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PINEAPPLE DESIGNED LINED JOURNAL NOTEBOOK IS NOW AVAILABLE! This gorgeous journal notebook is cram packed with a ton of funky black and white pineapples on a light blue background. It's a handy size and measures 6 inches by 9 inches with 120 journal lined pages. Great for note taking, list making, brainstorming ideas, doodling, planning and more. It's ideal for the office, to keep at home, for university, school or college, by your bedside, when travelling, on your holidays, in your bag or tote etc. It has plenty of room for writing down your plans, thoughts, ideas, inspirations, dreams and more! It would make a great gift for someone, or just go ahead and treat yourself. We have lots more professionally designed notebooks, journals and planners, (including other Pineapple Designs), just search for BohoJack Press. Handy size Journal Notebook measuring 6 x 9 inches, great to fit in your bag or tote Each journal style lined page has plenty of room for all your notes Beautifully illustrated pineapple designed cover, with a glossy stay clean finish 120 pages made of great quality white paper with black print A great gift idea for your partner, a relative, a friend, a co-worker, your Sister, or just treat yourself! A wonderful gift for Mother's Day, Easter, a Birthday, Christmas, Graduation, or any other special occasion

This Dictionary covers information and communication technology (ICT), including hardware and software; information networks, including the Internet and the World Wide Web; automatic control; and ICT-related computer-aided fields. The Dictionary also lists abbreviated names of relevant organizations, conferences, symposia and workshops. This reference is important for all practitioners and users in the areas mentioned above, and those who consult or write technical material. This Second Edition contains 10,000 new entries, for a total of 33,000.

This is Volume 42 of the Educational Media and Technology Yearbook. For the past 40 years, our Yearbook has contributed to the field of Educational Technology in presenting contemporary topics, ideas, and developments regarding diverse technology tools for educational purposes. Our Yearbook has inspired researchers, practitioners, and teachers to consider how to develop technological designs and develop curricula and instruction integrating technology to enhance student learning, teach diverse populations across levels with effective technology integration, and apply technology in interactive ways to motivate students to engage in course content. In addition, Volume 42 features the Virtual Reality (VR) and Augmented Reality (AR) research and educational use cases, organized and coordinated by Vivienne and David. This section provides evidence that the affordances of AR, VR, and mixed reality, defined as an immersive multi-platform experience reality (XR), have begun to make indelible changes in teaching and learning in the United States. XR's recent developments stimulated the editors to propose a special edition to mark the interoperability of immersive

technology to push the boundaries of human curiosity, creativity, and problem solving. After years of incremental development, XR has reached a critical level of investment, infrastructure, and emerging production. The chapters included in this section illustrate how XR can push user inquiry, engagement, learning, and interactivity to new levels within physical and digital contexts.

An Introduction to Analytic Geometry and Calculus covers the basic concepts of analytic geometry and the elementary operations of calculus. This book is composed of 14 chapters and begins with an overview of the fundamental relations of the coordinate system. The next chapters deal with the fundamentals of straight line, nonlinear equations and graphs, functions and limits, and derivatives. These topics are followed by a discussion of some applications of previously covered mathematical subjects. This text also considers the fundamentals of the integrals, trigonometric functions, exponential and logarithm functions, and methods of integration. The final chapters look into the concepts of parametric equations, polar coordinates, and infinite series. This book will prove useful to mathematicians and undergraduate and graduate mathematics students.

This book is a comprehensive compilation of all the problems and solutions from the 2003 to 2012 Purple Comet Math Meet contests for middle and high school students. The problems featured not only employ an extensive range of mathematical concepts from algebra, geometry, number theory, and combinatorics but also encourage team collaboration. Any student interested in mathematics--whether looking to prepare for contests or, even more importantly, to sharpen math problem-solving skills--would cherish and enjoy this unique and pertinent collection of meaningful problems and solutions.

The specialist contributors to Geomorphological Techniques have thoroughly augmented and updated their original, authoritative coverage with critical evaluations of major recent developments in this field. A new chapter on neotectonics reflects the impact of developments in tectonic theory, and heavily revised sections deal with advances in remote sensing, image analysis, radiometric dating, geomorphometry, data loggers, radioactive tracers, and the determination of pore water pressure and the rates of denudation.

"With the collaboration of a number of dedicated teachers and their students, Susan Empson and Linda Levi have produced a volume that is faithful to the basic principles of CGI while at the same time covering new ground with insight and innovation." -Thomas P. Carpenter This highly anticipated follow-up volume to the landmark Children's Mathematics: Cognitively Guided Instruction addresses the urgent need to help teachers understand and teach fraction concepts. Fractions remain one of the key stumbling blocks in math education, and here Empson and Levi lay a foundation for understanding fractions and decimals in ways that build conceptual learning. They show how the same kinds of intuitive knowledge and sense making that provides the basis for children's learning of whole number arithmetic can be extended to fractions and decimals. Just as they did in Children's Mathematics and Thinking Mathematically, Empson and Levi provide important insights

into children's thinking and alternative approaches to solving problems. Three themes appear throughout the book: building meaning for fractions and decimals through discussing and solving word problems the progression of children's strategies for solving fraction word problems and equations from direct modeling through relational thinking designing instruction that capitalizes on students' relational thinking strategies to integrate algebra into teaching and learning fractions. With illuminating examples of student work, classroom vignettes, "Teacher Commentaries" from the field, sample problems and instructional guides provided in each chapter, you'll have all the tools you need to teach fractions and decimals with understanding and confidence.

Combinatorics, or the art and science of counting, is a vibrant and active area of pure mathematical research with many applications. The Unity of Combinatorics succeeds in showing that the many facets of combinatorics are not merely isolated instances of clever tricks but that they have numerous connections and threads weaving them together to form a beautifully patterned tapestry of ideas. Topics include combinatorial designs, combinatorial games, matroids, difference sets, Fibonacci numbers, finite geometries, Pascal's triangle, Penrose tilings, error-correcting codes, and many others. Anyone with an interest in mathematics, professional or recreational, will be sure to find this book both enlightening and enjoyable. Few mathematicians have been as active in this area as Richard Guy, now in his eighth decade of mathematical productivity. Guy is the author of over 300 papers and twelve books in geometry, number theory, graph theory, and combinatorics. In addition to being a life-long number-theorist and combinatorialist, Guy's co-author, Ezra Brown, is a multi-award-winning expository writer. Together, Guy and Brown have produced a book that, in the spirit of the founding words of the Carus book series, is accessible "not only to mathematicians but to scientific workers and others with a modest mathematical background."

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!

From the bestselling author of College Unbound comes a hopeful, inspiring blueprint to help alleviate parents' anxiety and prepare their college-educated child to successfully land a good job after graduation. Saddled with thousands of dollars of debt, today's college students are graduating into an uncertain job market that is leaving them financially dependent on their parents for years to come—a reality that has left moms and dads wondering: What did I pay all that money for? There Is Life After College offers students, parents, and even recent graduates the practical advice and insight they need to jumpstart their careers. Education expert Jeffrey Selingo answers key questions—Why is the transition to post-college life so difficult for many recent graduates? How can graduates market themselves to employers that are reluctant to

provide on-the-job training? What can institutions and individuals do to end the current educational and economic stalemate?—and offers a practical step-by-step plan every young professional can follow. From the end of high school through college graduation, he lays out exactly what students need to do to acquire the skills companies want. Full of tips, advice, and insight, this wise, practical guide will help every student, no matter their major or degree, find real employment—and give their parents some peace of mind.

This collection of chapters presents research focused on emerging strategies, paradigms, and theories on the sources, experiences, and consequences of stress, coping, and prevention pertaining to students, teachers and administrators. Studies analyze data collected through action research, program evaluation, surveys, qualitative interviewing, auto ethnography, and mixed methods gathered from students and educators in the United States, Italy, Holland, Turkey, and Australia.

For courses in decision support systems, computerized decision-making tools, and management support systems. Market-leading guide to modern analytics, for better business decisionsAnalytics, Data Science, & Artificial Intelligence: Systems for Decision Support is the most comprehensive introduction to technologies collectively called analytics (or business analytics) and the fundamental methods, techniques, and software used to design and develop these systems. Students gain inspiration from examples of organisations that have employed analytics to make decisions, while leveraging the resources of a companion website. With six new chapters, the 11th edition marks a major reorganisation reflecting a new focus -- analytics and its enabling technologies, including AI, machine-learning, robotics, chatbots, and IoT.

Sonia KovalevskyBiography and AutobiographyBioastronautics Data BookEmerging Thought and Research on Student, Teacher, and Administrator Stress and CopingIAP

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

The newest volume in the Army Lineage Series, "The Organizational History of Field Artillery" addresses the need for a modern work recording the historical structure, strength, disposition, materiel, and technical and tactical doctrine of field artillery in the U.S. Army. Although several books on field artillery have appeared over the past thirty years--some popular histories and a few scholarly works--this one is intended to emphasize the organizational structure of the branch rather than its weapons or operations. The publication includes charts and tables showing the organization of field artillery over the last 225 years, as well as photographs and artwork depicting artillerymen and their weapons in both war and peace. The book was designed to complement the volume published in 1985 in the series covering the lineages and honors of Regular Army and Army Reserve field artillery regiments, which is currently being updated to include commands, brigades, groups, and regiments in all three components. This updated edition will also be published shortly by the Center of Military History. Taken together, these volumes will provide an unparalleled portrait of one of the Army's basic combat arms as it has evolved over the past two hundred fifty years.

The mathematical sciences are part of nearly all aspects of everyday life-the discipline has underpinned such beneficial modern capabilities as Internet search, medical imaging, computer animation, numerical weather predictions, and all

types of digital communications. The Mathematical Sciences in 2025 examines the current state of the mathematical sciences and explores the changes needed for the discipline to be in a strong position and able to maximize its contribution to the nation in 2025. It finds the vitality of the discipline excellent and that it contributes in expanding ways to most areas of science and engineering, as well as to the nation as a whole, and recommends that training for future generations of mathematical scientists should be re-assessed in light of the increasingly cross-disciplinary nature of the mathematical sciences. In addition, because of the valuable interplay between ideas and people from all parts of the mathematical sciences, the report emphasizes that universities and the government need to continue to invest in the full spectrum of the mathematical sciences in order for the whole enterprise to continue to flourish long-term. Algebraic statistics uses tools from algebraic geometry, commutative algebra, combinatorics, and their computational sides to address problems in statistics and its applications. The starting point for this connection is the observation that many statistical models are semialgebraic sets. The algebra/statistics connection is now over twenty years old, and this book presents the first broad introductory treatment of the subject. Along with background material in probability, algebra, and statistics, this book covers a range of topics in algebraic statistics including algebraic exponential families, likelihood inference, Fisher's exact test, bounds on entries of contingency tables, design of experiments, identifiability of hidden variable models, phylogenetic models, and model selection. With numerous examples, references, and over 150 exercises, this book is suitable for both classroom use and independent study. The MAA was founded in 1915 to serve as a home for The American Mathematical Monthly. The mission of the Association-to advance mathematics, especially at the collegiate level-has, however, always been larger than merely publishing world-class mathematical exposition. MAA members have explored more than just mathematics; we have, as this volume tries to make evident, investigated mathematical connections to pedagogy, history, the arts, technology, literature, every field of intellectual endeavor. Essays, all commissioned for this volume, include exposition by Bob Devaney, Robin Wilson, and Frank Morgan; history from Karen Parshall, Della Dumbaugh, and Bill Dunham; pedagogical discussion from Paul Zorn, Joe Gallian, and Michael Starbird, and cultural commentary from Bonnie Gold, Jon Borwein, and Steve Abbott. This volume contains 35 essays by all-star writers and expositors writing to celebrate an extraordinary century for mathematics-more mathematics has been created and published since 1915 than in all of previous recorded history. We've solved age-old mysteries, created entire new fields of study, and changed our conception of what mathematics is. Many of those stories are told in this volume as the contributors paint a portrait of the broad cultural sweep of mathematics during the MAA's first century. Mathematics is the most thrilling, the most human, area of intellectual inquiry; you will find in this volume compelling proof of that claim.

"The Defense Innovation Initiative (DII), begun in November 2014 by former Secretary of Defense Chuck Hagel, is intended to ensure U.S. military superiority throughout the 21st century. The DII seeks broad-based innovation across the spectrum of concepts, research and development, capabilities, leader development, wargaming, and business practices. An essential component of the DII is the Third Offset Strategy -- a plan for overcoming (offsetting) adversary parity or advantage, reduced military force structure, and declining technological superiority in an era of great power competition. This study explored the implications for the Army of Third Offset innovations and breakthrough capabilities for the operating environment of 2035-2050. It focused less on debating the merits or feasibility of individual technologies and more on understanding the implications -- the second and third order effects on the Army that must be anticipated ahead of the breakthrough"--Publisher's web site.

An examination of fifteen of today's most successful investors according to their areas of expertise, including stock-picking, global macro trading, sector investing, and more, describes how these investors approach the market at a time when volatility is high and certainty low.

This mono graph is intended for an advanced undergraduate or graduate course as well as for the researchers who want a compilation of developments in this rapidly growing field of operations research. This is a sequel to our previous work entitled "Multiple Objective Decision Making--Methods and Applications: A State-of-the-Art Survey," (No. 164 of the Lecture Notes). The literature on methods and applications of Multiple Attribute Decision Making (MADM) has been reviewed and classified systematically. This study provides readers with a capsule look into the existing methods, their char acteristics, and applicability to analysis of MADM problems. The basic MADM concepts are defined and a standard notation is introduced in Part 11. Also introduced are foundations such as models for MADM, trans formation of attributes, fuzzy decision rules, and methods for assessing weight. A system of classifying seventeen major MADM methods is presented. These methods have been proposed by researchers in diversified disciplines; half of them are classical ones, but the other half have appeared recently. The basic concept, the computational procedure, and the characteristics of each of these methods are presented concisely in Part 111. The computational procedure of each method is illustrated by solving a simple numerical example. Part IV of the survey deals with the applications of these MADM methods.

The Soil Conservation Service (SCS) curve number (CN) method is one of the most popular methods for computing the runoff volume from a rainstorm. It is popular because it is simple, easy to understand and apply, and stable, and accounts for most of the runoff producing watershed characteristics, such as soil type, land use, hydrologic condition, and antecedent moisture condition. The SCS-CN method was originally developed for its use on small agricultural

watersheds and has since been extended and applied to rural, forest and urban watersheds. Since the inception of the method, it has been applied to a wide range of environments. In recent years, the method has received much attention in the hydrologic literature. The SCS-CN method was first published in 1956 in Section-4 of the National Engineering Handbook of Soil Conservation Service (now called the Natural Resources Conservation Service), U. S. Department of Agriculture. The publication has since been revised several times. However, the contents of the methodology have been nonetheless more or less the same. Being an agency methodology, the method has not passed through the process of a peer review and is, in general, accepted in the form it exists. Despite several limitations of the method and even questionable credibility at times, it has been in continuous use for the simple reason that it works fairly well at the field level.

This book offers valuable guidance for science teacher educators looking for ways to facilitate preservice and inservice teachers' pedagogy relative to teaching students from underrepresented and underserved populations in the science classroom. It also provides solutions that will better equip science teachers of underrepresented student populations with effective strategies that challenge the status quo, and foster classrooms environment that promotes equity and social justice for all of their science students. Multicultural Science Education illuminates historically persistent, yet unresolved issues in science teacher education from the perspectives of a remarkable group of science teacher educators and presents research that has been done to address these issues. It centers on research findings on underserved and underrepresented groups of students and presents frameworks, perspectives, and paradigms that have implications for transforming science teacher education. In addition, the chapters provide an analysis of the socio-cultural-political consequences in the ways in which science teacher education is theoretically conceptualized and operationalized in the United States. The book provides teacher educators with a framework for teaching through a lens of equity and social justice, one that may very well help teachers enhance the participation of students from traditionally underrepresented and underserved groups in science, technology, engineering, and mathematics (STEM) areas and help them realize their full potential in science. Moreover, science educators will find this book useful for professional development workshops and seminars for both novice and veteran science teachers. "Multicultural Science Education: Preparing Teachers for Equity and Social Justice directly addresses the essential role that science teacher education plays for the future of an informed and STEM knowledgeable citizenry. The editors and authors review the beginnings of multicultural science education, and then highlight findings from studies on issues of equity, underrepresentation, cultural relevancy, English language learning, and social justice. The most significant part of this book is the move to the policy level—providing specific recommendations for policy development, implementation, assessment and analysis, with calls to action for all

science teacher educators, and very significantly, all middle and high school science teachers and prospective teachers. By emphasizing the important role that multicultural science education has played in providing the knowledge base and understanding of exemplary science education, Multicultural Science Education: Preparing Teachers for Equity and Social Justice gives the reader a scope and depth of the field, along with examples of strategies to use with middle and high school students. These classroom instructional strategies are based on sound science and research. Readers are shown the balance between research-based data driven models articulated with successful instructional design. Science teacher educators will find this volume of great value as they work with their pre-service and in-service teachers about how to address and infuse multicultural science education within their classrooms. For educators to be truly effective in their classrooms, they must examine every component of the learning and teaching process. Multicultural Science Education: Preparing Teachers for Equity and Social Justice provides not only the intellectual and research bases underlying multicultural studies in science education, but also the pragmatic side. All teachers and teacher educators can infuse these findings and recommendations into their classrooms in a dynamic way, and ultimately provide richer learning experiences for all students." Patricia Simmons, North Carolina State University, Raleigh, USA "This provocative collection of chapters is a presentation in gutsiness. Ingenious in construction and sequencing, this book will influence science teacher educators by introducing them to issues of equity and social justice directly related to women and people of color. The authors unflinchingly interrogate issues of equity which need to be addressed in science education courses. "This provocative collection of chapters is a presentation in gutsiness. Ingenious in construction and sequencing, this book will influence science teacher educators by introducing them to issues of equity and social justice directly related to women and people of color. The authors unflinchingly interrogate issues of equity which need to be addressed in science education courses. It begins with setting current cultural and equity issue within a historic frame. The first chapter sets the scene by moving the reader through 400 years in which African-American's were 'scientifically excluded from science'. This is followed by a careful review of the Jim Crow era, an analysis of equity issues of women and ends with an examination of sociocultural consciousness and culturally responsive teaching. Two chapters comprise the second section. Each chapter examines the role of the science teacher in providing a safe place by promoting equity and social justice in the classroom. The three chapters in the third section focus on secondary science teachers. Each addresses issues of preparation that provides new teachers with understanding of equity and provokes questions of good teaching. Section four enhances and expands the first section as the authors suggest cultural barriers the impact STEM engagement by marginalized groups. The last section, composed of three chapters, interrogates policy issues that influence the science classroom." Molly Weinburgh, Texas Christian University, Fort Worth, USA

Help your students to think critically and creatively through team-based problem solving instead of focusing on testing and outcomes. Professionals throughout the education system are recognizing that standardized testing is holding students back. Schools tend to view children as outcomes rather than as individuals who require guidance on thinking critically and creatively. Awesome Math focuses on team-based problem solving to teach discrete mathematics, a subject essential for success in the STEM careers of the future. Built on the increasingly popular growth mindset, this timely book emphasizes a problem-solving approach for developing the skills necessary to think critically, creatively, and collaboratively. In its current form, math education is a series of exercises: straightforward problems with easily-obtained answers. Problem solving, however, involves multiple creative approaches to solving meaningful and interesting problems. The authors, co-founders of the multi-layered educational organization AwesomeMath, have developed an innovative approach to teaching mathematics that will enable educators to: Move their students beyond the calculus trap to study the areas of mathematics most of them will need in the modern world Show students how problem solving will help them achieve their educational and career goals and form lifelong communities of support and collaboration Encourage and reinforce curiosity, critical thinking, and creativity in their students Get students into the growth mindset, coach math teams, and make math fun again Create lesson plans built on problem based learning and identify and develop educational resources in their schools Awesome Math: Teaching Mathematics with Problem Based Learning is a must-have resource for general education teachers and math specialists in grades 6 to 12, and resource specialists, special education teachers, elementary educators, and other primary education professionals.

A companion book to the PBS series reveals the myriad ways mathematical ideas can explain the world

Humans are part of an ecosystem, and understanding our relationship with the environment and with other organisms is a prerequisite to living together sustainably. Zoonotic diseases, which are spread between animals and humans, are an important issue as they reflect our relationship with other animals in a common environment. Zoonoses are still presented with high occurrence rates, especially in rural communities, with direct and indirect consequences for people. In several cases, zoonosis could cause severe clinical manifestations and is difficult to control and treat. Moreover, the persistent use of drugs for infection control enhances the potential of drug resistance and impacts on ecosystem balance and food production. This book demonstrates the importance of understanding zoonosis in terms of how it allows ecosystems to transform, adapt, and evolve. Ecohealth/One Health approaches recognize the interconnections among people, other organisms, and their shared developing environment. Moreover, these holistic approaches encourage stakeholders of various disciplines to collaborate in order to solve problems related to zoonosis. The reality of climate change necessitates considering new variables in studying diseases, particularly to predict how these changes in the ecosystems

can affect human health and how to recognize the boundaries between medicine, veterinary care, and environmental and social changes towards healthy and sustainable development.

Back by popular demand, we are pleased to reissue this outstanding collection of problems and solutions from the Putnam Competitions covering the years 1938-1964. Problemists the world over, including all past and future Putnam Competitors, will revel in mastering the difficulties posed by this collection of problems from the first 25 William Lowell Putnam Competitions. Solutions to all 347 problems are given. In some cases multiple solutions are included, some which contestants could reasonably be expected to find under examination conditions, and others which are more elegant or utilize more sophisticated techniques. Valuable references and historical comments on many of the problems are presented. The book concludes with four articles on the Putnam competition written by G. Birkhoff, L. E. Bush, L. J. Mordell, and L. M. Kelly which are reprinted from the American Mathematical Monthly. There is great appeal here for all; teachers, students, and all those who love good problems and see them as an entree to beautiful and powerful ideas.

First multi-year cumulation covers six years: 1965-70.

At a time when globalization and technology are dramatically altering the world we live in, is education reform in the United States headed down the right path? Are schools emphasizing the knowledge and skills that students need in a global society--or are they actually undermining their strengths by overemphasizing high-stakes testing and standardization? Are education systems in China and other countries really as superior as some people claim? These and other questions are at the heart of author Yong Zhao's thoughtful and informative book. Born and raised in China and now a distinguished professor at Michigan State University, Zhao bases many of his observations on firsthand experience as a student in China and as a parent of children attending school in the United States. His unique perspective leads him to conclude that "American education is at a crossroads" and "we need to change course" to maintain leadership in a rapidly changing world. To make his case, Zhao explains * What's right with American education; * Why much of the criticism of schools in the United States has been misleading and misinformed; * Why China and other nations in Asia are actually reforming their systems to be more like their American counterparts; * How globalization and the "death of distance" are affecting jobs and everyday life; and * How the virtual world is transforming the economic and social landscape in ways far more profound than many people realize. Educators, policymakers, parents, and others interested in preparing students to be productive global citizens will gain a clear understanding of what kinds of knowledge and skills constitute "digital competence" and "global competence," and what schools can--and must--do to meet the challenges and opportunities brought about by globalization and technology.

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