## Homework for Lesson № 6

1 Solve the 2-step problems by identifying units' values. Write each step separately together with its meaning (see classwork sample)
A. Granny Rhinoceros backed cookies and laid them evenly on plates. There are 18 cookies on 3 plates. How many cookies are on 7 plates?

1. $\qquad$
2. $\qquad$
B. Grapes are packed in identical boxes. 8 boxes contain 56 kg of grapes. How much grapes are in 5 boxes?
3. $\qquad$
4. $\qquad$
C. A snail eats 63 g of leaves in 9 days. How many grams of leaves does the snail eat in a week?
5. $\qquad$
6. $\qquad$
D. There are 35 liters of juice in 5 identical cans. How many lites of juice in 9 such cans?
7. $\qquad$
8. $\qquad$

2 Solve equations in your notebook, copy your answers here. Make drawings!
$203-x=49$
$y+72=841$
$42: w=6$
$x=$ $\qquad$
$y=$ $\qquad$
$w=$ $\qquad$

3
$\boldsymbol{C}$ is a set of a school's athletes. $\boldsymbol{F}$ is a set of the school's soccer players. $\boldsymbol{B}$ is the set of the school's goal keepers in soccer teams.
Draw a Venn Diagram for the sets $\boldsymbol{B}, \boldsymbol{C}$, and $\boldsymbol{F}$.
$\boldsymbol{P}$ is a set of animals. $\boldsymbol{Q}$ is a set of predators. $\boldsymbol{R}$ is a set of birds. Draw a Venn Diagram for the sets $\boldsymbol{P}, \boldsymbol{Q}$, and $\boldsymbol{R}$.

## 4

Use \{\} to list the elements of
sets $\boldsymbol{A}, \boldsymbol{B}$, and their intersection in the increasing order.

A = $\qquad$
$B=$ $\qquad$
$A \cap B=$ $\qquad$


Fill in the blanks using the symbols $\in$ or $\notin$ :


A

$8 \quad$ A
$\underline{0} \quad B$

8 B
3 B
6 B

List the properties that the elements in the intersection of sets $\boldsymbol{P}$ and $\boldsymbol{Q}$ inherit
from each set.


1. $\qquad$
2. $\qquad$

3. $\qquad$
4. 

Complete the auxiliary drawings to solve the problems:
6
A. There are 5 potatoes in each of 6 baskets and 3 tomatoes in each of 4 bags. How many vegetables are there in total?

B. There are $\boldsymbol{a}$ potatoes in each of $\boldsymbol{b}$ baskets and 3 tomatoes in each of $\boldsymbol{w}$ bags. How many vegetables are there in total?

C. Jake types $\boldsymbol{k}$ pages an hour, Lisa types $\boldsymbol{m}$ pages. How many pages did they type on Friday if Jake worked 5 hours and Lisa worked $\boldsymbol{q}$ hours?


56


7
Use analysis of operations to solve the equations.

| $\boldsymbol{x}:$ | 7 | + | 5 | $=$ | 1 | 1 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



8 Use a compass to find set of all points that are...
... 5 cm away from point $\boldsymbol{K}$ and
$\ldots 4 \mathrm{~cm}$ away from point $\boldsymbol{M}$.

How many points did you find?

9
Use a compass to find all points of the curve $\boldsymbol{p}$ located 3 cm away from the point $\boldsymbol{X}$.

How many points did you find?

How do we call the set of all points located 3 cm away from the point $\boldsymbol{X}$ ?

10
Find set of all points that are ...
... 2 cm away from point $\boldsymbol{A}$ and
$\ldots 2 \mathrm{~cm}$ away from point $\boldsymbol{B}$.
$\qquad$

Fin
${ }^{\bullet}$
$\stackrel{\bullet}{M}$
$\qquad$

$A^{\bullet}$
B

How many points did you find?
What do you think is the reason for that?

11 The dimensions of the triangle
$\triangle A B C$ are labeled on the drawing. List two properties of each of the points A, B, and C in terms of distances.


* Check $\boldsymbol{\checkmark}$ the TRUE statements; cross mark $\boldsymbol{X}$ the FALSE statements.
$\square \quad \boldsymbol{A} \in \operatorname{Circ}(\boldsymbol{B}, 3 \mathrm{~cm})$
$\square \quad \boldsymbol{A} \in \operatorname{Circ}(\mathbf{A}, 3 \mathrm{~cm})$
$\square \quad \boldsymbol{B} \in \operatorname{Circ}(\boldsymbol{A}, 3 \mathrm{~cm}) \cap \operatorname{Circ}(\boldsymbol{C}, 4 \mathrm{~cm})$
$\square \quad \boldsymbol{A} \notin \operatorname{Circ}(\boldsymbol{B}, 3 \mathrm{~cm}) \cap \operatorname{Circ}(\boldsymbol{C}, 5 \mathrm{~cm})$
$\square \quad \boldsymbol{C} \notin \operatorname{Circ}(\boldsymbol{A}, 3 \mathrm{~cm}) \cap \operatorname{Circ}(\mathbf{C}, 5 \mathrm{~cm})$
$\square \quad A B \cap B C=\varnothing \quad \square \quad A C \cap B C \neq \varnothing$
$A C \cap B C \neq \varnothing$
Use your imagination

You may use a compass,
but try not to
Take your time


## 12

Try to trace each shape without lifting a pencil or tracing the same edge twice. For each picture state whether it is possible or not.


13
Foxy Tail put apples and oranges in three boxes and labeled these boxes. Certainly he placed each label onto a wrong box.

You are allowed to pick just one fruit from one box only to identify the content of each box.

Which box would you choose and why?


I choose the box\# $\qquad$ because $\qquad$

Who is the fastest: a deer, a fox, a snail, a turtle, and a pig? $\qquad$
The turtle is faster than the fox
The pig is slower than the snail
The snail is faster than the deer
slow fast

Is the dear faster than the fox? $\qquad$

