Welcome to Math7a 2019-2020 at School Nova

Our plan is to first review some of what was previously studied (Math6), and then to learn about:

- vectors and operations with them (in coordinates)

- basic trigonometry (sin, cos, law of sines)

- combinatorics, Pascal triangle

- transformations of the plane: reflections, rotations and their compositions

- the quadratic equation, quadratic formula, Viète formula, parabola

- Fibonacci numbers

We will also solve various other interesting problems, have Math Battles, and look at some AMC8 and Math Kangaroo problems. And there won't be any grades: this is just a discovery journey, together. Our travel log will be a quad ruled notebook, and you will also need pencils and a ruler. Homework assignements will be handed out in class and posted on the school page, at `https://schoolnova.org/nova/homeworks`. Try to thoroughly spend an hour or two on it every week, even if you don't manage to do it all. Make sure you show your work when you write your solutions. Hand them to me the next class. Think of this like explaining the rules of a game, or some new idea how to win it to your teammates or friends ! You want them to understand them, to follow you, and to help you win ! It can even help you, if you become a bit lost.

Doing Math is like playing with Legos, or playing video games, or sports, or exploring beautiful mountains or lakes, or tinkering with screwdrivers, hammers or other tools, or doing magic like true wizards: equally passionating, rewarding and powerful ! Let's start digging around and have fun together !