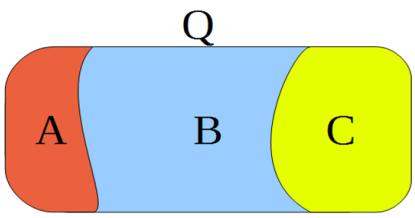
Math 2 Homework 11

1 Compare:

$a \_\_ a + c$	$a + b \_\_ b + a$	$38 - b \_\_ 68 - b$
$b \_\_ b - 5$	$k + 26 \_\_ 62 + k$	$a - 0 \_\_ a + 0$
$4 \_\_ d - d$	$54 + n \_\_ 54 - n$	$c - 19 \_\_ c - 90$

2 Analyze the whole and the parts:



Q = A + B + C

B = Q – A – …

A + B = Q – …

A + C = _____

3 Write down the expressions:

a) There are ***3*** books on a shelf. ***One*** book was added. How many books are on the shelf now?

_____

b) There are ***m*** books on a shelf. ***One*** book was added. How many books are on the shelf now?

_____

c) There are ***k*** books on a shelf. ***n*** books were added. How many books are on the shelf now?

_____

d) There are ***3*** books on one shelf and ***6*** books on another shelf. How many more books are on the second shelf than on the first one? _____

e) There are ***c*** books on the first shelf and ***b*** on the second. How many more books are on the second shelf than on the first one? _____

f)There are ***3*** books on one shelf and ***6*** books on another. How many books will remain on both shelves after ***4*** books are taken away? _____

g) There are ***a*** books on one shelf and ***b*** books on another. How many books will remain on both shelves after ***c*** books are taken away?_____

4 Mark the order of operations and calculate (do NOT open parentheses):

12 + 8 – 7 + 13 = _____

(12 + 8) – (7 + 13) = _____

12 + (8 –7 + 13) = _____

Removing parentheses.

$a + (b + c) = a + b + c$ $\quad$ $a + (b + c) = a + b + c$

$a + (b - c) = a + b - c$ $\quad$ $a + (b - c - d) = a + b - c - d$

$a - (b - c) = a - b + c$ $\quad$ $a - (b - c - d) = a - b + c + d$

5 Remove the parentheses and calculate:

5 + (6 + 1) =

5 + (6 – 1) =

5 – (6 – 1) =

25 + (95 + 6 + 5) =

63 + (52 – 3 – 8) =

89 – (23 – 17 – 11) =

6 Remove parentheses and combine the similar terms:

$a + (b - c - a) + (c - b) =$ _____

$(a + b) - (c + d + b) =$ _____

$a - (b - c - d) - (c + d) =$ _____

$(b - d) - (d - b) + (a - b) =$ _____

7 Write the numbers in columns and calculate their sums.

21 + 48 + 456

276 + 59 + 84

32 + 370 + 91

35 + 46 + 16

8. Calculate:

		8	1	7					5	0	5				3	1	4			
	-		6	8				-		2	6			-		8	9			

9. 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. _____

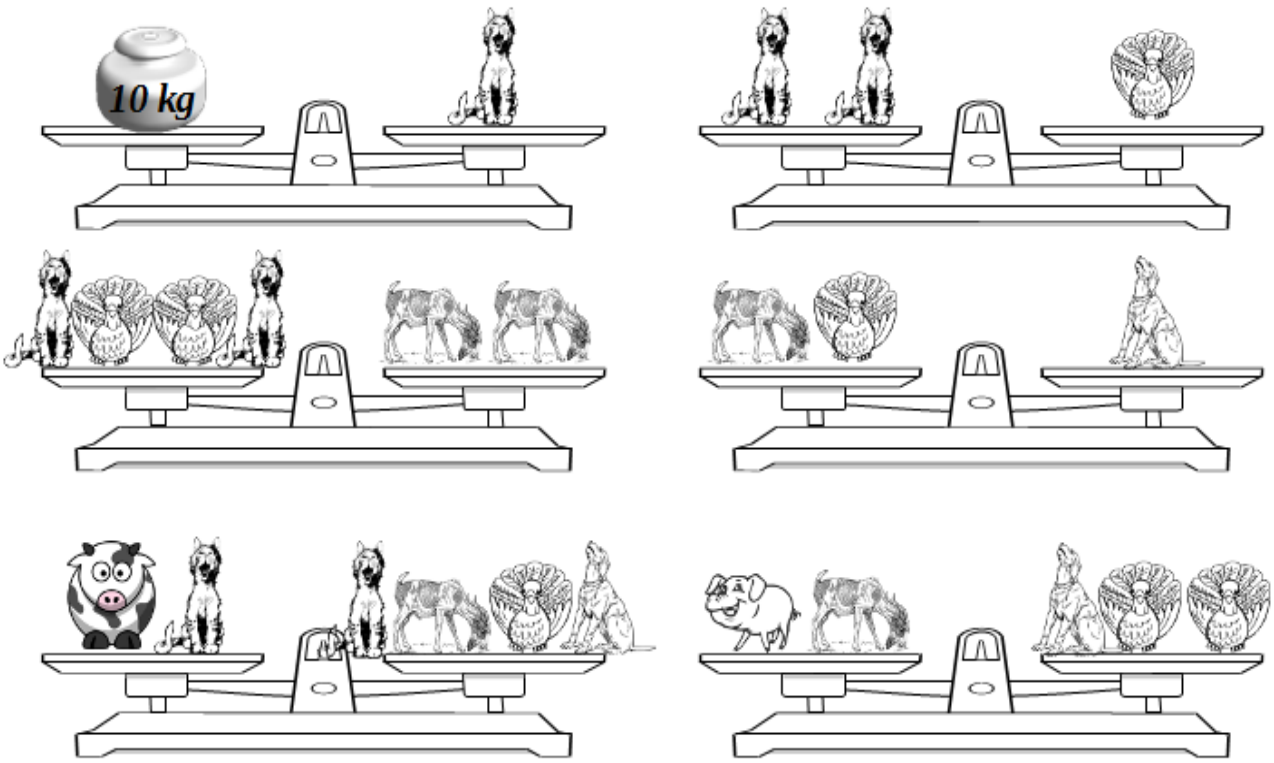
c) When I am decreased by 45, the result is 17. _____

10 Solve for x. Check your answers.

31 – x = 22	*x + 107 = 235*	*x – 18 = 29 + 125*
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

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



12 Insert operation signs +, – to get correct equalities:

a) 8 __ 6 ___ 1___ 7 ___ 9 ___ 3 = 20

b) 7 ___ 9 ___ 8 ___ 4 ___ 3 ___5 = 20

13 Calculate and express the answers in cm:

a) 8dm 1cm + 9 cm =

b) 9dm – 5 cm =

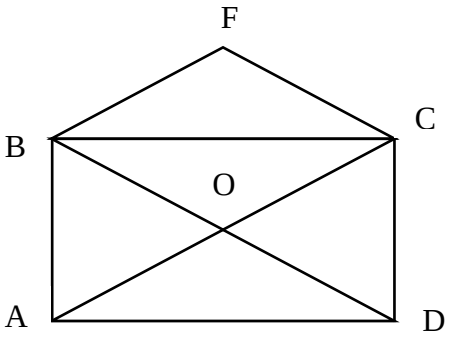
c) 8dm + 3m 2dm =

d) 5m – 9dm =

14 How many triangles and quadrilaterals can you find on the sketch below. Write down all names.

Triangles: ABC, _____

Quadrilaterals: ABCD, _____

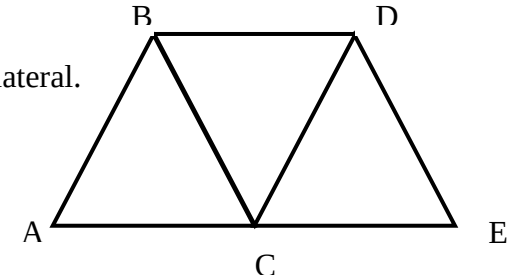


15 The perimeter of the square is 32cm. Imagine the rectangle with a length equal to the square's side, and the width is 3cm shorter. Find the perimeter of the rectangle.

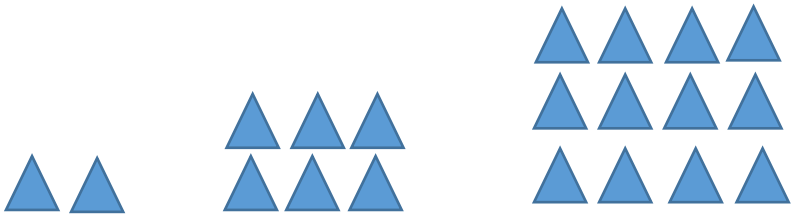
P = _____

16 The quadrilateral is consisting of three equilateral triangles.
The side of the triangle is 6cm. Find the perimeter of the quadrilateral.

P = _____



17 Look at the pattern and draw steps 4, 5, and 6. Make a drawing for each step.



Step 1 Step 2 Step 3