## Homework 17.

Problem 1. Count the number of shapes in each box and compare. Draw shapes in the last two boxes according to the numbers below. Compare.


Problem 2. Solve the problems. Draw your answers in the empty boxes. Then create your own problem and solve.
a)

B)

c)


$$
5+1=\square
$$



$$
2+3+1=\square
$$


$6-3-2=\square$

Problem 3 The figures (F) were grouped according to their properties (size, color, and shape). Finish adding and subtracting according to the grouping rules.
a)


$$
\begin{array}{rlrl}
\mathrm{B}+\mathrm{S} & =\mathrm{F} & 2+4 & =6 \\
\square+\square & =\square & \square+\square & =\square \\
\mathrm{F}-\mathrm{B} & =\square & 6-2 & =\square \\
\square-\mathrm{S} & =\square & \square-\square & =\square
\end{array}
$$

B)

c)


$$
\begin{array}{ll}
5+1=\square & \square-\square=\square \\
\square+\square=F & F-\square=\square
\end{array}
$$

$$
3+\square=\square
$$

$$
\square-\square=\square
$$

Problem 4. Complete the table. Color in all of the trees green and houses red.

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

Problem 5. Take out 2 leaves from each branch and write the number sentence in the boxes above each branch.


Write numbers in a "one" order fill out empty boxes.


Problem 6. Let's play a "Number Beads Sequence" Game, where the rule for today is:
-if the number gets inside the square, its value increases by 4 ;
-if the number gets inside the triangle, its value decreases by 2 ;
-if the number gets inside the circle it stays the same


Problem 7. All the circles need to be filled with numbers. You may use the same number as long as you follow the rule: the arrow goes from the LARGER to the smaller number.


Problem 8. Color the cubes in a way so that it will be the red cube below the green cube and the yellow cube will be to the right of the green cube.


Color in the pictures if:
a) The red ball is in a box and the box is yellow inside and blue from the outside.
b) The red cube is in the box and the box is blue from the inside and yellow from the outside.
a)

б)


A box is blue from the outside and red from the inside.


Problem 1. Continue the chain.

$$
\begin{gathered}
\text { (2) } \xrightarrow{+4} \bigcirc \xrightarrow{-3} \bigcirc \xrightarrow{+1} \bigcirc \xrightarrow{-2} \bigcirc{ }^{+3} \longrightarrow \\
2+4-3+1-2+3=\square
\end{gathered}
$$

Find mistakes and correct them.

$$
\begin{array}{llll}
3+2=5 & 4-3=1 & 3<5 \\
6-4=2 & 3+3=6 & 4>6 \\
5+1=4 & 6-1=5 & 6>1
\end{array}
$$

Place "+" or "-".
$5 * 3 * 1=1$
$1 * 5 * 4=2$
$6 * 3 * 1=4$
$4 * 1 * 2=3$
$4 * 1 * 2=5$
$2 * 3 * 1=6$

Create a number sentences according to the pictures and solve.


Fill in the blank boxes.

$$
3+\square=8 \quad \square-2=6 \quad 8-\square=1
$$

Problem 2. Color each column using 3 colors: red, yellow and blue. Make sure no column looks the same.


Problem 3. Find out what mice each cat caught. Color the mice with the same color as the catcher cat.


Problem 4. Find and color the flowers according to the addresses listed at the bottom of the page.


Problem 5. Funny questions game.

1. Who has the longest neck if the ostrich's neck is shorter than a rhinoceros' and longer than a giraffe's?
2. A corridor is colder than a kitchen. The living room is warmer than a kitchen. What room is the coldest?
3. A book has less letters than a newspaper, but more than a workbook. What has the most letters?
4. A pencil is thicker than a pen and longer than a marker. A pencil is thinner than a marker and shorter than a pen. What is the thinnest object and what is the longest one?
5. Create your own problem.

Problem 6. Solve the problem and color according to the number rule.


## Homework 21.

Problem 1. Folow the examples to complete each task.


$$
1+4+2=\square
$$



$$
5-2+3=\square
$$



How were the shapes grouped?

Create a number expression under each picture, record.


Solve. What do you notice?

| $1+6=\square$ | $7-1=\square$ |
| :--- | :--- |
| $2+5=\square$ | $7-2=\square$ |
| $3+4=\square$ | $7-6=\square$ |
| $7-3-5=\square$ |  |
| $7-4=\square$ |  |



Problem 2. Continue the pattern.


## Problem 3.

Color one half of each shape. When is the dotted line not a symmetry line? Circle it.


Problem 4. Draw the missing picture by following the pattern.
A)

B)


Problem 5. Add. Fill out the blanks.


Place "+" or "_" signs instead of a star to make a true sentence.

$$
\begin{array}{lll}
6 * 1 * 3=4 & 5 * 2 * 1=2 & 4 * 1 * 2=7 \\
7 * 2 * 4=1 & 1 * 3 * 3=7 & 7 * 4 * 2=5
\end{array}
$$

Problem 6. There were 4 sailboats getting ready for a competition. The judge requested to color the sails 2 colors, but in such a way that sailboats are all different. Please help color.


## Problem 7.

Match each person's perspective to the positon of the cup that's in front of them.


Draw the object that is to the left of:

a) Pete
b). Alice

## Homework 23.

Problem 1. Using only the colors that you see in the pictures, color the neighboring areas. Make sure the neighboring areas are not colored in the same color.


Problem 2. Help solve the problem. Figure out what numbers need to be added in the blanks to get 10 on the boats.


## Problem 3.

This is a flower, but the artist didn't finish drawing it. Please help complete the drawing.
Remember, that at first, you need to connect two dots to see the magic symmetry line that splits this object into two equal half's.


Problem 4. Solve. Fill in the blank boxes.
2 $\square$ 45 $\square$
$\square$ 7 $\square$542 . 1$4+2=\square$

$$
8-1=\square
$$

$$
6-5=\square
$$

$$
4+3=\square
$$

$$
8-2=\square
$$

$$
7-5=\square
$$

$$
4+4=\square
$$

$$
8-3=\square
$$

$$
8-5=\square
$$



$$
2+3+3=\square
$$

$$
8-4+3=\square
$$

Problem 5. Place " + " or "-"signs instead of a star to get the correct result.

$$
\begin{array}{lll}
6 * 4 * 1=3 & 8 * 2 * 1=7 & 2 * 4 * 2=8 \\
2 * 1 * 5=8 & 3 * 5 * 4=4 & 7 * 1 * 6=2
\end{array}
$$

Problem 6. Finish the number expressions in the ovals and solve them. Hint: count red segments, if blue one's is already counted.


Solve and compare.

| $8 \square$ | $>,<,=$ |  |
| :--- | :--- | :--- |
| 8 | $3-2 \square 4$ | $8-4 \square 4+3$ |
| 4 | $5+3 \square 7$ | $7+1 \square 2+6$ |

Solve.


Problem 7. Every sign below has a number value from 1 to 9 . Can you figure out what number each sign represents? Solve.

$$
\text { (A) }=1
$$



Problem 8. Color in all triangles- yellow and all quadrilaterals - blue. (Quadrilaterals - 4 sides shape: quad means four, and lateral means side).


## Problem 9.

Triangular Fairy Tale.
Once upon a time there was a King named Triangular who lived in his Triangular Kingdom. He was very old and very ill. He was trying to find a cure for his disease but he could not find any doctors nearby who could save his life.

The only hope for cure was to find a doctor from far away. However that doctor could not get to Triangular Kingdom as he lived too far. He could treat the King Triangular on the distance using mail. He asked King to write him a letter and send him a triangular map of his Kingdom. The King was so weak that he could not hold a pencil in his hand and could not draw.

Please help King Triangular to draw his Triangular Kingdom. Please remember that everything in his Triangular Kingdom must be made of triangles.

Bring your triangular maps of the Triangular Kingdom to next class. (You should use rule to draw triangles.)

Homework 25.
Problem 1. Solve.


Solve. What do you notice?

$$
\begin{array}{ll}
9-1=\square & 3+3=\square
\end{array} \quad 4-4=\square
$$



Fill out the empty boxes.

$$
\begin{array}{rlrl}
5+\square & =9 & 7-\square & =3 \\
\square-3 & =6 & \square+2 & =7 \\
4+\square & =8 & 9-\square & =1
\end{array}
$$

Solve.

$$
\begin{aligned}
& 9-1-3+2=\square \\
& 8-4+3-6=\square \\
& 7+1-2-6=\square
\end{aligned} \quad\left\{\begin{array}{l}
5+0-3+4=\square \\
4+5-6+1=\square \\
9-0-7+2=\square
\end{array}\right.
$$



Problem 2. Find the pattern. Fill out the empty circles with correct numbers.


Problem 3. Solve and color according to directions below:

| $1+5$ | $0+8$ | $3+3$ |
| :--- | :--- | :--- |
| $9-1$ | $8+1$ | $2+6$ |
| $9-3$ | $5+3$ | $2+4$ |


| $9-0$ | $6-1$ | $5+4$ |
| :--- | :--- | :--- |
| $7-1$ | $7-2$ | $8-3$ |
| $4+4$ | $8-2$ | $2+7$ |


| $4+3$ | $5-0$ | $5+2$ |
| :--- | :--- | :--- |
| $1+4$ | $9+0$ | $9-4$ |
| $9-2$ | $3+2$ | $8-1$ |

$\square$ $8 \square 9$


Problem 4. Guess what is missing in the empty boxes. Draw in these objects and complete the pattern.


Problem 5. Create number expressions based on the number line and make the expressions work according to the compare signs.


Problem 6. Find the 3 D shapes projections. Connect.


Problem 7. Using only 3 colors, color the neighboring areas. Make sure the neighboring areas are not colored in the same color.
a)


Problem 8. Replace stars with numbers according to the compare signs.

$$
*<1 \quad *>8 \quad 3=* \quad *<7
$$

Problem 9. Create number sentences based on the pictures. Solve them.


Problem 10. From what numbers are these $(7,8,9)$ numbers composed? Write a few solutions.



## Homework 27.

Problem 1. Solve the problem according the diagram.


Solution: $\qquad$ (fl.)

Answer: $\qquad$ Flowers.


How many cups are in all?


Solution: $\qquad$ (c.)

Answer: Cups.

Problem 2. The pet shop had 7 kittens for sale. There were 3 white kittens and others were ginger. How many ginger kittens were in the store for sale?

Solution: (g.k.)

Answer: Ginger kittens.

Problem 3. Create problems based on the picture, complete each diagram and number expression.


There are 7 leaves. 2 of them
and 3


Solve the problem

$\square$

Create yours problems based on the diagrams and picture.
a)

б)


a) $5+4$
c) $3+6$
в) $9-5$
d) $9-3$
e) $4+1+2+2$

Problem 4. Add up to 9. Draw and write your solution.


Problem 5. Solve.

$$
\begin{array}{ll}
5+2-3+1-2=\square & 6-3+5-7+2= \\
9-2-1-5+2=\square & 8-4-2+0+1=
\end{array}
$$


$3+\square=7$
$\square-1=6$
$5+\square=5$
$\square+4=8$
$9-\square=2$
$3-\square=3$

Problem 6. Find out what shapes are missing. Draw.
a)

b)
$-\square=\frac{\square}{\square}$
c) $\square-+\quad=+$

Problem 7. Using only 4 colors, color the neighboring areas. Make sure the neighboring areas are not colored in the same color.


Using only 2 colors, color the neighboring areas. Make sure the neighboring areas are not colored in the same color.


Problem 8. Solve.


Problem 9. Find differences in the pictures.


Problem 10. Solve and compare.



Problem 11. Connect and find out who is hiding in the ocean.


