I afraid to forget the idea (very stupid!) of the solution of the following problem.

I There are n-points on the plane. For every 2 points there exist the third which is on the same line. Prove that all the points are on the same line.

The main idea of solution.

We can always choose coordinates (x, y) on the plane and the numeration of the points in the following way: If (x_i, y_i) are coordinates of the i-th point $(i = 1, \dots, n)$then

$$x_1 \leq x_2 \leq x_3 \leq \ldots \leq x_n, \quad y_1 \leq y_2 \leq y_3 \leq \ldots \leq y_n .$$

We consider the equivalent problem

II From the every point x_1 the "point" with constant velocity $v_i = y_i$ begins to move. All the intersections are not binar! (it corresponds that for every 2 points there exist the third one on the same line). Prove that all the lines intersect simultaneously!

This second formulation admits combinatoril reformulation. Every collision is the rearrangement of the points.

There are n symbols on the line– $a_1, \dots, a_n$. The rukles of the game are following:...

This third reformulation is solved by me.