## school nova

## Homework 10

1. Find the weight of the cat, the dog, the goat, the turkey, the pig and the cow.

Show your work.

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


2. 10 pine trees are growing along a straight road. The distances between neighboring trees are 10 m . How far is the first pine from the last one? Draw a picture if it'll help you.
3.

Change the drawing twice according to the encoded task:

4.

Alex has $\boldsymbol{a}$ books, Boris has $\boldsymbol{b}$ books, and Victor has $\boldsymbol{c}$ books. Write down the meanings of the following expressions:
$a+b$ $\qquad$
$a+c$ $\qquad$
$a-c$ $\qquad$
$b+c$ $\qquad$
$a+b+c$ $\qquad$
5. Solve for x . Try to find x in your mind first. Use diagrams. Check your answers.

$$
111-x=100
$$

$$
x+33=333
$$

$$
x-222=444
$$


$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
6. a) Draw a circle and place all triangles inside it. Draw another circle and place all yellow shapes inside. What shapes will be inside an intersection of two circles?
b) What object does not belong to any group? Why?
c) Think of your own problem about sets based on the properties of shapes on the drawing. (Hint: consider number of angles).

7.

Check the statements about the drawings and put TRUE or FALSE in front of each statement.
$\qquad$ All balloons are round.
$\qquad$ One balloon is green.
$\qquad$ Only one balloon is yellow.
$\qquad$ Each balloon has a string attached.
a) Draw a line segment within each triangle to end up with 3 triangles in each drawing.


Name the line segments you have drawn. Write down the names of the triangles in each drawing.

1. $\triangle A B C$;
2. $\qquad$ 1. $\qquad$
3. $\qquad$ 2. $\qquad$ 2. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
b) Draw a line segment within each triangle to end up with two triangles and one quadrilateral in each drawing.


Name the line segments you have drawn. Write down the names of the triangles and the quadrilateral in each drawing.

1. $\triangle A B C$;
2. $\qquad$ 1. $\qquad$
3. $\qquad$
4. $\qquad$
5. $\qquad$
6. $\qquad$
7. $\qquad$
8. $\qquad$
9. a) A rectangular swimming pool is 10 meters wide and 15 meters long. What is its perimeter?
$\mathrm{P}=$ $\qquad$
b) Brook has a rectangular garden of length 12 meters and width 6 meters She wants to fence the garden with a rope. How much rope will be required?
$\mathrm{P}=$ $\qquad$
c) John goes for a morning walk every day. He walks along a path whose total length is 600 meters. Find the length of the missing sides.


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