## Homework for Lesson № 10

1 Shade the following Venn Diagrams:
$\boldsymbol{X} \cap \boldsymbol{W}$
$W \cup W$
$\boldsymbol{R} \cap T$
$R \cup T$


2 List the elements in the following sets:
$A=$ $\qquad$
$B=$ $\qquad$
$\boldsymbol{A} \cap \boldsymbol{B}=$ $\qquad$
$\boldsymbol{A} \cup \boldsymbol{B}=$ $\qquad$


3 Look at the diagram of the students' music skills: How many students play guitar?

How many students sing?

How many students both play guitar AND sing

How many students both play guitar OR sing $\qquad$
$\qquad$
$\qquad$


How many students play guitar only?

How many students sing only?

4 Solve the following word problems. Draw diagrams to help you if you want.
A. A gardner can prune 63 fruit trees in 9 hours. How many trees can the Gardner prune in 5 hours?

B. There are 5 cucumbers in each of $\boldsymbol{s}$ bowls. There are 3 tomatoes on each of $w$ plates. How many vegetables are there in total?
$\qquad$
$\qquad$
C. Annie jogs 35 km per week. Every week day she joggs 4 km . On Saturday she joggs 10 km . How many kilometers does she jog on Sunday?

D. 9 identical boxes contain 36 cookies. Foxy Tail took won these boxes. How many cookies did he take?


5 In your notebook solve the following equations and check you answers. Once they are correct copy them here. Make appropriate drawings if need ones.
$y \times 9=63$
$z-9=4$
$7+x=49$
$49 \div w=7$
$y=$ $\qquad$
$\mathbf{z}=$ $\qquad$

$$
x=
$$

$w=$ $\qquad$


7 The Cat Island Senate allocated 92 cat silver coins to build an anti-mice fence for their cheese factory. The fence will be made out of sections. Each section costs 4 cat silver coins.

How many sections can the Senate afford?


How many coins will be left over, if any? $\qquad$

8 * The Cat Island Senate also allocated 92 cat silver coins to build an anti-mice fence for their strawberry beds. Each bed has to be protected around all of its perimeter. The size
 of each bed is given on the picture.

How many fence sections are needed to protect each bed?

How many beds can be fenced, given the

$\qquad$ budget?

9 * The cats have also a 25 by 60 meters orchard. How many fence sections are needed to fence it around if each section is 6 m long?


Any street has an odd side and an even side.

## 10

What are the numbers of three adjacent houses on a street if their total is 21 ?

$\qquad$

What are the numbers of three adjacent houses on a street if their total is 42 ?

11 Analyze and solve the equations


Determine the kinds of angles on the drawing:
$\angle N S T$ is $\qquad$

$\angle A B C$ is $\qquad$
B

$\angle P Q R$ is $\qquad$
$P{ }^{P} \begin{array}{ll} & R \\ Q & \end{array}$
$\angle E F L$ is $\qquad$


13 In each diagram, shade $\boldsymbol{A} \cup \boldsymbol{B}$.


14
In each diagram, shade $\boldsymbol{A} \cap \boldsymbol{B}$.


15
Connect the points to obtain ...
a). ... a five-point star

b). a seven-point star


16
Hamsters are very popular pets on the Cat Island. In one of the best Gentlecats Clubs of Cat Island four Gentlecats were discussing their pets.

Mr. Red: Can you guess what color is my hamster?

Mr. Fluffy: I am guessing it's not white.

Mr. White: It is either beige or red.
Mr. Short Tail: I know it is beige.


Mr. Red: At least one of you is right AND at least one of you is wrong.

Can you help them answer Mr. Reds question?

If the hamster is ...

|  | $\ldots \mathrm{W}$ | $\ldots B$ | $\ldots R$ |
| :--- | :--- | :--- | :--- |
| Mr. FI. |  |  |  |
| Mr. W. |  |  |  |
| Mr. ST. |  | $\ddots$ |  |

