

2009 Amc 8 Solutions

Over 300 unusual problems, ranging from easy to difficult, involving equations and inequalities, Diophantine equations, number theory, quadratic equations, logarithms, more. Detailed solutions, as well as brief answers, for all problems are provided.

This introductory textbook takes a problem-solving approach to number theory, situating each concept within the framework of an example or a problem for solving. Starting with the essentials, the text covers divisibility, unique factorization, modular arithmetic and the Chinese Remainder Theorem, Diophantine equations, binomial coefficients, Fermat and Mersenne primes and other special numbers, and special sequences. Included are sections on mathematical induction and the pigeonhole principle, as well as a discussion of other number systems. By emphasizing examples and applications the authors motivate and engage readers. This radical approach to complex analysis replaces the standard calculational arguments with new geometric ones. Using several hundred diagrams this is a new visual approach to the topic. Many mathematicians have been drawn to mathematics through their experience with math circles: extracurricular programs exposing teenage students to advanced mathematical topics and a myriad of problem solving techniques and inspiring in them a lifelong love for mathematics. Founded in 1998, the Berkeley Math Circle (BMC) is a pioneering model of a U.S. math circle, aspiring to prepare our best young minds for their future roles as mathematics leaders. Over the last decade, 50 instructors--from university professors to high school teachers to business tycoons--have shared their passion for mathematics by delivering more than 320 BMC sessions full of mathematical challenges and wonders. Based on a dozen of these sessions, this book encompasses a wide variety of enticing mathematical topics: from inversion in the plane to circle geometry; from combinatorics to Rubik's cube and abstract algebra; from number theory to mass point theory; from complex numbers to game theory via invariants and monovariants. The treatments of these subjects encompass every significant method of proof and emphasize ways of thinking and reasoning via 100 problem solving techniques. Also featured are 300 problems, ranging from beginner to intermediate level, with occasional peaks of advanced problems and even some open questions. The book presents possible paths to studying mathematics and inevitably falling in love with it, via teaching two important skills: thinking creatively while still "obeying the rules," and making connections between problems, ideas, and theories. The book encourages you to apply the newly acquired knowledge to problems and guides you along the way, but rarely gives you ready answers. "Learning from our own mistakes" often occurs through discussions of non-proofs and common problem solving pitfalls. The reader has to commit to mastering the new theories and techniques by "getting your hands dirty" with the problems, going back and reviewing necessary problem solving techniques and theory, and persistently moving forward in the book. The mathematical world is huge: you'll never know everything, but you'll learn where to find things, how to connect and use them. The rewards will be substantial. In the interest of fostering a greater awareness and appreciation of mathematics and its connections to other disciplines and everyday life, MSRI and the AMS are publishing books in the Mathematical Circles Library series as a service to young people, their parents and teachers, and the mathematics profession.

Euclidean Geometry in Mathematical Olympiads

Natural Language Processing with Python

Solutions and Application

A Logical Introduction to Proof
The Art of Problem Solving, Volume 1
Mathematical Circles

Education is an admirable thing, but it is well to remember from time to time that nothing worth knowing can be taught. Oscar Wilde, "The Critic as Artist," 1890. Analysis is a profound subject; it is neither easy to understand nor summarize. However, Real Analysis can be discovered by solving problems. This book aims to give independent students the opportunity to discover Real Analysis by themselves through problem solving. The depth and complexity of the theory of Analysis can be appreciated by taking a glimpse at its developmental history. Although Analysis was conceived in the 17th century during the Scientific Revolution, it has taken nearly two hundred years to establish its theoretical basis. Kepler, Galileo, Descartes, Fermat, Newton and Leibniz were among those who contributed to its genesis. Deep conceptual changes in Analysis were brought about in the 19th century by Cauchy and Weierstrass. Furthermore, modern concepts such as open and closed sets were introduced in the 1900s. Today nearly every undergraduate mathematics program requires at least one semester of Real Analysis. Often, students consider this course to be the most challenging or even intimidating of all their mathematics major requirements. The primary goal of this book is to alleviate those concerns by systematically solving the problems related to the core concepts of most analysis courses. In doing so, we hope that learning analysis becomes less taxing and thereby more satisfying.

Written for the gifted math student, the new math coach, the teacher in search of problems and materials to challenge exceptional students, or anyone else interested in advanced mathematical problems. Competition Math contains over 700 examples and problems in the areas of Algebra, Counting, Probability, Number Theory, and Geometry. Examples and full solutions present clear concepts and provide helpful tips and tricks. "I wish I had a book like this when I started my competition career." Four-Time National Champion MATHCOUNTS coach Jeff Boyd "This book is full of juicy questions and ideas that will enable the reader to excel in MATHCOUNTS and AMC competitions. I recommend it to any students who aspire to be great problem solvers." Former AHSME Committee Chairman Harold Reiter

Appealing to everyone from college-level majors to independent learners, The Art and Craft of Problem Solving, 3rd Edition introduces a problem-solving approach to mathematics, as opposed to the traditional exercises approach. The goal of The Art and Craft of Problem Solving is to develop strong problem solving skills, which it achieves by encouraging students to do math rather than just study it. Paul Zeitz draws upon his experience as a coach for the international mathematics Olympiad to give students an

enhanced sense of mathematics and the ability to investigate and solve problems.

According to the great mathematician Paul Erdős, God maintains perfect mathematical proofs in The Book. This book presents the authors candidates for such "perfect proofs," those which contain brilliant ideas, clever connections, and wonderful observations, bringing new insight and surprising perspectives to problems from number theory, geometry, analysis, combinatorics, and graph theory. As a result, this book will be fun reading for anyone with an interest in mathematics.

A Decade of the Berkeley Math Circle

Problems and Solutions

Mathematical Olympiad Challenges

Third Party Protection in Shipping

With Hints and Solutions

AR 71-9 12/28/2009 WARFIGHTING CAPABILITIES DETERMINATION , Survival Ebooks
Any high school student preparing for the American Mathematics Competitions should get their hands on a copy of this book! A major aspect of mathematical training and its benefit to society is the ability to use logic to solve problems. The American Mathematics Competitions (AMC) have been given for more than fifty years to millions of high school students. This book considers the basic ideas behind the solutions to the majority of these problems, and presents examples and exercises from past exams to illustrate the concepts. Anyone taking the AMC exams or helping students prepare for them will find many useful ideas here. But people generally interested in logical problem solving should also find the problems and their solutions interesting. This book will promote interest in mathematics by providing students with the tools to attack problems that occur on mathematical problem-solving exams, and specifically to level the playing field for those who do not have access to the enrichment programs that are common at the top academic high schools. The book can be used either for self-study or to give people who want to help students prepare for mathematics exams easy access to topic-oriented material and samples of problems based on that material. This is useful for teachers who want to hold special sessions for students, but it is equally valuable for parents who have children with mathematical interest and ability. As students' problem solving abilities improve, they will be able to comprehend more difficult concepts requiring greater mathematical ingenuity. They will be taking their first steps towards becoming math Olympians!

See also A SECOND STEP TO MATHEMATICAL OLYMPIAD PROBLEMS The International Mathematical Olympiad (IMO) is an annual international mathematics competition held for pre-collegiate students. It is also the oldest of the international science olympiads, and competition for places is particularly fierce. This book is an amalgamation of the first 8 of 15 booklets originally produced to guide students intending to contend for placement on their country's IMO team. The material contained in this book provides an introduction to the main mathematical topics covered in the IMO, which are: Combinatorics, Geometry and Number Theory. In addition, there is a special emphasis on how to approach unseen questions in Mathematics, and model the writing of proofs. Full answers are given to all questions. Though A First Step to Mathematical Olympiad Problems is written from the perspective of a mathematician, it is written in a way that makes it easily comprehensible to adolescents. This book is also a must-read for coaches and instructors of mathematical competitions.

"This book serves as a vital resource for practitioners to learn about the latest research and methodology within the field of wireless technology, covering important aspects of emerging technologies in the heterogeneous next generation network environment with a focus on

wireless communications and their quality"--Provided by publisher.

Proofs from THE BOOK

Existence Results via the Variational Approach

Numerical Solutions of Realistic Nonlinear Phenomena

Report of the Secretary of the Senate from ...

Handbook of Zinc Oxide and Related Materials

Introduction to Counting and Probability

The book focuses on how to implement discrete wavelet transform methods in order to solve problems of reaction-diffusion equations and fractional-order differential equations that arise when modelling real physical phenomena. It explores the analytical and numerical approximate solutions obtained by wavelet methods for both classical and fractional-order differential equations; provides comprehensive information on the conceptual basis of wavelet theory and its applications; and strikes a sensible balance between mathematical rigour and the practical applications of wavelet theory. The book is divided into 11 chapters, the first three of which are devoted to the mathematical foundations and basics of wavelet theory. The remaining chapters provide wavelet-based numerical methods for linear, nonlinear, and fractional reaction-diffusion problems. Given its scope and format, the book is ideally suited as a text for undergraduate and graduate students of mathematics and engineering.

"This book provides original research on the theoretical and applied aspects of artificial life, as well as addresses scientific, psychological, and social issues of synthetic life-like behavior and abilities"--Provided by publisher.

This book compiles all of the test problems and solutions from the 1st through the 8th Asian Physics Olympiad. Test questions of every paper consist of two parts, a theory section and an experiment section, before which minutes of teams and results of each competition are introduced. It is a rather desirable reference book for both students and teachers of international competition training as well as middle school student contests. This collection covers new aspects of numerical methods in applied mathematics, engineering, and health sciences. It provides recent theoretical developments and new techniques based on optimization theory, partial differential equations (PDEs), mathematical modeling and fractional calculus that can be used to model and understand complex behavior in natural phenomena. Specific topics covered in detail include new numerical methods for nonlinear partial differential equations, global optimization, unconstrained optimization, detection of HIV- Protease, modelling with new fractional operators, analysis of biological models, and stochastic modelling.

Aha! Solutions

A Problem Book in Real Analysis

Wireless Multi-Access Environments and Quality of Service Provisioning: Solutions and Application

Asian Physics Olympiad (1st - 8th)

The Basics

Competition Math for Middle School

What kind of book is this? It is a book produced by a remarkable cultural circumstance in the former Soviet Union which fostered the creation of groups of students, teachers, and mathematicians called "mathematical circles". The work is predicated on the idea that studying mathematics can generate the same enthusiasm as playing a team sport - without necessarily being competitive. This book is intended for both students and

teachers who love mathematics and want to study its various branches beyond the limits of school curriculum.

Solutions of Nonlinear Differential Equations Existence Results via the Variational Approach
World Scientific

This book is a celebration of mathematical problem solving at the level of the high school American Invitational Mathematics Examination. There is no other book on the market focused on the AIME. It is intended, in part, as a resource for comprehensive study and practice for the AIME competition for students, teachers, and mentors. After all, serious AIME contenders and competitors should seek a lot of practice in order to succeed. However, this book is also intended for anyone who enjoys solving problems as a recreational pursuit. The AIME contains many problems that have the power to foster enthusiasm for mathematics – the problems are fun, engaging, and addictive. The problems found within these pages can be used by teachers who wish to challenge their students, and they can be used to foster a community of lovers of mathematical problem solving! There are more than 250 fully-solved problems in the book, containing examples from AIME competitions of the 1980's, 1990's, 2000's, and 2010's. In some cases, multiple solutions are presented to highlight variable approaches. To help problem-solvers with the exercises, the author provides two levels of hints to each exercise in the book, one to help stuck starters get an idea how to begin, and another to provide more guidance in navigating an approach to the solution.

The William Lowell Putnam Mathematical Competition is the premier undergraduate mathematical competition in North America. This volume contains problems from the years 1985-2000, with solutions and extensive commentary. It is unlike the first two Putnam volumes and unlike virtually every other problem-based book, in that it places the problems in the context of important mathematical themes. The authors highlight connections to other problems, to the curriculum, and to more advanced topics. The best problems contain kernels of sophisticated ideas related to important current research, and yet the problems are accessible to undergraduates. The heart of the book is in the solutions, which have been compiled through extensive research. In editing the solutions, the authors have kept a student audience in mind, explaining techniques that have relevance to more than the problem at hand, suggesting references for further reading, and mentioning related problems, some of which are unsolved.

Introductory Combinatorics

Twenty More Problem Solving Skills for Mathcounts Competitions

Proceedings of the 6th GeoChina International Conference on Civil & Transportation Infrastructures: From Engineering to Smart & Green Life Cycle Solutions -- Nanchang, China, 2021

Handbook of Near-Infrared Analysis

Solutions of Nonlinear Differential Equations

First Steps for Math Olympians: Using the American Mathematics Competitions

Introductory Combinatorics emphasizes combinatorial ideas, including the pigeon-hole principle, counting techniques, permutations and combinations, Polya counting, binomial coefficients, inclusion-exclusion principle, generating functions and recurrence relations, and combinatorial structures (matchings, designs, graphs). Written to be entertaining and readable, this book's lively style reflects the author's joy for teaching the subject. It presents an

excellent treatment of Polya's Counting Theorem that doesn't assume the student is familiar with group theory. It also includes problems that offer good practice of the principles it presents. The third edition of *Introductory Combinatorics* has been updated to include new material on partially ordered sets, Dilworth's Theorem, partitions of integers and generating functions. In addition, the chapters on graph theory have been completely revised.

This book takes the reader on a journey through the world of college mathematics, focusing on some of the most important concepts and results in the theories of polynomials, linear algebra, real analysis, differential equations, coordinate geometry, trigonometry, elementary number theory, combinatorics, and probability. Preliminary material provides an overview of common methods of proof: argument by contradiction, mathematical induction, pigeonhole principle, ordered sets, and invariants. Each chapter systematically presents a single subject within which problems are clustered in each section according to the specific topic. The exposition is driven by nearly 1300 problems and examples chosen from numerous sources from around the world; many original contributions come from the authors. The source, author, and historical background are cited whenever possible. Complete solutions to all problems are given at the end of the book. This second edition includes new sections on quadratic polynomials, curves in the plane, quadratic fields, combinatorics of numbers, and graph theory, and added problems or theoretical expansion of sections on polynomials, matrices, abstract algebra, limits of sequences and functions, derivatives and their applications, Stokes' theorem, analytical geometry, combinatorial geometry, and counting strategies. Using the W.L. Putnam Mathematical Competition for undergraduates as an inspiring symbol to build an appropriate math background for graduate studies in pure or applied mathematics, the reader is eased into transitioning from problem-solving at the high school level to the university and beyond, that is, to mathematical research. This work may be used as a study guide for the Putnam exam, as a text for many different problem-solving courses, and as a source of problems for standard courses in undergraduate mathematics. *Putnam and Beyond* is organized for independent study by undergraduate and graduate students, as well as teachers and researchers

in the physical sciences who wish to expand their mathematical horizons.

Every mathematician (beginner, amateur, and professional alike) thrills to find simple, elegant solutions to seemingly difficult problems. Such happy resolutions are called "aha! solutions," a phrase popularized by mathematics and science writer Martin Gardner. Aha! solutions are surprising, stunning, and scintillating: they reveal the beauty of mathematics. This book is a collection of problems with aha! solutions. The problems are at the level of the college mathematics student, but there should be something of interest for the high school student, the teacher of mathematics, the "math fan," and anyone else who loves mathematical challenges. This collection includes one hundred problems in the areas of arithmetic, geometry, algebra, calculus, probability, number theory, and combinatorics. The problems start out easy and generally get more difficult as you progress through the book. A few solutions require the use of a computer. An important feature of the book is the bonus discussion of related mathematics that follows the solution of each problem. This material is there to entertain and inform you or point you to new questions. If you don't remember a mathematical definition or concept, there is a Toolkit in the back of the book that will help.

The studies presented in this volume cover new approaches of geotechnical engineering introduced by researchers, engineers and scientists to address contemporary issues in geotechnical engineering such as the usage of sustainable materials in soil, soil characterization with new methods, and numerical simulations to predict material properties, etc. Studies were selected from the 6th GeoChina International Conference on Civil & Transportation Infrastructures: From Engineering to Smart & Green Life Cycle Solutions -- Nanchang, China, 2021.

New Approaches of Geotechnical Engineering: Soil Characterization, Sustainable Materials and Numerical Simulation

*A First Step to Mathematical Olympiad Problems
Transplantation E-Book*

Problems, Solutions and Commentary

*A Gentle Introduction to the American Invitational
Mathematics Exam*

Wavelet Solutions for Reaction-Diffusion Problems in Science and Engineering

This book examines third party protection in shipping. Today, shipping is not just a part of the supply chain; it is indistinguishable from it. Once at the periphery, third party protection is now a central element of carriage. This matter is addressed by means of analysis of the current legal framework in relation to third parties and an evaluation of how, within this framework, the law applicable to a third party may be uncovered. Third party protection is analysed under the following: the Hague/Hague-Visby Rules; the Hamburg Rules; the Rotterdam Rules; English law and United States law; and civil law. With its breadth of coverage and high-quality analysis, this book is vital reading for both professional and academic readers with an interest in shipping and international trade.

Through their application in energy-efficient and environmentally friendly devices, zinc oxide (ZnO) and related classes of wide gap semiconductors, including GaN and SiC, are revolutionizing numerous areas, from lighting, energy conversion, photovoltaics, and communications to biotechnology, imaging, and medicine. With an emphasis on engineering a

A collection of problems put together by coaches of the U.S. International Mathematical Olympiad Team.

Based on Stanford University's well-known competitive exam, this excellent mathematics workbook offers students at both high school and college levels a complete set of problems, hints, and solutions. 1974 edition.

New Trends in Fractional Differential Equations with Real-World Applications in Physics

Investigations Into Living Systems, Artificial Life, and Real-world Solutions (Russian Experience)

Structures, Examples, and Problems

Volume One, Materials

Challenging Problems in Algebra

The International Mathematical Olympiad (IMO) is a competition for high school students. China has taken part in the IMO 21 times since 1985 and has won the top ranking for countries 14 times, with a multitude of golds for individual students. The six students China has sent every year were selected from 20 to 30 students among approximately 130 students who took part in the annual China Mathematical Competition during the winter months. This volume of comprises a collection of original problems with solutions that China used to train their Olympiad team in the years from 2009 to 2010. Mathematical Olympiad problems with solutions for the years 2002-2008 appear in an earlier volume, *Mathematical Olympiad in China*.

This is a challenging problem-solving book in Euclidean geometry, assuming nothing of the reader other than a good deal of courage. Topics covered included cyclic quadrilaterals, power of a point, homothety, triangle centers;

along the way the reader will meet such classical gems as the nine-point circle, the Simson line, the symmedian and the mixtilinear incircle, as well as the theorems of Euler, Ceva, Menelaus, and Pascal. Another part is dedicated to the use of complex numbers and barycentric coordinates, granting the reader both a traditional and computational viewpoint of the material. The final part consists of some more advanced topics, such as inversion in the plane, the cross ratio and projective transformations, and the theory of the complete quadrilateral. The exposition is friendly and relaxed, and accompanied by over 300 beautifully drawn figures. The emphasis of this book is placed squarely on the problems. Each chapter contains carefully chosen worked examples, which explain not only the solutions to the problems but also describe in close detail how one would invent the solution to begin with. The text contains a selection of 300 practice problems of varying difficulty from contests around the world, with extensive hints and selected solutions. This book is especially suitable for students preparing for national or international mathematical olympiads or for teachers looking for a text for an honor class.

The book is intended for students who want to learn how to prove theorems and be better prepared for the rigors required in more advanced mathematics. One of the key components in this textbook is the development of a methodology to lay bare the structure underpinning the construction of a proof, much as diagramming a sentence lays bare its grammatical structure. Diagramming a proof is a way of presenting the relationships between the various parts of a proof. A proof diagram provides a tool for showing students how to write correct mathematical proofs.

Variational methods are very powerful techniques in nonlinear analysis and are extensively used in many disciplines of pure and applied mathematics (including ordinary and partial differential equations, mathematical physics, gauge theory, and geometrical analysis). In our first chapter, we gather the basic notions and fundamental theorems that will be applied throughout the chapters. While many of these items are easily available in the literature, we gather them here both for the convenience of the reader and for the purpose of making this volume somewhat self-contained. Subsequent chapters deal with how variational methods can be used in fourth-order problems, Kirchhoff problems, nonlinear field problems, gradient systems, and variable exponent problems. A very extensive bibliography is also included. Contents: Preface Some Notations and Conventions Preliminaries and Variational Principles Quasilinear Fourth-Order Problems Kirchhoff Problems Nonlinear Field Problems Gradient Systems Variable Exponent Problems Readership: Graduate students and researchers interested in variational methods.

The Art and Craft of Problem Solving

The American Experience

Companion to Specialist Surgical Practice

Visual Complex Analysis

AR 71-9 12/28/2009 WARFIGHTING CAPABILITIES DETERMINATION ,
Survival Ebooks

Mathematical Olympiad in China (2009-2010)

"...offer[s] a challenging exploration of problem solving mathematics and preparation for programs such as MATHCOUNTS and the American Mathematics Competition."--Back cover

Rapid, inexpensive, and easy-to-deploy, near-infrared (NIR) spectroscopy can be used to analyze samples of virtually any composition, origin, and condition. The Handbook of Near Infrared Analysis, Fourth Edition, explores the factors necessary to perform accurate and time- and cost-effective analyses across a growing spectrum of disciplines. This updated and expanded edition incorporates the latest advances in instrumentation, computerization, chemometrics applied to NIR spectroscopy, and method development in NIR spectroscopy, and underscores current trends in sample preparation, calibration transfer, process control, data analysis, instrument performance testing, and commercial NIR instrumentation. This work offers readers an unparalleled combination of theoretical foundations, cutting-edge applications, and practical experience. Additional features include the following: Explains how to perform accurate as well as time- and cost-effective analyses. Reviews software-enabled chemometric methods and other trends in data analysis. Highlights novel applications in pharmaceuticals, polymers, plastics, petrochemicals, textiles, foods and beverages, baked products, agricultural products, biomedicine, nutraceuticals, and counterfeit detection. Underscores current trends in sample preparation, calibration transfer, process control, data analysis, and multiple aspects of commercial NIR instrumentation. Offering the most complete single-source guide of its kind, the Handbook of Near Infrared Analysis, Fourth Edition, continues to offer practicing chemists and spectroscopists an unparalleled combination of theoretical foundations, cutting-edge applications, and detailed practical experience provided firsthand by more than 50 experts in the field. Transplantation meets the needs of surgeons in higher training and practising consultants for a contemporary and evidence-based account of this sub-specialty that is relevant to their general surgical practice. It is a practical reference source incorporating the most current information on recent developments, management issues and

operative procedures. The text is thoroughly referenced and supported by evidence-based recommendations wherever possible, distinguishing between strong evidence to support a conclusion, and evidence suggesting that a recommendation can be reached on the balance of probabilities. This is a title in the Companion to Specialist Surgical Practice series whose eight volumes are an established and highly regarded source of information for the specialist general surgeon. The Companion to Specialist Surgical Practice series provides a current and concise summary of the key topics within each major surgical sub-specialty. Each volume highlights evidence-based practice both in the text and within the extensive list of references at the end of every chapter. An expanded authorship team across the series includes additional European and World experts with an increased emphasis on global practice. The contents of the series have been extensively revised in line with recently published evidence. Modern techniques in transplantation and new forms of immunosuppression are emphasised throughout this volume. The substantial interest in new organ perfusion and in the preservation techniques in organ donation and transplantation are reflected in a new chapter written by an international expert. All the chapters reflect transplant care as a multi-disciplinary team of clinicians working in a collaborative fashion.

This book offers a highly accessible introduction to natural language processing, the field that supports a variety of language technologies, from predictive text and email filtering to automatic summarization and translation. With it, you'll learn how to write Python programs that work with large collections of unstructured text. You'll access richly annotated datasets using a comprehensive range of linguistic data structures, and you'll understand the main algorithms for analyzing the content and structure of written communication. Packed with examples and exercises, Natural Language Processing with Python will help you: Extract information from unstructured text, either to guess the topic or identify "named entities" Analyze linguistic structure in text, including parsing and semantic analysis Access popular linguistic databases, including WordNet and treebanks Integrate techniques drawn from fields as diverse as linguistics and artificial intelligence This book will help you gain practical skills in natural language

processing using the Python programming language and the Natural Language Toolkit (NLTK) open source library. If you're interested in developing web applications, analyzing multilingual news sources, or documenting endangered languages -- or if you're simply curious to have a programmer's perspective on how human language works -- you'll find Natural Language Processing with Python both fascinating and immensely useful.

Putnam and Beyond

Analyzing Text with the Natural Language Toolkit

Number Theory

The Stanford Mathematics Problem Book

The William Lowell Putnam Mathematical Competition 1985-2000

Your book is "fabulous". I spent two hours last night working problems from it. I'm planning to use some in what I do with teachers, with citation of course. I love it. I love the clever problems you came up with and the clever solutions of the MATHCOUNTS problems you used. Dr. Harold Reiter, former Chairman of Mathcounts Question Written Committee, Math Professor, UNC at Charlotte Being responsible for the publications we put out at MATHCOUNTS, I understand the incredible amount of work this required. Congratulations on such a great accomplishment. ---Kristen Chandler Mathcounts, Deputy Director & Program Director I just finished going through with it. As for the book, I'm pretty impressed. It really seems you put a lot of time and effort into it, and I liked it. - Calvin Deng 2010 USA IMO Team Member, Silver Medalist I bought this book together with "Twenty More Problem Solving Skills" for my 6th grade daughter, who loves math, and is preparing for AMC and MathCounts competition. She is very excited with these two books, and learns a lot from these two books in her math competitionpreparation. We recommend this book as a must have math competition collection. - -A parent