

## Welcome Letter: Math 6c,

Welcome to your Math 6 class at School Nova - I hope that you are as excited as I am to start another year of learning the beauty of maths! We will continue adding more mathematical concepts rather by discovering them just rather than memorizing. We will keep deriving them till it sinks in by itself.

If you have any questions, I will be glad to answer them after the class, or you can always email me at oksana.ivashk@gmail.com

### *Class guidelines:*

Be respectful, participate, try your best. If you miss a class – check the class notes and the homework posted on the School Nova web page.

Parents are always welcome in class. Please, take a seat at the back.

### *Supplies:*

Bring a folder, a notebook, and a pencil or a pen. I will also recommend that you use quadrille paper, especially for graphs. You will also need a compass and a ruler.

### *Homework:*

Homework will be assigned every week; it complements our class work and provides a feedback of students' progress. Homework is not optional.

Please, work on all problems. Keep in mind that some problems may be more difficult than others. If you cannot solve a problem, you may wish to try again later. If you still cannot solve it, please do not worry and just submit your best attempt. Do not write your answers on the homework assignment printout page; write *neatly* on separate paper, show ***all your work***, staple the pages together, and do not forget to add your name and your class section on the top of the first page.

Parents, you are welcome to help if you wish, but please try to provide only hints and let your children work more independently.

### *Grades:*

There will be no grades for this class although I will give feedback on the homework!

The main topics which we will cover this year are (not in order):

- Basic logic (knights and knaves, logic operations)
- Set theory basics (basic operations and Venn diagrams)
- Linear equations continued. Simple inequalities.
- More powers:  $a^n a^m = a^{n+m}$ . Multiplication and division by powers of 10.
- Square roots. Rational and irrational numbers
- Arithmetic and Geometric Progressions
- Probability. Basic combinatorics: permutations
- Similarity; relation with areas and volumes
- Constructions with ruler and compass
- Coordinate plane and graphs of simple functions