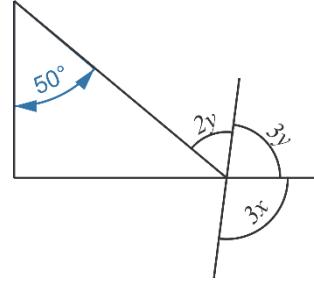
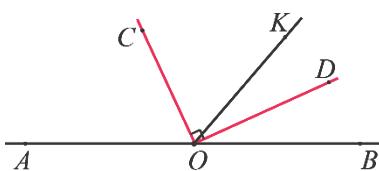


1. Triangle ABC is a right triangle. Measure of the angle B is  $50^\circ$ .  
Find  $x$ .



2. Angles  $\angle AOK$  and  $\angle KOB$  are supplementary. Ray [OC) is a bicector of angle  $\angle AOK$  and ray [OD) is a bicector of angle  $\angle KOB$ . Show that angle  $\angle COD$  is a right angle.



3. There are 3 points on line  $a$ , and point  $B$  lies outside the line. Point  $B$  is connected by segments to the points on the line. How many triangles are formed in the figure? How many triangles will there be if 4, 5, ...,  $n$  points ( $n$  is a natural number) are taken on the line?

4. Reduce the polynomial to its standard form:

a.  $4a^2b + 5b^2b + baa + 3aba$

b.  $5a^3 - 7ax^3 - 2ax^3 - a^3x - ax^3$

c.  $3ax^2 - 3a^2x + 2a^2x^2 - 7a^2x^2 - a^2x$

d.  $6n^3 - 8p^2n^3 + p^2n^2 + 12n^3p^2 + 2n^3$

5. For the letters M and N, select monomials such that the equality holds

$$(a + b + c) + (M - N + c) = 4a - 2b + 2c;$$

$$(7x - N) - (M + 2y) = 3x - 2y;$$

$$(M + N) - (2a - b) + (a - 4b) = 5a + 7b;$$

$$(a - M) - (N + 7b) - (2a + b) = -5a - 10b.$$

6. Solve the equation:

$$2 \cdot \left(0.3x - \frac{2}{9}\right) - \left(-1\frac{1}{9} + \frac{2}{3}x\right) = \frac{x}{5}$$

7. At which interest rate is it more profitable to deposit money in a bank for one year: 6% per year or 0.5% per month?

8. Multiply polynomials (hint: each term of one polynomial should be multiply by each term of the other polynomial):

a.  $(a + 1)(a + 1)(a + 1);$

c.  $(a + b + c)(a + 1)$

b.  $(a + b)(a - b)(a + b)$

d.  $(x + 1)(x^2 - x + 1)$