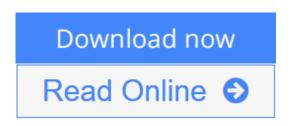# 104 Number Theory Problems: From the Training of the USA IMO Team

By Titu Andreescu, Dorin Andrica, Zuming Feng

104 Number Theory Problems: From the Training of the USA IMO Team
By Titu Andreescu, Dorin Andrica, Zuming Feng

This challenging problem book by renowned US Olympiad coaches, mathematics teachers, and researchers develops a multitude of problem-solving skills needed to excel in mathematical contests and in mathematical research in number theory. Offering inspiration and intellectual delight, the problems throughout the book encourage students to express their ideas in writing to explain how they conceive problems, what conjectures they make, and what conclusions they reach. Applying specific techniques and strategies, readers will acquire a solid understanding of the fundamental concepts and ideas of number theory.

⬇ **Download** 104 Number Theory Problems: From the Training of t ...pdf

📄 **Read Online** 104 Number Theory Problems: From the Training of ...pdf

104 Number Theory Problems: From the Training of the USA IMO Team

By Titu Andreescu, Dorin Andrica, Zuming Feng

104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng

This challenging problem book by renowned US Olympiad coaches, mathematics teachers, and researchers develops a multitude of problem-solving skills needed to excel in mathematical contests and in mathematical research in number theory. Offering inspiration and intellectual delight, the problems throughout the book encourage students to express their ideas in writing to explain how they conceive problems, what conjectures they make, and what conclusions they reach. Applying specific techniques and strategies, readers will acquire a solid understanding of the fundamental concepts and ideas of number theory.

104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng Bibliography

- Sales Rank: #180034 in Books
- Brand: Brand: Birkhäuser
- Published on: 2010-06-02
- Original language: English
- Number of items: 1
- Dimensions: 9.25" h x .50" w x 6.10" l, .84 pounds
- Binding: Paperback
- 204 pages

[**Download** 104 Number Theory Problems: From the Training of t ...pdf](#)

[**Read Online** 104 Number Theory Problems: From the Training of ...pdf](#)

Download and Read Free Online 104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng

Editorial Review

Review

From the reviews:

"In short, this book is a very valuable tool for any student/coach interested in preparing for mathematics competitions, especially the International Mathematical Olympiad. College students participating in the Putnam competition might also find quite a few interesting problems. Moreover, any course in number theory could be supplemented with this book and could use some of the references included. Even research mathematicians working in number theory will find this book of value in their pursuits." -MAA Online

"The names of the authors sound familiar for teachers of mathematics and mathematicians who use books of these types … . I am sure about the success of this book. It is going to be a 'bestseller'. It can be useful for high school students preparing for contests, and for teachers helping them all over the world. I am also reliant on being able to insert some excellent problems of the book into the syllabus of number theory courses at university level." (József Kosztolányi, Acta Scientiarum Mathematicarum, Vol. 73, 2007)

"The book starts with a gentle introduction to number theory. It serves for a training of the participants of the U. S. International Mathematical Olympiad. … The 104 problems are carefully selected. … The solutions are also carefully presented." (J. Schoissengeier, Monatshefte für Mathematik, Vol. 156 (3), March, 2009)

From the Back Cover

This challenging problem book by renowned US Olympiad coaches, mathematics teachers, and researchers develops a multitude of problem-solving skills needed to excel in mathematical contests and research in number theory. Offering inspiration and intellectual delight, the problems throughout the book encourage students to express their ideas, conjectures, and conclusions in writing. Applying specific techniques and strategies, readers will acquire a solid understanding of the fundamental concepts and ideas of number theory.

Key features:

* Contains problems developed for various mathematical contests, including the International Mathematical Olympiad (IMO)

* Builds a bridge between ordinary high school examples and exercises in number theory and more sophisticated, intricate and abstract concepts and problems

* Begins by familiarizing students with typical examples that illustrate central themes, followed by numerous carefully selected problems and extensive discussions of their solutions

* Combines unconventional and essay-type examples, exercises and problems, many presented in an original fashion

* Engages students in creative thinking and stimulates them to express their comprehension and mastery of

the material beyond the classroom

104 Number Theory Problems is a valuable resource for advanced high school students, undergraduates, instructors, and mathematics coaches preparing to participate in mathematical contests and those contemplating future research in number theory and its related areas.

About the Author

Titu Andreescu received his Ph.D. from the West University of Timisoara, Romania. The topic of his dissertation was "Research on Diophantine Analysis and Applications." Professor Andreescu currently teaches at The University of Texas at Dallas. He is past chairman of the USA Mathematical Olympiad, served as director of the MAA American Mathematics Competitions (1998–2003), coach of the USA International Mathematical Olympiad Team (IMO) for 10 years (1993–2002), director of the Mathematical Olympiad Summer Program (1995–2002), and leader of the USA IMO Team (1995–2002). In 2002 Titu was elected member of the IMO Advisory Board, the governing body of the world's most prestigious mathematics competition. Titu co-founded in 2006 and continues as director of the AwesomeMath Summer Program (AMSP). He received the Edyth May Sliffe Award for Distinguished High School Mathematics Teaching from the MAA in 1994 and a "Certificate of Appreciation" from the president of the MAA in 1995 for his outstanding service as coach of the Mathematical Olympiad Summer Program in preparing the US team for its perfect performance in Hong Kong at the 1994 IMO. Titu's contributions to numerous textbooks and problem books are recognized worldwide.

Dorin Andrica received his Ph.D. in 1992 from "Babes-Bolyai" University in Cluj-Napoca, Romania; his thesis treated critical points and applications to the geometry of differentiable submanifolds. Professor Andrica has been chairman of the Department of Geometry at "Babes-Bolyai" since 1995. He has written and contributed to numerous mathematics textbooks, problem books, articles and scientific papers at various levels. He is an invited lecturer at university conferences around the world: Austria, Bulgaria, Czech Republic, Egypt, France, Germany, Greece, Italy, the Netherlands, Portugal, Serbia, Turkey, and the USA. Dorin is a member of the Romanian Committee for the Mathematics Olympiad and is a member on the editorial boards of several international journals. Also, he is well known for his conjecture about consecutive primes called "Andrica's Conjecture." He has been a regular faculty member at the Canada–USA Mathcamps between 2001–2005 and at the AwesomeMath Summer Program (AMSP) since 2006.

Zuming Feng received his Ph.D. from Johns Hopkins University with emphasis on Algebraic Number Theory and Elliptic Curves. He teaches at Phillips Exeter Academy. Zuming also served as a coach of the USA IMO team (1997-2006), was the deputy leader of the USA IMO Team (2000-2002), and an assistant director of the USA Mathematical Olympiad Summer Program (1999-2002). He has been a member of the USA Mathematical Olympiad Committee since 1999, and has been the leader of the USA IMO team and the academic director of the USA Mathematical Olympiad Summer Program since 2003. Zuming is also co-founder and academic director of the AwesomeMath Summer Program (AMSP) since 2006. He received the Edyth May Sliffe Award for Distinguished High School Mathematics Teaching from the MAA in 1996 and 2002.

Users Review

From reader reviews:

Detra Satterwhite:

Hey guys, do you wishes to finds a new book to see? May be the book with the concept 104 Number Theory Problems: From the Training of the USA IMO Team suitable to you? Often the book was written by popular writer in this era. Often the book untitled 104 Number Theory Problems: From the Training of the USA IMO Teamis the one of several books this everyone read now. This kind of book was inspired lots of people in the world. When you read this reserve you will enter the new dimension that you ever know ahead of. The author explained their idea in the simple way, thus all of people can easily to comprehend the core of this book. This book will give you a lots of information about this world now. To help you see the represented of the world with this book.

Phillip Barker:

The guide with title 104 Number Theory Problems: From the Training of the USA IMO Team has lot of information that you can study it. You can get a lot of profit after read this book. This specific book exist new expertise the information that exist in this publication represented the condition of the world today. That is important to yo7u to learn how the improvement of the world. This book will bring you within new era of the glowbal growth. You can read the e-book on your smart phone, so you can read the idea anywhere you want.

Jeremy Windham:

Beside this specific 104 Number Theory Problems: From the Training of the USA IMO Team in your phone, it may give you a way to get more close to the new knowledge or information. The information and the knowledge you may got here is fresh in the oven so don't always be worry if you feel like an older people live in narrow commune. It is good thing to have 104 Number Theory Problems: From the Training of the USA IMO Team because this book offers to you personally readable information. Do you oftentimes have book but you would not get what it's interesting features of. Oh come on, that wil happen if you have this in your hand. The Enjoyable set up here cannot be questionable, just like treasuring beautiful island. Techniques you still want to miss this? Find this book as well as read it from right now!

Keri Lo:

On this era which is the greater person or who has ability to do something more are more treasured than other. Do you want to become one of it? It is just simple method to have that. What you have to do is just spending your time little but quite enough to possess a look at some books. One of several books in the top checklist in your reading list is definitely 104 Number Theory Problems: From the Training of the USA IMO Team. This book which is qualified as The Hungry Hillsides can get you closer in becoming precious person. By looking right up and review this publication you can get many advantages.

Download and Read Online 104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng #4XSB03CGPLM

Read 104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng for online ebook

104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read 104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng books to read online.

Online 104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng ebook PDF download

104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng Doc

104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng Mobipocket

104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng EPub

4XSB03CGPLM: 104 Number Theory Problems: From the Training of the USA IMO Team By Titu Andreescu, Dorin Andrica, Zuming Feng