## Math 2 Homework 12系

Compare:
1
$a_{-} a+c$
$a+b \_b+a$
$b \_b-5$
$k+26 \_62+k$
$4 \_d-d$
$54+n \_54-n$
$38-b$ _ $68-b$
$a-0 \_a+0$
c-19_c-90

Analyze the whole and the parts:
Q


$$
\begin{aligned}
& Q=A+B+C \\
& B=\underline{Q-A-\ldots} \\
& A+B=\underline{Q-\ldots} \\
& A+C=
\end{aligned}
$$

Write down the expressions:

# a) There are $\mathbf{3}$ books on a shelf. One book was added. How many books are on the shelf now? 

b) There are $\boldsymbol{m}$ books on a shelf. One book was added. How many books are on the shelf now?
c) There are $\boldsymbol{k}$ books on a shelf. $\boldsymbol{n}$ books were added. How many books are on the shelf now?
d) There are $\mathbf{3}$ books on one shelf and $\mathbf{6}$ books on another shelf. How many more books are on the second shelf than on the first one? $\qquad$
e) There are $\boldsymbol{c}$ books on the first shelf and $\boldsymbol{b}$ on the second. How many more books are on the second shelf than on the first one? $\qquad$
f)There are $\mathbf{3}$ books on one shelf and $\mathbf{6}$ books on another. How many books will remain on both shelves after $\mathbf{4}$ books are taken away? $\qquad$
g) There are $\boldsymbol{a}$ books on one shelf and $\boldsymbol{b}$ books on another. How many books will remain on both shelves after $\boldsymbol{c}$ books are taken away? $\qquad$

Mark the order of operations and calculate (do NOT open parentheses):
$12+8-7+13=$ $\qquad$
$(12+8)-(7+13)=$ $\qquad$
$12+(8-7+13)=$ $\qquad$

## Removing parentheses.

$$
\begin{aligned}
a+(b+c) & =a+b+c & & a+(b+c)=a+b+c \\
a+(b-c) & =a+b-c & & a+(b-c-d)=a+b-c-d \\
a-(b-c) & =a-b+c & & a-(b-c-d)=a-b+c+d
\end{aligned}
$$

5 Remove the parentheses and calculate:
$5+(6+1)=$
$25+(95+6+5)=$
$5+(6-1)=$
$63+(52-3-8)=$
$5-(6-1)=$
$89-(23-17-11)=$

Remove parentheses and combine the similar terms:

$$
\begin{aligned}
& a+(b-c-a)+(c-b)= \\
& (a+b)-(c+d+b)= \\
& a-(b-c-d)-(c+d)= \\
& (b-d)-(d-b)+(a-b)=
\end{aligned}
$$

$\qquad$
$\qquad$
$\qquad$

Write the numbers in columns and calculate their sums.

$$
\begin{aligned}
& 21+48+456 \\
& 276+59+84 \\
& 32+370+91 \\
& 35+46+16
\end{aligned}
$$



Calculate:


What number am I?
a) When I am taken from 100, the result is 52 .
b) When I have 108 added to me, the result is 409 . $\qquad$
c) When I am decreased by 45 , the result is 17 .

Solve for x . Check your answers.
$31-x=22$
$x+107=235$
$x-18=29+125$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

11
Find the weights of animals.

| The cat weighs ..................... kg | The turkey weighs .................. kg |
| :---: | :---: |
| The dog weighs ..................... kg | The piglet weighs ................... kg |
| The goat weighs ................... kg | The cow weighs ..................... kg |



路解Insert operation signs + , - to get correct equalities:
a) 8 __ 6 __ 1 __ 7 __ 9 __ $3=20$


Calculate and express the answers in cm :
a) $8 \mathrm{dm} 1 \mathrm{~cm}+9 \mathrm{~cm}=$
b) $9 \mathrm{dm}-5 \mathrm{~cm}=$
c) $8 \mathrm{dm}+3 \mathrm{~m} 2 \mathrm{dm}=$
d) $5 \mathrm{~m}-9 \mathrm{dm}=$

How many triangles and quadrilaterals can you find on the sketch below. Write down all names. Triangles: ABC, Quadrilaterals: ABCD, $\qquad$路然


15
The perimeter of the square is 32 cm . Imagine the rectangle with a length equal to the square's side, and the width is 3 cm shorter. Find the perimeter of the rectangle. $\mathrm{P}=$ $\qquad$


Step 1


Step 2


Step 3

