

1. Record Nr.	UNINA9910484188403321
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Titolo	Mathematical Stories I – Graphs, Games and Proofs : For Gifted Students in Primary School // by Susanne Schindler-Tschirner, Werner Schindler
Pubbl/distr/stampa	Wiesbaden : , : Springer Fachmedien Wiesbaden : , : Imprint : Springer, , 2021
ISBN	3-658-32733-2
Edizione	[1st ed. 2021.]
Descrizione fisica	1 online resource (IX, 61 p. 32 illus., 3 illus. in color.)
Collana	Springer essentials, , 2731-3115
Disciplina	510
Soggetti	Mathematics Mathematics - Study and teaching General Mathematics and Education Mathematics Education Ensenyament de la matemàtica Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	With the help of tried and tested, carefully elaborated learning units, the authors convey fundamental mathematical techniques in this essential, which are important far beyond primary school. In the present volume I, path problems and word puzzles are modeled and solved using undirected and directed graphs. Simple math games are systematically analyzed and the optimal strategies are determined. Students learn to gradually reduce difficult problems to simpler ones and to provide evidence in different contexts. The tasks encourage mathematical thinking, imagination and creativity. The detailed sample solutions are designed for non-mathematicians. This book is a translation of the original German 1st edition Mathematische Geschichten I – Graphen, Spiele und Beweise by Susanne Schindler-Tschirner and Werner Schindler, published by Springer Fachmedien Wiesbaden GmbH, part of Springer Nature in 2019. The translation was done with the help of artificial intelligence (machine translation by the service DeepL.com). A subsequent human revision was done primarily

in terms of content, so that the book will read stylistically differently from a conventional translation. Springer Nature works continuously to further the development of tools for the production of books and on the related technologies to support the authors. The content

Mathematical techniques and tasks Detailed sample solutions The target groups Leaders of study groups as well as support courses for mathematically gifted students in grades 3 and 4, teachers who practice differentiated mathematics lessons Committed parents for extracurricular support

The authors Susanne Schindler-Tschirner is a philologist and after studying to become a teacher, she was a project manager at a science publisher. She works in the field of student development and is the author of didactic-oriented publications. Werner Schindler has a PhD in mathematics. He is head of section at the Federal Office for Information Security (BSI) and an adjunct professor in the mathematics department at TU Darmstadt.
