## Math 2 Homework 3

Arrange given groups of numbers from least to greatest:
a) $209,69,19,199,9,109$ $\qquad$
b) $46,116,306,26,6,176$ $\qquad$
Write the numbers.
a) Seven hundred four $\qquad$
b) Five hundred forty $\qquad$
c) 3 hundred 4 ones $\qquad$
d) 8 hundred 2 tens $\qquad$

Write the value of the underlined digit.
a. 45 - forty ( 4 tens)
b. 68 $\qquad$
c. 719 $\qquad$
d. $8 \underline{0} 1$ $\qquad$
e. $43 \underline{0}$ $\qquad$
f. 182 $\qquad$


On the number line above find and mark the numbers:
a) greater than 5 and less than 10: : $\qquad$
b) less than 18 and greater than 14 : $\qquad$

Write the number 222 in Mesopotamian's symbols.
(ones were written as $\Delta, \quad$ tens as $\boldsymbol{4}$, and $\quad 60$ as $\boldsymbol{\nabla}$ ).

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

$$
\begin{aligned}
& 4 \text { tens }+3 \text { ones __ } 4 \text { tens }+2 \text { ones } \\
& 8 \text { tens }+0 \text { ones _ } 0 \text { tens }+8 \text { ones } \\
& 2 \text { hundreds }+0 \text { tens }+5 \text { ones ___ } 2 \text { hundreds }+5 \text { tens }+0 \text { ones } \\
& 5 \text { hundreds }+2 \text { ones }+2 \text { ones }
\end{aligned}
$$

Solve for $x$ :
$x-1=100$
$99+x=100$
$101-x=100$


Is it TRUE? Move one number to make the following equations TRUE:
8
Example: $1+2+3=4$ - False; $2+3=4+1$ - True
$11+12+13=14$ $\qquad$
$3+9+6=2+4$ $\qquad$
$21+22+24=23$ $\qquad$
$3+7+11=5+10$ $\qquad$
$11+21+16=2+3$ $\qquad$

9 Using a ruler, divide a given rectangle into 4 equal pieces in 4 different ways.
$\square$


10 Write the expressions instead of words sentences:
a) the sum of 29 and 2 is greater than $A$ $\qquad$
b) $B$ is greater than the difference between 20 and 5 $\qquad$
c) $C$ is equal to the sum of 11,32 and 40
d) the difference between 100 and $D$ is less than $E$ $\qquad$

11 I have ten boxes, with a total weight of $75 \mathrm{~kg}: 15 \mathrm{~kg}, 13 \mathrm{~kg}, 11 \mathrm{~kg}, 10 \mathrm{~kg}, 9 \mathrm{~kg}, 8 \mathrm{~kg}$, $4 \mathrm{~kg}, 2 \mathrm{~kg}, 2 \mathrm{~kg}, 1 \mathrm{~kg}$.
I want to pack the boxes into 3 crates, but each crate can carry a maximum of 25 kg .
How can I pack the boxes into the crates? (There may, or may not, be more than one way!)
$\qquad$
$\qquad$
$\qquad$

12 Using a ruler, connect point A with points D and C . Also Connect points E and B . How many triangles can you find on the picture?


## Matchsticks puzzles:

13 Using 8 matchsticks, you can make one square or two squares.
one square:

two squares:


Look at the picture below. Make the same shape on your table (instead of matchsticks you can use toothpicks or any other short sticks of the same length)?
Remove 2 matchsticks (do not touch the other matches) to get 3 squares. How many matchsticks should you remove to get 2 squares?

Draw your solutions here.


