each solids:



Faces are all rectangles

(-----)



Faces are all squares

(-----)



It has 2 circular bases

(-----)



It has 1 vertex and 1 circular base

(-----)



Lateral faces are all rectangles

(-----)



Faces are all triangles

(-----)

Date: -----

3- Complete:



Name of solid	Number of faces	Number of edges	Number of vertices
Cube	-----	-----	-----
Cuboid	-----	-----	-----
Pyramid with a square base	----- faces + ----- base	-----	----- Without counting the vertices of the base
Pyramid with a triangle base	----- faces + ----- base	-----	-----
Prism	----- faces + ----- bases	-----	-----
Cone	----- base as a -----	-----	-----
Cylinder	----- bases and each base is a -----	-----	-----

N.B.

1- A sphere doesn't have faces , edges or vertices.

2- Every vertex one intersection point of 3 edges.

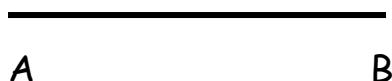
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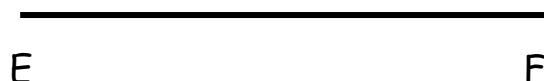
Lesson 2:

Using a ruler to measure the length of a line segments

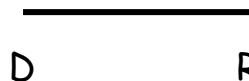
Use your ruler to measure the lengths of the following line segments:



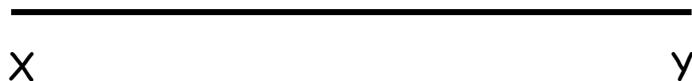
$$AB = \text{----- cm.}$$



$$EF = \text{----- cm.}$$



$$DR = \text{----- cm.}$$



$$XY = \text{----- cm.}$$



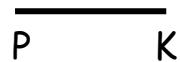
$$LZ = \text{----- cm.}$$



$$CD = \text{----- cm.}$$



$$MN = \text{----- cm.}$$



$$PK = \text{----- cm.}$$



$$LO = \text{----- cm.}$$



Date: -----

Lesson 3:

Geometric constructions

1- Draw:

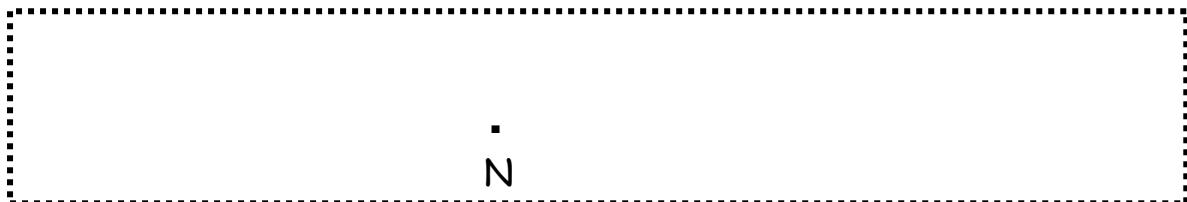
a) A line segment with length 5 cm. long



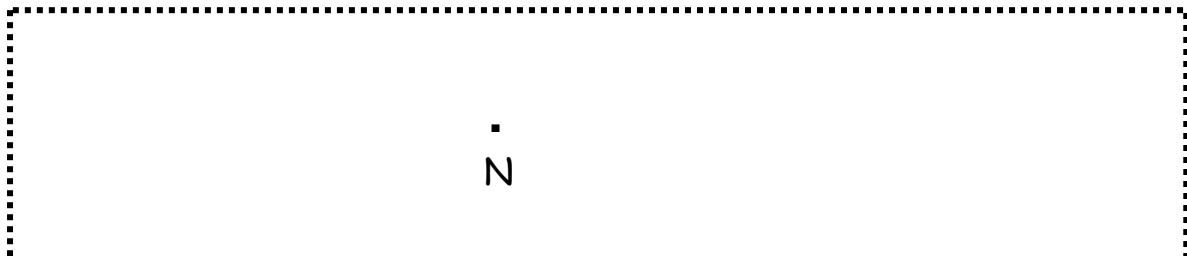
b) A line segment with length 3 cm. long, which point N is one of its end points.



c) A line segment with length 4 cm. long, passing through point N .



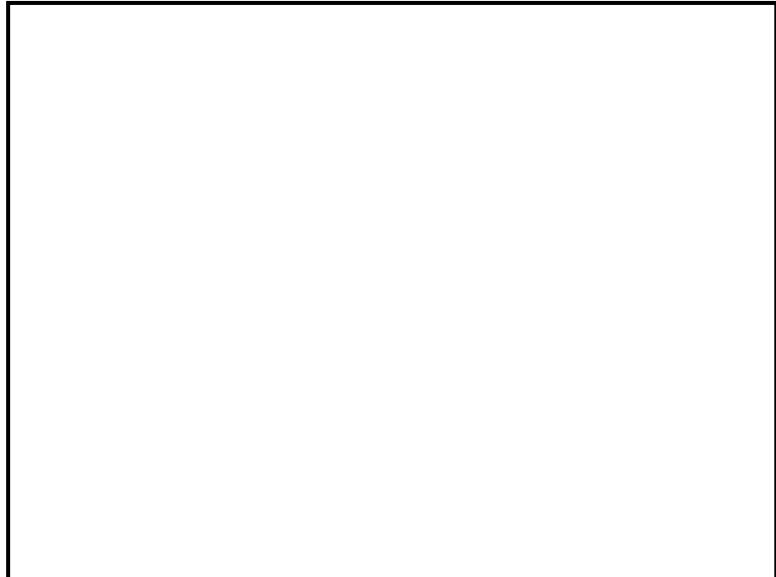
d) Two line segments each with length 2 cm. long, and intersecting at point N .



Date: -----

2- Draw a shape where $AB = 4 \text{ cm.}$ and $BC = 5 \text{ cm.}$ then draw \overline{AC}

What's this shape called?



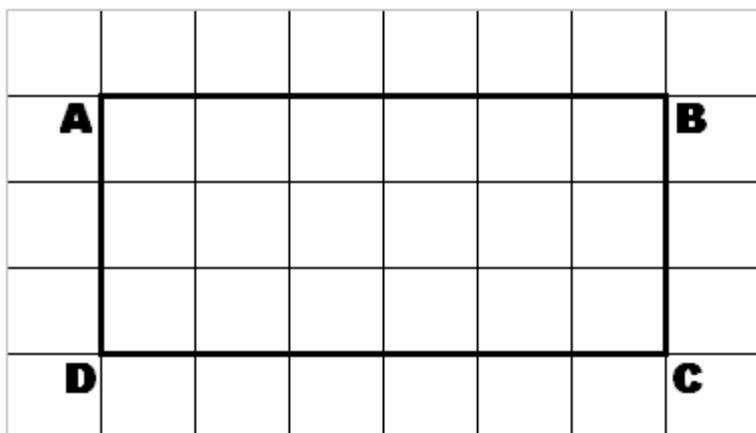
3- In the opposite figure, if we take the length of the side of small squares of the lattice as 1 unit of length:

Find:

a- The lengths of the two dimensions of the rectangle ABCD
is ----- and ----- of these units.

b- Length = ----- units.

Width = ----- units.



Date: -----

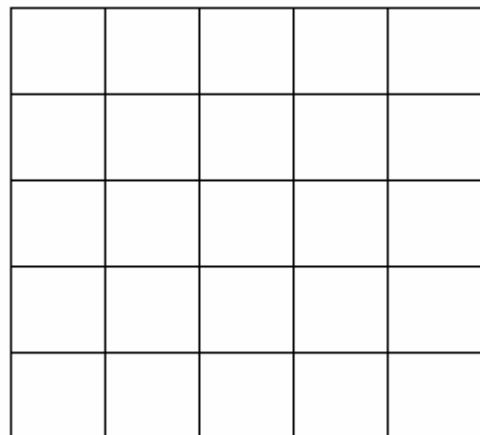
- 4- In the opposite lattice, draw:
XYZL where XY = 3 units, and
YZ = 4 units.

Complete:

$$ZL = \text{-----} \text{ units.}$$

$$LX = \text{-----} \text{ units,}$$

XYZL is called -----



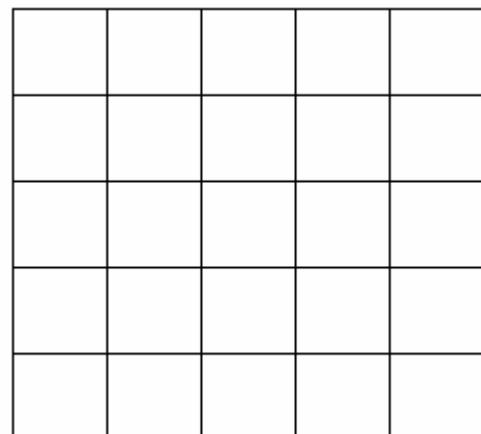
- 5- In the opposite lattice, draw:
ABCD where AB = 3 units, and
BC = 3 units.

Complete:

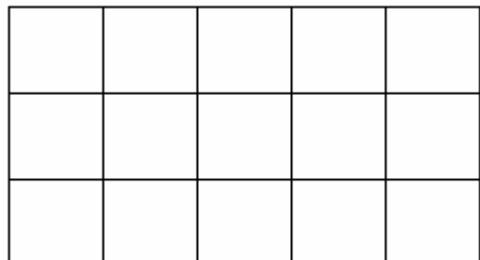
$$CD = \text{-----} \text{ units.}$$

$$DA = \text{-----} \text{ units.}$$

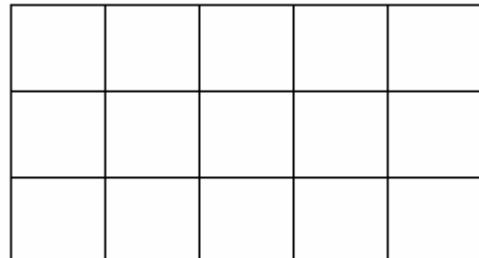
ABCD is called -----



- 6- In the opposite lattice, draw
A square LMNO, where LM= 2 units.



- 7- Draw a rectangle KFSP,
where KF = 5 units, and
KF = 1 unit and FS = 4 units.

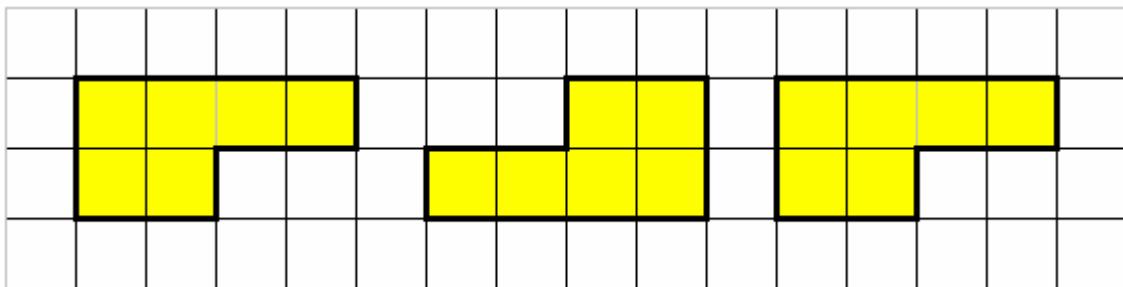


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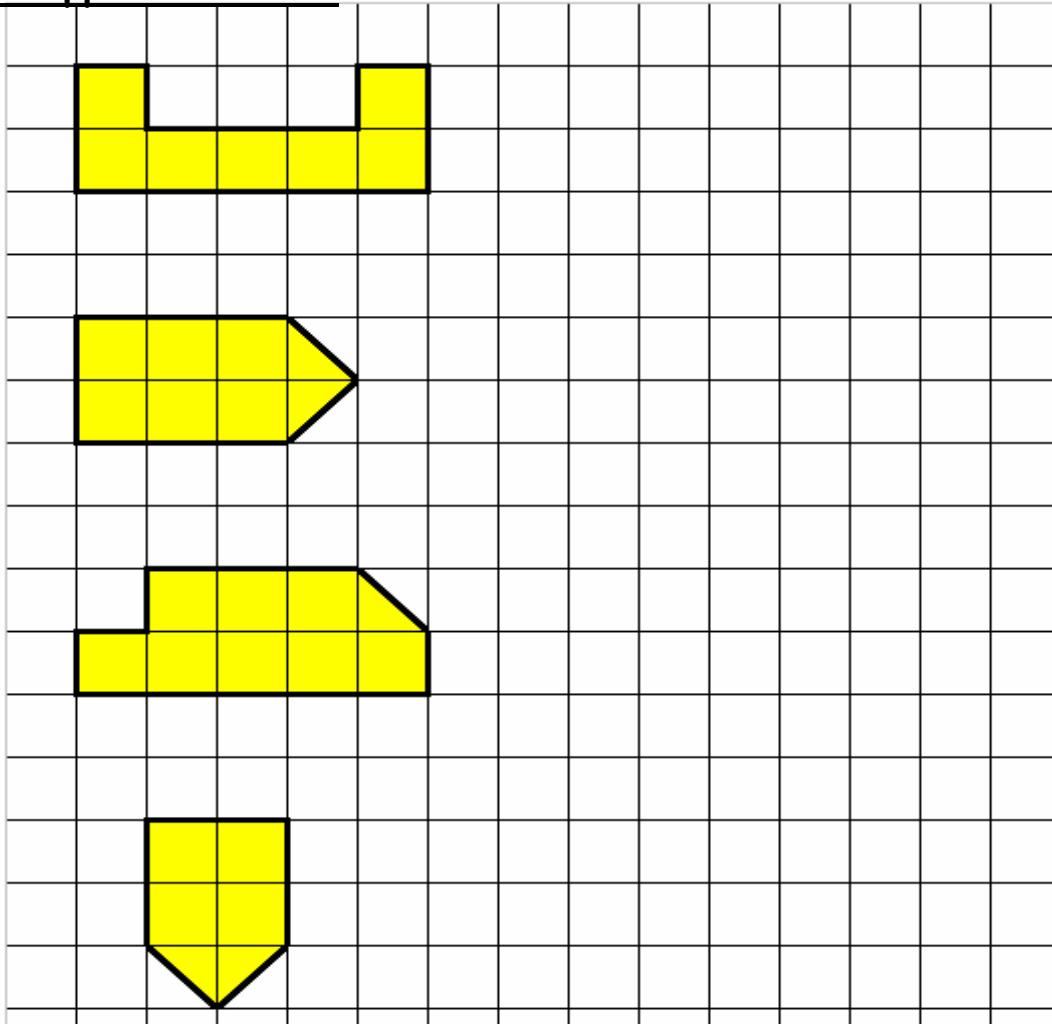
Note that:

Congruent figure have the same shape and size.

5- In the opposite figure identify the two congruent figures, and colour them using the same colour.



6- Draw figures congruent with the drawn figures in the opposite lattice:

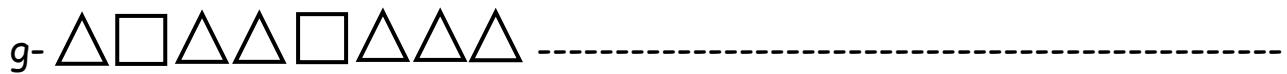
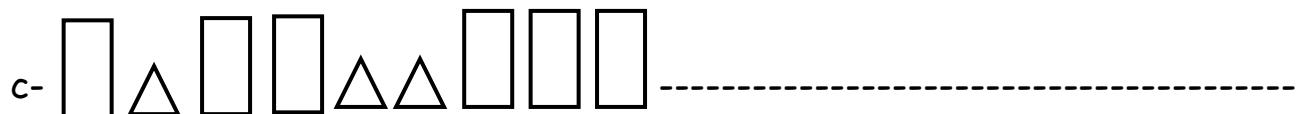
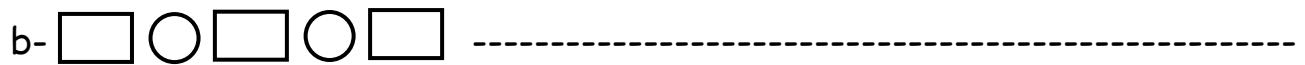


Date: -----

Lesson 5

Visual patterns (recognizing and building them)

Complete in the same pattern:



h- XYZ , XYZX , XYZXY , ----- , ----- , -----

i- 123 , 1231 , 12312 , ----- , ----- , -----

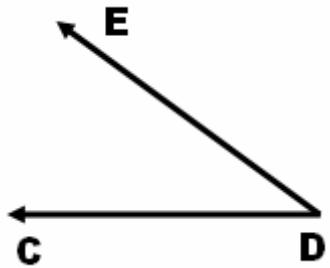
i- AB , ABA , ABAB , ABABA , ----- , ----- , -----

Date: -----

Lesson 6: The angles

The opposite figure shows:

- ❖ Two rays: \overrightarrow{DC} and \overrightarrow{DE} , with a common starting point or beginning point which is point "D" forming an angle.



- ❖ The point "D" is called (vertex).

- ❖ The two rays \overrightarrow{DC} and \overrightarrow{DE} are called the sides of the angle.

- ❖ The angle is denoted by the symbol " \angle " and it's written as:
 $\angle CDE$ or $\angle EDC$ or $\angle D$

1- Complete the table:

The figure	Name of the angle	Vertex	Sides of the angle
	$\angle \underline{\quad}$ $\angle \underline{\quad}$ $\angle \underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$
	$\angle \underline{\quad}$ $\angle \underline{\quad}$ $\angle \underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$
	$\angle \underline{\quad}$ $\angle \underline{\quad}$ $\angle \underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$
	$\angle \underline{\quad}$ $\angle \underline{\quad}$ $\angle \underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$	$\underline{\quad}$ $\underline{\quad}$ $\underline{\quad}$

Date: -----

2- Draw $\angle XYZ$, then complete:

a- The vertex is -----

b- The two sides are ----- and -----



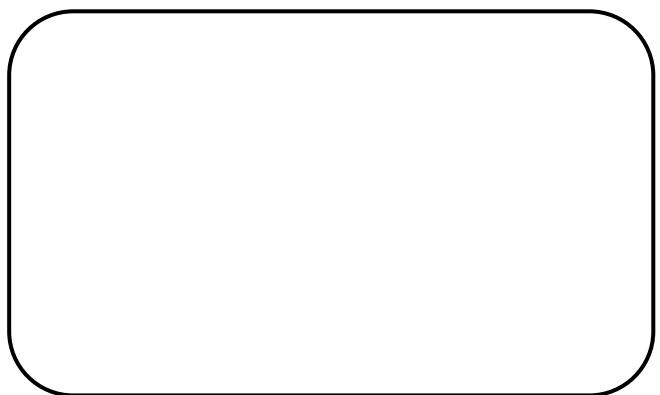
3- Draw an angle with the two sides \overrightarrow{LM} and \overrightarrow{LN}

a- The vertex is -----

b- The name of the angle -----

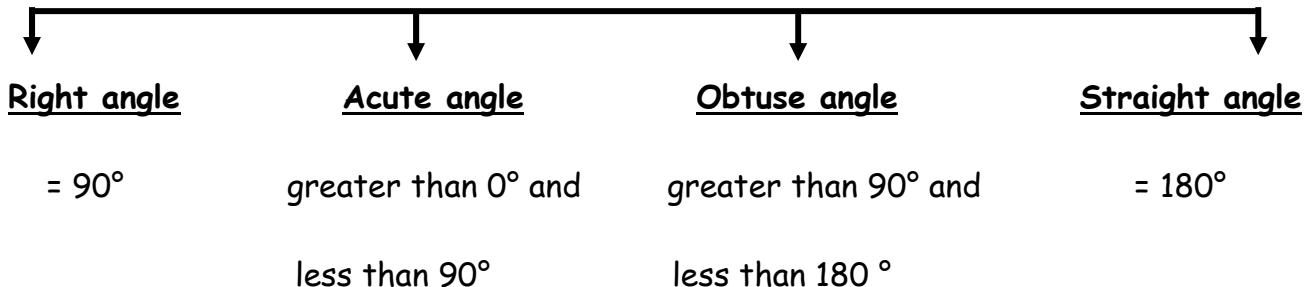
c- The type of the angle is

----- angle.



Date: -----

Kinds of angles



Completer the table:

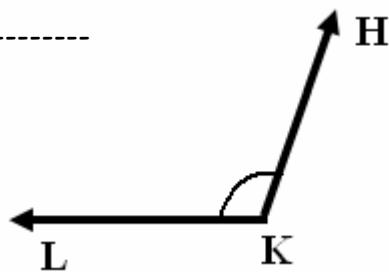
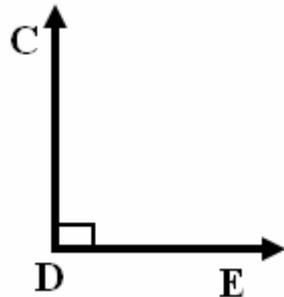
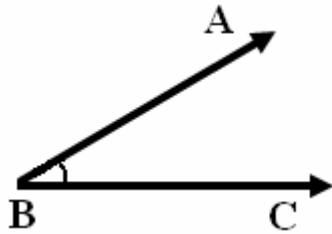
The figure	Kinds of the angle

Measuring angles

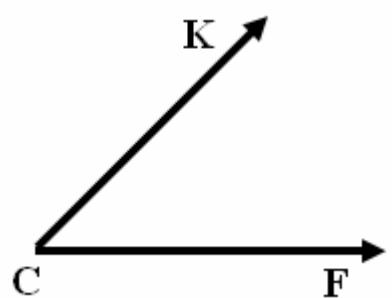
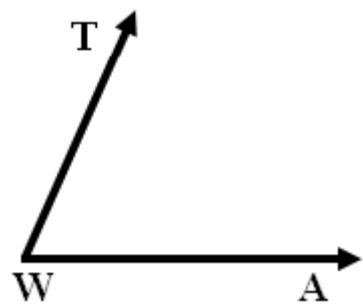
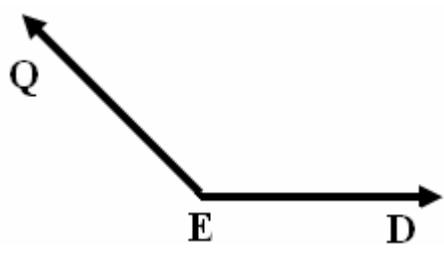
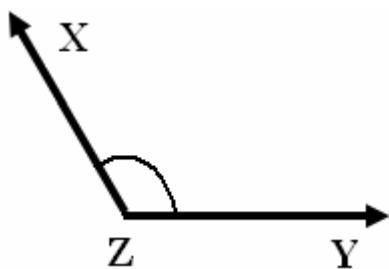
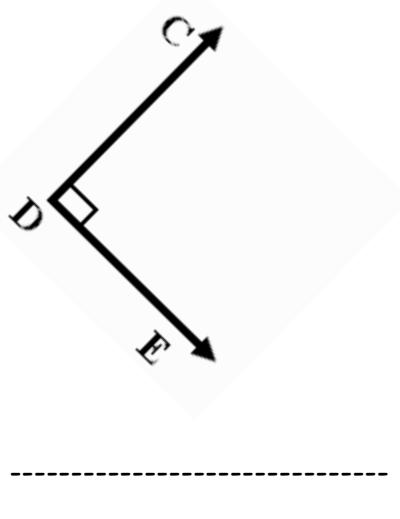
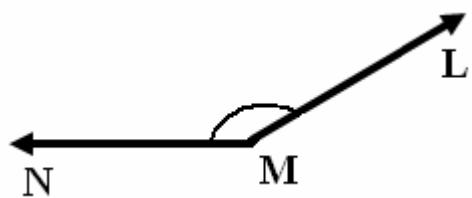
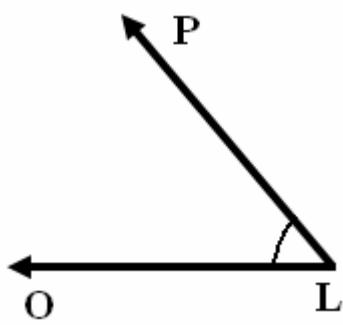
Date: -----

- ❖ The unit used for measuring angles is called the **degree**, and it's denoted by the symbol " ° " .
- ❖ **The protractor** is a geometric instrument used to measure angles.
- ❖ The protractor is divided into **180** equal parts.
Each part = 1 degree (1°).
- ❖ **M** is the centre of the protractor, and it divides the protractor into two 90°
- ❖ The protractor has two scales, each one begins from 0° , and ends with 180° . One of them begins from the left and the other begins from the right.

1- Measure each of the following angles, then write the type of each angle:



Date: -----



Date: -----

2- Draw angles with the following measures, and state its kind:

35 °	80 °
120 °	180 °
90 °	75 °
145 °	48 °
26 °	165 °

3- Choose the correct answer:

- 1- The angle between the hands of the clock is a right angle, when it's ----- (7 o'clock , 9 o'clock , 2 o'clock).
- 2- The angle between the hands of the clock is an acute angle, when it's ----- (4 o'clock , 3 o'clock , 11 o'clock).
- 3- The angle between the hands of the clock is a straight angle, when it's ----- (12 o'clock , 5 o'clock , 6 o'clock).
- 4- The intersection point of 3 edge of a solid -----
(angle , vertex , face).
- 5- the unit used for measuring angle is -----
(protractor , angle , degree)
- 6- The geometric tool used for measuring angle is -----
(vertex , protractor , degree)
- 7- We use protractor to measure -----
(angles , lengths , weights)

