1. Record Nr. UNINA9910482959403321 Autore Garaschuk Kseniya Titolo Grade Five Competition from the Leningrad Mathematical Olympiad: 1979–1992 / / by Kseniya Garaschuk, Andy Liu Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-52946-0 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (X, 168 p. 100 illus.) Problem Books in Mathematics, , 0941-3502 Collana 510 Disciplina Soggetti Mathematics Mathematics—Study and teaching Mathematics, general **Mathematics Education** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia - Preface -- Understand the Problem -- Make a Plan -- Carry Out the Nota di contenuto Plan -- Look Back -- Short Answers -- First Problem Index -- Second Problem Index. Sommario/riassunto This unique book presents mathematical competition problems primarily aimed at upper elementary school students, but are challenging for students at any age. These problems are drawn from the complete papers of the legendary Leningrad Mathematical Olympiads that were presented to the city's Grade Five students. The period covered is between 1979 – the earliest year for which relevant records could be retrieved – and 1992, when the former Soviet Union was dissolved. The respective chapters reflect the famous four-step approach to problem solving developed by the great Hungarian mathematics educator Gyorgy Pólya. In Chapter One, the Grade Five Competition problems from the Leningrad Mathematical Olympiads from 1979 to 1992 are presented in chronological order. In Chapter Two, the 83 problems are loosely divided into 26 sets of three or four related problems, and an example is provided for each one. Chapter Three provides full solutions to all problems, while Chapter Four offers

generalizations of the problems. This book can be used by any

mathematically advanced student at the upper elementary school level.

Teachers and organizers of outreach activities such as mathematical circles will also find this book useful. But the primary value of the book lies in the problems themselves, which were crafted by experts; therefore, anyone interested in problem solving will find this book a welcome addition to their library.