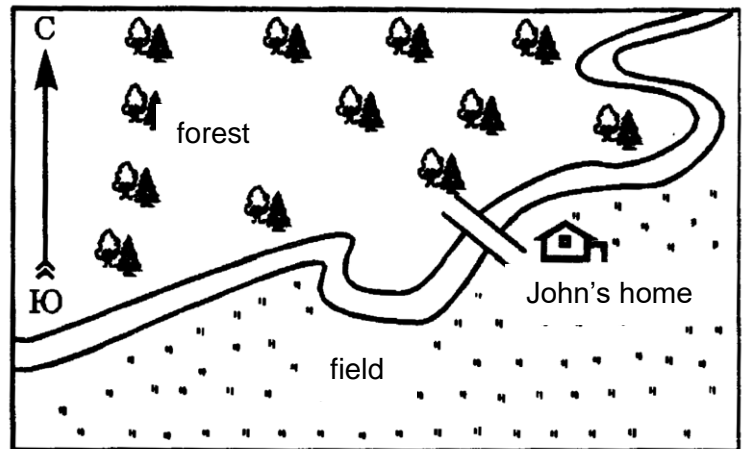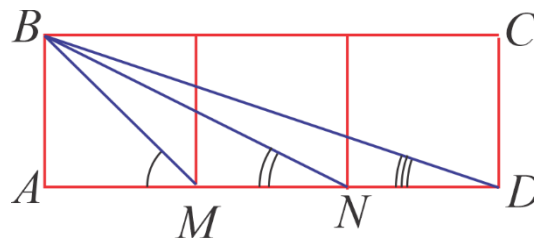1. John knows that he can walk in the field at a speed of 4 km/h and in the forest at a speed of 2 km/h. He has decided to mark on the map all places he can reach within 1 hour. Help him to do it! (The map scale is 1:100000, the river is narrow, he doesn't need time to cross it)

2. The rectangle ABCD is made from three squares. Find the sum of the angles

$$\angle BMA + \angle BNA + \angle BDA$$

3. Let $|a| = |b|$. In which case $a \neq b$?

4. In which case:
   a. If $a > b$, then $|a| > b$?
   b. If $a > b$, then $|a| < b$?

5. Compare numbers;
   a. $2.42424242\ldots$ and $-2.42424242\ldots$;
   b. $5.4444444\ldots$ and $5.5444444\ldots$
   c. 0.333333 and $\dfrac{1}{3}$;
   d. $-4.31313\ldots$ and $-4.31311311131311\ldots$
   e. 0 and $-10.\overline{4}$;
   f. $0.\overline{12}$ and $0.\overline{121}$
   g. $\dfrac{1}{9}$ and $0.\overline{1}$;
   h. $0.\overline{27}$ and $\dfrac{3}{10}$

6. There are two natural numbers, where one is twice the other. If the smaller number increases by 4 times and the greater number increases by 2 times, their sum will be 44. What are the numbers?

7. Write without parenthesis;

   a. $(x-1)(x+1)$;
   b. $(x-1)^2$;

8. Using the result from the previous problem, reduce the fraction:
$$\frac{x^2 - 2x + 1}{x^2 - 1}; \qquad x \neq 1, -1$$

9. Write without parenthesis and simplify:

a. $4x - \big(3x + (2x - 1)\big);$ b. $y - \big(2y - (3y - 4)\big);$ c. $z - \Big(2z + \big(3z - (4z + 5)\big)\Big).$