school nova™

1

Compare:

$32 - x$ _____ $32 - (x + 2)$ $32 + x$ _____ $32 + (x + 2)$

$26 - y$ _____ $26 - (y - 3)$ $26 + y$ _____ $26 + (y - 3)$

$b - a$ _____ $b - (a - n)$ $b + a$ ____ $b + (a + m)$

$b - c$ ____ $b - (c - n)$ $b + c$ _____ $b + (c - n)$

2

a) Write an arithmetic operation above each arrow:

$$24 \longrightarrow 30 \qquad\qquad 73 \longrightarrow 59$$

b) Construct and solve equation, don't forget to check your answer!

$$213 \longrightarrow 232 \qquad\qquad 952 \longrightarrow 573$$

2	1	3	+	x	=	2	3	2			
x	=										
x	=										

9	5	2	-	x	=	5	7	3			
x	=										
x	=										

3

Write down an equation for each operation and solve it.

$$x \;\overset{+17}{\longleftrightarrow}\; 88 \qquad\qquad y \;\overset{-32}{\longleftrightarrow}\; 13$$

4 Perimeter of quadrilateral is 16 cm (assume that each cell is 1cm). Draw several different quadrilaterals with the same perimeter – 16 cm.
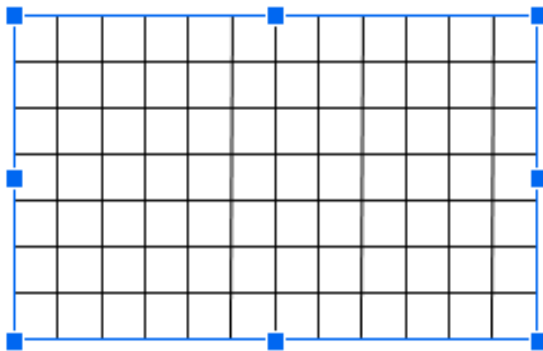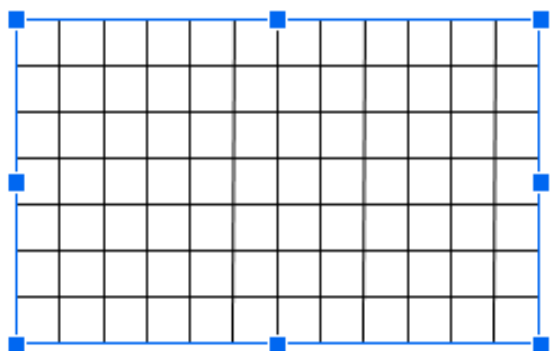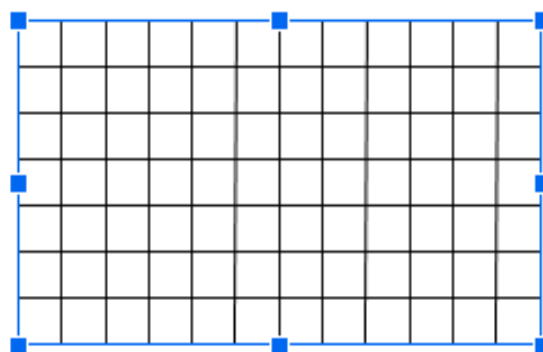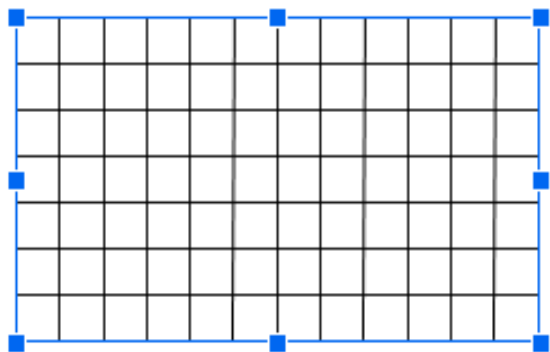
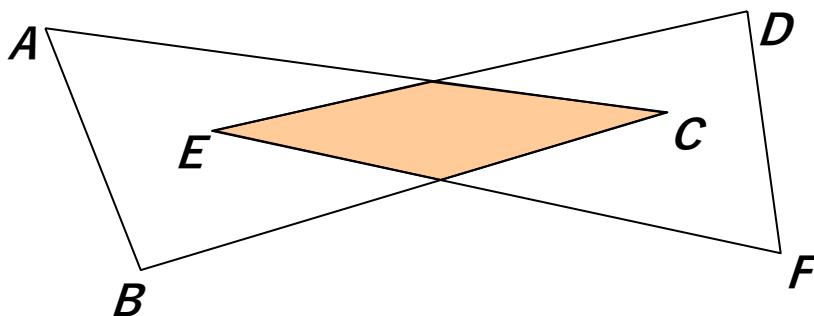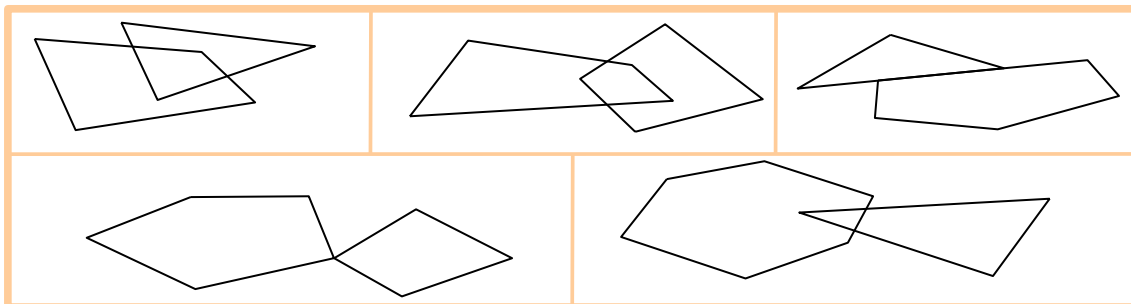**5** a) Name the two triangles shown in the drawing. _____

b) Label the points of intersection of their sides with points **M** and **N**. What is the shape of the intersection of these triangles (shaded)?

_____

_____

_____

**6** Shade the intersections of two polygons shown in each picture.

7 Draw two triangles whose intersection is: (Practice of the separate piece of paper first!)

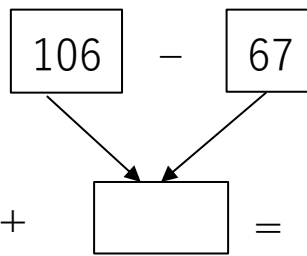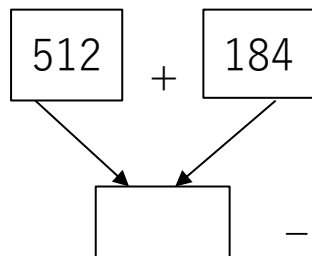| a triangle	a point	a rectangle	a line segment

8 Write the expressions for each scheme, number the order of operations and calculate the values of expressions (use parentheses):

a) *Example:*

$$203 + 49$$

$$750 - \boxed{} =$$

$750 - (203 + 49) =$ _____

b)

$$512 + 184$$

$$\boxed{} - 93 + \boxed{} =$$

$$106 - 67$$

_____
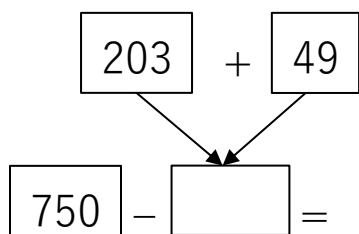
9

Write down the numerical expression and calculate the value:

a) The length of a newborn baby whale was 5m 3dm 2cm. Once he grew up, he was 32m 6dm 7cm long! How much did he grow? _____

b) The seedling was 1dm and 5cm when it was planted. After two years, the plant was 2m 3dm and 8cm high. How much did the plant grow over two years? _____
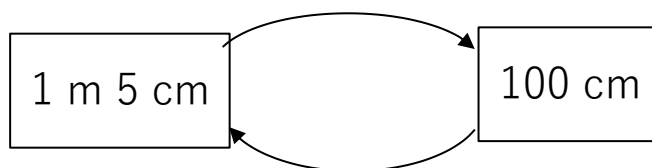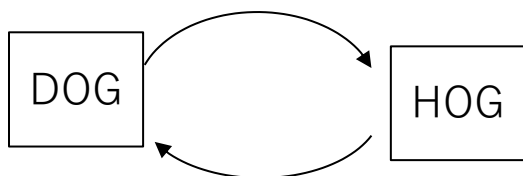
10

Choose the suitable units:

a) The length of the mobile phone is about 15 _____

b) Dad's height is about 180 _____

c) The length of the soccer field is about 100 _____

d) The capacity of the cup is about 200 _____

e) The volume of the aquarium is about 25 _____

11

Write an operation and a reverse operation above each arrow.

12

a) Make up your own operation. Decide the **object of operation**, what exactly the operation is, and what the **result of the operation**.

b) Reverse the operation you created. What is the object of operation and the result of operation now?

13

Solve the problem:

Winnie the Pooh and Piglet went to visit their friend Rabbit. While there, Piglet ate 48 spoons of honey, and Winnie the Pooh ate 254 spoons more than Piglet. If Winnie the Pooh eats 300 spoons of honey, he cannot pass through the Rabbit's hole.

How many spoons of honey did Winnie the Pooh eat? _____

How many fewer spoons of honey should he eat to be able to pass through the Rabbit's hole?

_____