

Preface to the English Edition

Dear readers, students, and parents!

This book was originally written and published in Russian, and I have no experience in teaching geometry in English-speaking countries where traditions are different (this refers to the general culture of teaching as well as to teaching geometry itself). The translator, the editors of the book, and the AMS did a lot to adapt the terminology and real-life examples to Western realities, and I am very obliged to all involved. However, please keep in mind that you may still occasionally see some awkward-looking things or references to Russian books (especially in the Afterword). I hope that this will not be a serious obstacle to English-speaking readers, but who knows. (If you read Russian, you can also look at the Russian original—it is freely available online!)

The English edition was initiated by Sergei Gelfand; the translation was prepared by Marie Brodsky and carefully edited by Maia Averett. Thank you all so much!

Good luck!

Alexander Shen
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Preface

Dear readers, students, and parents!¹

This book is a collection of over 750 problems in plane geometry suitable for middle and high school students. For the most part they are not complicated, although there are a few difficult ones. The problems include important theorems usually covered in a geometry course. Solving these problems, you will learn the central facts and problem-solving methods of plane geometry (or review them once more if you have already come across them in school).

The problems are divided into chapters by topic. At the beginning of each chapter, we briefly review the main definitions and facts that will be useful in solving problems in that chapter. The majority of problems come with solutions, but you will learn much more if you attempt to solve a problem (or at least properly familiarize yourself with its formulation) before looking at the solution. The solution will then be easier to read and understand.

This book also has some problems for you to solve independently. These often have simple hints.

We wish you luck!

¹A discussion, intended for math teachers, of the principles used in selecting problems for this book is given in the afterword.