

Dear Students and Parents, Welcome to Math 6a!

My name is **Andrei Antonenko**, and I will be your SchoolNova Math class teacher this year.

A little bit about me: I hold a PhD in Theoretical Linguistics and an MSc in Applied Mathematics from Stony Brook University and currently work as a Lecturer at the Department of Linguistics at Stony Brook University, as well as a data analyst for the University administration. I have been teaching at SchoolNova for the last 19 years.



Classwork and homework:

The handouts containing the assignments and the basic theory will be posted on Google Classroom. You may log into Google Classroom with your SchoolNova account: every student will be provided with one. As an extra layer for staying informed, anything posted in the classroom will automatically send a notification to each student's SchoolNova email - student email information will be always posted on your private account page on Schoolnova.org website.

I will assign weekly homework. They are **extremely important** for understanding the material: it is common that some new idea or method is presented to students as a series of homework problem. Thus, it is vital that the students do the homework. The homework should take about 1 to 2 hours. Note that each homework has problems of varying difficulty. It is not expected that each student can do all of them, so do not worry if your child cannot solve some problems. Make sure to solve homework assignment on separate paper, and not on the assignment sheet itself. Also, make sure to write your solutions and not just answers.

Questions and Help:

Students and parents are always welcome to reach out to me with questions and for extra help by email to antonenko@schoolnova.org or by leaving comments in Google Classroom under a particular assignment or topic. There is an option to keep the comments private. I will monitor both regularly.

Topics:

During this year we will study the following topics:

- Introduction to Logic and Set Theory
- Introduction to Combinatorics and Probability
- Algebra and Systems of Equations
- Coordinate Geometry
- Geometry and Ruler and Compass Constructions

At the beginning of the year we will review the previous material.

Some emphasis will be placed on teaching students to solve problems which, while they do require some knowledge of basic topics, are not straightforward exercises but require some creativity. Think of "puzzles" or "brain-teasers". It does not necessarily mean that such problems are more difficult than usual textbook exercises, but they definitely will be more interesting. We will solve problems working collectively in class; more problems will be given as homework exercises. Most of these problems will be tied to the topics listed above, but there will also be problems which are not directly related but are interesting enough to be discussed anyway.

We will also solve some interesting problems from math olympiads, such as Math Kangaroo.

Thank you for choosing the SchoolNova! I look forward to working with all of you.