Math 4. Homework 4.

1. Find the numbers that are represented by the figures in the following problems.

A)

1. $\bigcirc + 12 = \triangle$
2. $\square : \triangle = 7$
3. $\triangle + 5 = \pentagon$
4. $4 \cdot \pentagon = 100$

B)

1. $\square : 9 = \square$
2. $\triangleright + \square = 84$
3. $3 \cdot \square = 162$
4. $90 - \bigcirc = \triangleright$

2. Compute using the most convenient way:

$23 \times 15 + 15 \times 77 =$

$79 \times 21 - 69 \times 21 =$

$340 \times 7 + 16 \times 70 =$

$250 \times 61 - 25 \times 390 =$

$67 \times 58 + 33 \times 58 =$

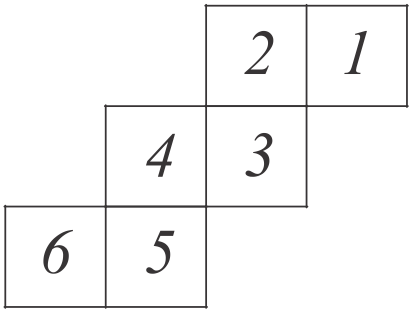
$55 \times 682 - 45 \times 682 =$

3. On the first shelf there are 5 more books than on the second shelf and 5 less books than on the third shelf. There are 105 books altogether. How many books are there on each shelf? (Write an equation to solve the problem.)

4. Open parenthesis and solve the equation

$$5\,(x + 25) = 10\,(x + 10)$$

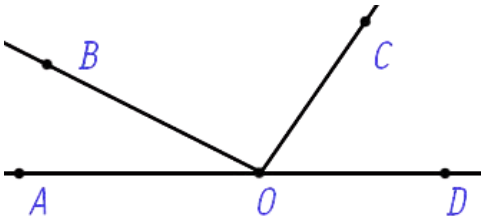
5. On a picture below is the surface of a cube. List three pairs of numbers on the opposite sides of this cube.



6. * 3 lines intersect at 1 point and form 6 angles. One is 44°, another is 38°. Can you find all other angles?

7. *Right angle is divided into 3 angles by 2 rays. One of this angles by 20° more than the other and by 20° less the third one. What are the measures of these 3 angles?

8. On the picture below ∠BOD = 152°, ∠COD = 55°, angle ∠AOD is a straight angle. Find the measures of all other angles on the picture.



9. Solve equations:

$a.\ x - 25 = 89$ $b.\ x : 12 = 16$ $c. 28 - 4x = 50 + 3x - 45$

10. Find all natural numbers such that upon division by 7 they give equal quotient and remainder.