## Homework 2

## Problem 1

Draw the new shapes according to the rules:
a) Change only the color. b) Change only the shape.


Continue the pattern.


## Problem 2

Please continue the pattern using the same colors.

|  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |

## Problem 3

Solve the problems by adding and subtracting $\mathbf{1}$ to the number on the trains. Write your answers on the wagons.


Problem 4 Watch each single step on the number line as you do addition and subtraction operations. Fill out the blank boxes.

$$
5-\square=\square
$$



$$
1+4=\square
$$



$$
2+\square=\square
$$



Add or subtract using the number lines.

$$
\begin{aligned}
& 2+2=\square \quad 5+1=\square \quad 3-2=\square \quad 4-2=\square \\
& 3+3=\square \quad 4+2=\square \quad 2+3=\square \quad 6-1=\square
\end{aligned}
$$

## Problem 5

Using a yellow pencil, color in all of the fish that are swimming to the right, count them, and record that number with the same color pencil. Using a green pencil, color in the fish that are swimming to the left and record that number in green. Compare which colors of the fish there are more or less of.


## Problem 6 Draw the objects smaller and bigger according to the pattern.



## Problem 7

Color in the beads, but keep in mind that both boys have to have the same set of identical beads.


## Problem 8

Geometry. Study Circles. Notice that circles don't have angles! Notice different sizes. Think of what resembles the shape of a circle. Trace and color all circles.


## Homework 4

Problem 1 Color according to the pattern. (Pay attention that the color stays the same when the shape changes.)


Problem 2 Connect the shapes with their "symbol".
a)

b)

c) Make all the pictures look like the first one:


## Problem 3

a) Put the correct sign in the blue boxes.

b) Draw some shapes in the empty boxes according to the rule.

c) Put some shapes in the empty boxes according to the rule.

d) Group by:


Problem 4 OVAL. Which pictures resemble an oval? Color. Draw your own examples.


Color ovals in blue and circles in red.


Problem 5 What shape is missing in each row? Finish the pattern.


## Problem 6

Draw the shapes that fit the description.
Large shapes' symbol is , small shapes' symbol is $Y$


## Problem 7

How many triangles can you find in each pine tree? Can you draw a pine tree that has 4 triangles?


Problem 8 Dear Parents! We are using a number line to solve the number sentences below. It is still hard for your children's eyes to jump from a number line to a problem. Please help your child as follows: As your child places a pencil on the first number from the problem's question, dictate the further steps of the problem. Remind your child that "+" is moving forward and "-" is backward. Thanks!

$$
\begin{array}{ll}
4-3+1+2=\square & 5-3-1+4=\square \\
1+2+2-3=\square & 1+3-2-1=\square
\end{array}
$$



$$
\begin{array}{ll}
1+2+2-4=\square & 4+1-2+1=\square \\
2-1+3-2=\square & 5-1-3+4=\square
\end{array}
$$



## Problem 9

Fill in the empty "windows" with numbers. The sum of the numbers in each row should be equal to the number on the roof.


## Homework 6

## Problem 1

Triangles. Triangles have 3 angles and 3 sides. Trace \& color.


Count the number of angles for the shapes and write the number next to each shape.


## Problem 2

There are different ways to add 3 . Match each number line with the correct number sentence. Write the solution in the blue boxes. Would the result be different from how you did it?


Write your own number sentences based on the pictures.


## Problem 3

Finish the pattern. Chose the right answer out of 4 given.


## Problem 4

Color each traffic light using three colors. Make sure no traffic light looks the same.


## Problem 5

Solve the problems. Draw your answers in the empty boxes. Then create your own problem and solve.


Find mistakes and correct them.


Problem 6 What has been changed? (use words "shape, size, color").


Change color and shape:


## Problem 7

Are there more bunnies or animals in the forest? Why? $\qquad$
Are there more cups than kitchenware in the kitchen? Why? $\qquad$
Are there more spectators or people in the theater? Why? $\qquad$
Are there more countries or towns? Why? $\qquad$
Problem 8 Add or subtract using the number line.


## 



Problem 9 Help the bunny get to his carrot.


## Homework 8

## Problem 1

Color the objects that remind you of a triangle.


Color the triangles according to the color scheme:


Problem 2 Make all the pictures look like the first one.


## Problem 3

Change the shape:


Change the color:


## Problem 4

Put " + " or "-" sign into the blue boxes to get a proper result.


## Problem 5

- Color the tallest tower yellow.
- Color the shortest brown.
- Color the second tallest blue.
- Color the second shortest red.

$\pi$

Problem 6 Guess according to what rules the shapes were grouped. Write the math sentences according to the grouping rules. Fill out the missing letters in the empty boxes.
(HINT: group by shape, color, size)
a) $\mathrm{S}=$ shape, $\mathrm{T}=$ triangle, $\mathrm{R}=$ rectangle
в) $R=$ red, $G=$ green, $S=$ shape
c) $B=$ big, $M=$ small, $S=$ shape


Problem 7 Draw the objects according to the preposition rule.


## Problem 8

There is a haunted mansion by the ocean. No one know who lives there. The only thing we know is that all of the rooms are occupied and all of the rooms have only one window.

## Can you try to draw a portrait of one of the tenants there knowing that:

There is an old lady living with three cats on the $1^{\text {st }}$ floor.
There is a lonely Princess and an Ice cream truck driver with his dog named Popsicle living on the $2^{\text {nd }}$ floor.

There are as many tenants living on the $3^{\text {rd }}$ floor as there are on the $1^{\text {st }}$ and $2^{\text {nd }}$ floor altogether.

There are 2 people less living on the $4^{\text {th }}$ floor than on the $3^{\text {rd }}$ one.
There is an Astronomer with his parrot living on the loft of this mansion.
Can you try to guess how many people are living there? $\qquad$

Loft $\qquad$
$4^{\text {th }}$ $\qquad$
$3^{\text {rd }}$ $\qquad$
$2^{\text {nd }}$ $\qquad$
$1^{\text {st }}$ $\qquad$


Problem 9 Solve the subtraction problems and write your answers inside the squares.


Problem 10 In how many ways can you divide a sheet of paper by using only 3 straight lines? Draw your answers below.


## Problem 11

Solve the problems using the number line. It will be easier for your child if an adult can dictate the problem while a child will follow it with his/her finger placed on the number line.
$8-4-2+3-1+2-3-1=$

$5-1+2-3-1+4-2-1=$

$7-5+3-3+1-2+4-3=$


Problem 12 Ask your child to describe the position of each toy at the top frame of the page.
Then ask him/her to draw the shapes inside the empty frame at the bottom (dictation is important for following directions and developing listening skills).
Draw a circle in the center of the frame. Then draw a square in the top right corner, a rectangle in the bottom left corner of the frame. Now draw a diamond in the top left corner and a triangle in the bottom right corner of the picture frame. You are amazing! Congratulations!


## Homework 10

Problem 1 Square is 4-sided flat shape with straight sides where:

- all sides have equal length
- and four right angle

It is also a Quadrilateral and a Regular Polygon.
How many squares do you see? Write your answer. $\qquad$


Color in the large squares yellow, small squares- red, large circles- green and small circles blue. Now you have a beautiful patterned quilt.


Problem 2 Create an addition table, and then fill in the numbers inside each car. The rule is the same as for the houses we were working on for a while. The sum of two numbers in each column has to be equal to the number inside the green square of the car. There is a mistake somewhere. Earn a bonus point by finding this mistake!


## Problem 3

Learn to measure in inches using a ruler. How long is a crayon $\qquad$ and a pencil $\qquad$ ?


Problem 4 Add dots to each domino block in such a way that it makes 7.
Record the problem and solution.


Problem 5 Guess how the bugs should look inside each empty square. Draw the missing picture by following the pattern.


## Problem 6

Count and decode the word. In the empty boxes write letters that correspond to the numbers.


Problem 7 Draw a small person and a big pine tree.


This is a Pine Tree

This is ME

Problem 8 Color in the rectangle according to the pattern rule.


Finish drawing the pattern. Color in all the small shapes green and all the big shapes yellow.


What does not belong in each row? Cross out those objects.


## Problem 9

Each tower should have 7 knights in it. Help place the numbers accordingly in each window in such a way that the sum of those two numbers is equal to 7 .


## Homework 12

Problem 1 Add or subtract using the number line.

$$
\begin{array}{llll}
5-1= & 7-2= & 8+2= & 10-4= \\
4+2= & 3+3= & 6-3= & 8-3= \\
3-1-1+2-1+1-2+1= \\
\\
\rightarrow 0 & 1 & 2 & 3 \\
0 & 4 & 5 & 6
\end{array}
$$

Find the pattern and finish the drawing.


Problem 2 Group the geometric figures by shape. Fill out the blank boxes.


Problem 3 Add more beads to make 6. Write the number of added beads in the boxes.


Problem 4 Color in the ribbons of the same length, the same color.


Problem 5 Finish filling in the empty boxes.


Problem 6 Color in the mosaic tiles the same colors as in the picture.


## Problem 7

Draw the yellow triangle in the top left corner. Draw the blue square in the bottom right corner. Draw the green rectangle in the top right corner and the orange oval in the bottom left corner. Finish off by drawing the red circle in the middle.

Problem 8 Connect each picture with its number expression.


Problem 9 Add or subtract. Can you guess what the message is?


Problem 10 Fill in the empty "windows" with numbers or dots. The sum of the numbers in each row should be equal to the number or number of the dots on the roof.


Look at the first example and find out the numbers in the empty circles.


Problem 11 Continue each pattern. Draw the shapes that are missing in the traincar.


## Problem 12

Anna, Julian, Kelly took out all of the stuff from their pockets. Anna has something that Julian and Kelly don't have. Kelly and Anna have something that Julian doesn't have. Find out which pockets belong to which girl. Connect each girl with her pocket.


## Homework 14

Problem 1 Add or subtract using the number line.

$$
\begin{aligned}
& 8-1=\quad 7-3=\quad 10-4= \\
& 6+2=\quad 4+4=\quad 9-3=\quad 8-3=
\end{aligned}
$$

Fill out the blank boxes.

$$
\begin{array}{lll}
3-\square=1 & 4-\square=2 & \square-3=1 \\
\square+2=3 & \square+2=4 & 1+\square=4
\end{array}
$$

## Problem 2

Look at the pictures, fill out the blank boxes (draw) according to the number operation, and solve it.


Problem 3 Continue each pattern.


Look at the picture, find regularities, and finish the pattern.


## Problem 4

Mom poured milk, juice, water into three cups. Milk is in the blue cup, water is in the cup between milk and juice. Find out what cup contains which liquid. Which cup is empty? Mark all the cups.


Problem 5 Create number expressions based on the picture. Record them in the boxes under each picture and don't forget to write the answer.


Problem 6 Continue the pattern.


Problem 7 Make the drawings look exactly the same. Complete.


## Problem 8

Help the designer draw horizontal lines on the shirt, then draw the vertical lines on the shorts. Then draw slanted lines (diagonal) on the bag.


## Problem 9

This is a ray. Ray has a starting point but does not have an ending point.

Trace all of the rays in red.


Problem 10 Turn these open shapes in to closed ones.


Connect the dots in the pictures to make them into closed shapes.


Problem 11 Challenge: Pair up the numbers that can add up to 8 .


| 2 | 6 | 3 | 5 | 0 | 6 | 4 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 4 | 4 | 8 | 5 | 2 | 6 | 3 |
| 1 | 7 | 8 | 0 | 0 | 8 | 7 | 2 |

## Problem 12

Color in the beads following the pattern: the green one follows the red one. There are yellow and brown beads in between the blue and the green beads. The brown bead is in front of the blue one and the red bead follows the blue one.
a)

b)


## Problem 13

Make it true. Fill out the empty boxes.
$\square<14$
$\square>16$
$13=\square$
$\square<11$

