

October November 2013 Maths Paper 4

This series has been developed specifically for the Cambridge International AS & A Level Mathematics (9709) syllabus to be examined from 2020. Cambridge International AS & A Level Mathematics: Probability & Statistics 2 matches the corresponding unit of the syllabus, with a clear and logical progression through. It contains materials on topics such as hypothesis testing, Poisson distribution, linear combinations and continuous random variables, and sampling. This coursebook contains a variety of features including recap sections for students to check their prior knowledge, detailed explanations and worked examples, end-of-chapter and cross-topic review exercises and 'Explore' tasks to encourage deeper thinking around mathematical concepts. Answers to coursebook questions are at the back of the book.

This book is designed to aid students in their preparation for JEE (Main). It is a well-planned study guide which shows through examples and challenging questions how to think analytically, and find a way to the “mysteries” of problem solving. The book leads students through a broad spectrum of levels of difficulty with the intention that they will be able to crack their examinations successfully. HIGHLIGHTS The topic-wise concepts of the subject matter have been explained in each chapter for ease of recapitulation by the students. Each chapter contains nearly 180 solved problems, from the routine to the intriguing, to test, reinforce and expand the understanding of the concepts presented. Each chapter contains a large variety of questions to hone the analytical and reasoning skills of students. The book contains three sets of mock test papers and one fully solved sample paper for practice.

This volume contains the papers presented at the International Conference on Mathematics Education in a Connected World held from September 16-21, 2015 in Catania, Italy. The Conference was organized by The Mathematics Education for the Future Project – an international educational project founded in 1986.

A group of researchers, graduate students, and classroom teachers convened a working group on "Queering, Trans-forming, and En-gendering Mathematics and Mathematics Education" at the Psychology of Mathematics Education-North America conference in November 2013. Arguing that the "time has come to queer mathematics and mathematics education," they proposed a research agenda that included queering gender, queering the research process queering curriculum, resources, representation, queering pedagogy and teacher education, and queering mathematical concepts and content areas. The working group concluded by discussing plans for future collaboration. [This paper was published in: Martinez, M. & Castro Superfine, A. (Eds.), "Proceedings of the 35th Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education" (p.1367-1373). Chicago, IL: University of Illinois at Chicago.].

Cambridge International AS and A Level Mathematics: Probability & Statistics 2 Coursebook
Effective Math Instruction

Modeling and Using Context

Cambridge IGCSE® Mathematics Core and Extended Coursebook

8th International and Interdisciplinary Conference, CONTEXT 2013, Annecy, France, October 28 - 31, 2013, Proceedings

Sep 16–21, 2015, Grand Hotel Baia Verde, Catania, Sicily, Italy

Social Policy in a Cold Climate offers a data-rich, evidence-based analysis of the impact Labour and coalition government policies have had on inequality and on the delivery of services such as health, education, adult social care, housing and employment in the wake of the greatest recession of our time. The authors provide an authoritative and unflinching analysis of recent approaches to social policy and their outcomes following the financial crisis, with particular focus on poverty and inequality. Through a detailed look at spending, outputs and outcomes the book offers a unique appraisal of Labour and the coalition’s impact as well as an insightful assessment of future directions. This volume offers a much-awaited follow-up to the critically acclaimed ‘A more equal society?’ (2005) and ‘Towards a more equal society?’ (2009).

In this volume, scholars, researchers, and teacher educators from across the United States present their latest findings regarding teacher education to develop meaningful learning experiences and meet the sociocultural, linguistic, and academic needs of Latino ELLs. The book documents how teacher education programs guide teachers to engage in culturally and linguistically diverse academic contexts and sheds light on the variety of research-based theoretical frameworks that inform teaching practices. A unique contribution to the field, Learning from Emergent Bilingual Latinx Learners in K-12 provides innovative approaches for linking Latino school communities with teachers at a time when demographic shifts are considerably altering population trends in the K-12 educational system.

Mathematicians have recently made dramatic progress on the Twin Primes Conjecture, which asserts that there are infinitely many pairs of prime numbers that differ by 2. This book will describe two stories: that of the recent work on the Twin Primes Conjecture, and in parallel the related ideas from the previous two thousand years of mathematics.--

This book describes The Artistic Theory of Psychology, in which a dominant focus is on the successful creative artist and mental health. However, the book also describes the relationship of the creative artist to mental disturbance in various contexts, including an innovative academic treatment, personal experiential essays written by the author, excerpts related to the author’s semi-autobiographical novel, and illustrative blog excerpts from the author’s struggling actor son. The main theme of the book is that through humanistic supportive environments for creative artists, the phenomenon of the successful creative artist in the context of success in both one’s creative artistic endeavors as well as a satisfactory adjustment to day-to-day life, can be nourished and enhanced.

The Epic Breakthroughs of the Early Twenty-First Century

Count Girls In

The Psychology of Intuition, Influence, Decision Making and Trust

How Modern Math Reveals Nature’s Deepest Secrets

Theory and Applications of Models of Computation

Cambridge IGCSE® and O Level Additional Mathematics Coursebook

This handbook provides a critical guide to the most central proposition in modern linguistics: the notion, generally known as Universal Grammar, that a universal set of structural principles underlies the grammatical diversity of the world’s languages. Part I considers the implications of Universal Grammar for philosophy of mind and philosophy of language, and examines the history of the theory. Part II focuses on linguistic theory, looking at topics such as explanatory adequacy and how phonology and semantics fit into Universal Grammar. Parts III and IV look respectively at the insights derived from UG-inspired research on language acquisition, and at comparative syntax and language typology, while part V considers the evidence for Universal Grammar in phenomena such as creoles, language pathology, and sign language. The book will be a vital reference for linguists, philosophers, and cognitive scientists.

The contributions in this proceedings volume offer a new perspective on the mathematical ties between France and Italy, and reveal how mathematical developments in these two countries affected one another. The focus is above all on the Peninsula’s influence on French mathematicians, counterbalancing the historically predominant perception that French mathematics was a model for Italian mathematicians. In the process, the book details a subtle network of relations between the two countries, where mathematical exchanges fit into the changing and evolving framework of Italian political and academic structures. It reconsiders the issue of nationalities in all of its complexity, an aspect often neglected in research on the history of mathematics. The works in this volume are selected contributions from a conference held in Lille and Lens (France) in November 2013 on Images of Italian Mathematics in France from Risorgimento to Fascism. The authors include respected historians of mathematics, philosophers of science, historians, and specialists for Italy and intellectual relations, ensuring the book will be of great interest to their peers.

Developed by experienced professionals from reputed civil services coaching institutes and useful for the aspirants of Civil Services Prelim exams, General Studies - Solved & Practice Papers provides an Overview and Compressive Strategy of the UPSC Civil Service Prelim exams. The book contains previous Nine Years (2014 - 2006) Solved Papers and Ten Practice Test Papers for comprehending the latest pattern and for thorough practice to get success in the prestigious exam. Explanatory Notes have been provided for better understanding of the problems asked in the exam. #v&spublishers

Revised edition of the IGCSE Mathematics Core and Extended Coursebook for the 0580 syllabus for examination from 2015.

The Charisma Machine

Examples of Methodology and Methods

Images of Italian Mathematics in France

Advanced Methodologies and Technologies in Modern Education Delivery

The Oxford Handbook of Universal Grammar

Mind, Language and Action

How math helps us solve the universe’s deepest mysteries One of the great insights of science is that the universe has an underlying order. The supreme goal of physicists is to understand this order through laws that describe the behavior of the most basic particles and the forces between them. For centuries, we have searched for these laws by studying the results of experiments. Since the 1970s, however, experiments at the world’s most powerful atom-smashers have offered few new clues. So some of the world’s leading physicists have looked to a different source of insight: modern mathematics. These physicists are sometimes accused of doing ‘fairy-tale physics’, unrelated to the real world. But in *The Universe Speaks in Numbers*, award-winning science writer and biographer Farnelo argues that the physics they are doing is based squarely on the well-established principles of quantum theory and relativity, and part of a tradition dating back to Isaac Newton. With unprecedented access to some of the world’s greatest scientific minds, Farnelo offers a vivid, behind-the-scenes account of the blossoming relationship between mathematics and physics and the research that could revolutionize our understanding of reality. A masterful account of the some of the most groundbreaking ideas in physics in the past four decades. *The Universe Speaks in Numbers* is essential reading for anyone interested in the quest to discover the fundamental laws of nature.

The contents in this volume are based on the program Sets and Computations that was held at the Institute for Mathematical Sciences, National University of Singapore from 30 March until 30 April 2015. This special collection reports on important and recent interactions between the fields of Set Theory and Computation Theory. This includes the new research areas of computational complexity in set theory, randomness beyond the hyperarithmetic, powerful extensions of Goodstein’s theorem and the capturing of large fragments of set theory via elementary-recursive structures. Further chapters are concerned with central topics within Set Theory, including cardinal characteristics, Fraïssé limits, the set-generic multiverse and the study of ideals. Also Computation Theory, which includes computable group theory and measure-theoretic aspects of Hilbert’s Tenth Problem. A volume of this broad scope will appeal to a wide spectrum of researchers in mathematical logic.

“This volume addresses the impact of the geological sciences, from 1963-2013, in such areas as geologic hazards, mineral resources, energy resources, water resources, soil resources, geology and health, geologic education, and the informing of general public policy. The chapters focus on how earth science informs and benefits society”--Provided by publisher.

An inquiry into what it is about our experiences and cultures that brings out the differences and reveals the similarities in us as humans beings, in the vein of Malcolm Gladwell and Daniel Kahneman. Jacob Burak is on a quest to answer the question “are we as human beings, who are separated by different cultures and experiences, similar or different?” Through the lens of behavioural studies, we see how, while our approaches differ and often conflict, we all strive for similar things: love, acceptance, power and understanding. How to Find a Black Cat in a Dark Room offers the latest scientific studies of human behaviour alongside accessible anecdotes to examine the universal human experiences of comparing ourselves to others, the need to belong, the urge to achieve and the anxiety and uncertainty of life itself. More importantly, Burak shows us how, in understanding these behavioural patterns, we learn that we are actually more alike than we are different; that our rivals often make us stronger; and that being trusting can help us live longer. With his inquisitive nature, logical thinking and engaging style, Burak examines whether it is destiny or personality that controls our lives, through intriguing subjects such as: • What are the ten rules for happiness that are entirely under our control? • Why do smart people make stupid mistakes? • What distinguishes bureaucrats and entrepreneurs? • What are the psychological differences between liberals and conservatives? • In what circumstances is it right to surrender our privacy? • Does it pay to trust people?

Social policy in a cold climate

Psychological and Pedagogical Considerations in Digital Textbook Use and Development

The Mathematics Education for the Future Project. Proceedings of the 13th International Conference Mathematics Education in a Connected World

Approaches to Qualitative Research in Mathematics Education

General Studies Paper 1

The Impact of the Geological Sciences on Society

This e-book includes the latest outcomes produced by a broad range of fNIRS research with activation of prefrontal cortex, from methodological one to clinical one, providing a forum for scientists planning functional studies of prefrontal brain activation. Reading this book, one will find the possibility that fNIRS could replace fMRI in the near future, and realize that even our aesthetic feeling is measurable. This will serve as a reference repository of knowledge from these fields as well as a conduit of information from leading researchers. In addition it offers an extensive cross-referencing system that will facilitate search and retrieval of information about NIRS measurements in activation studies. Researchers interested in fNIRS would benefit from an overview about its potential utilities for future research directions.

This easy-to-use classroom resource provides a series of lessons, templates, and exemplars for practical classroom application, and will help teachers understand the content standards and the mathematical practice standards in order to develop meaningful mathematics lessons. This book primarily focuses on teachers' procedural knowledge of standards implementation as they apply the information and resources presented in this book. Mathematical rigor in the classroom for students includes lessons that target conceptual knowledge, procedural knowledge, factual knowledge, meta-cognitive knowledge, and the application of this knowledge in context. It also includes opportunities for teachers to develop all three dimensions of rigor as it applies to the Common Core.

"This book offers balanced coverage of the technological solutions that contribute to the design of digital textbooks and contribute to achieving learning objectives, offering an emphasis on assessment mechanisms and learning theory"--

A readily understandable exploration of how figures are badly reported or deliberately misrepresented everywhere from political arguments and briefings to business presentations and shopping offers. Praise for Hugh Barker’s Million Dollar Maths: ‘Great fun. A clear, original and highly readable account of the curious relationship between mathematics and money.’ Professor Ian Stewart - author of Significant Figures ‘A lively crash course in the mathematics of gambling, investing, and managing. Hugh Barker makes deep ideas fun and profitable.’ William Poundstone - author of How to Predict the Unpredictable Politicians, economists, scientists, journalists . . . all of them have been known to bend the truth and to twist the facts from time to time. But surely the numbers and statistics they rely on are cold, hard objective facts that tell the real story? Of course the truth is much murkier than that. Figures can be misinterpreted, misunderstood, misconstrued and misused in hundreds of different ways. This book takes a look at the many ways that statistical information can be badly reported or deliberately misused in all walks of life, from political arguments, to business presentations, to more local concerns such as shopping offers and utility bills. A polemical guide to how numbers are used to mislead, which is intended to help the reader through the minefield of dubious stats and lying numbers.

General Studies Solved & Practice Paper

Bounded Gaps Between Primes

The Introduction and Implementation of Onscreen Marking in Hong Kong

The Universe Speaks in Numbers

Closing the Gap

Core 1,3

Recent innovations and new technologies in education have altered the way teachers approach instruction and learning and can provide countless advantages. The pedagogical value of specific technology tools and the cumulative effects of technology exposure on student learning over time are two areas that need to be explored to better determine the improvements needed in the modern classroom. Advanced Methodologies and Technologies in Modern Education Delivery provides emerging research on educational models in the continually improving classroom. While highlighting the challenges facing modern in-service and pre-service teachers when educating students, readers will learn information on new methods in curriculum development, instructional design, and learning assessments to implement within their classrooms. This book is a vital resource for pre-service and in-service teachers, teacher education professionals, higher education administrative professionals, and researchers interested in new curriculum development.

These resources have been created for the Cambridge IGCSE® and O Level Additional Mathematics syllabuses (0606/4037), for first examination from 2020. This coursebook gives clear explanations of new mathematical concepts followed by exercises. This allows students to practise the skills required and gain the confidence to apply them. Classroom discussion exercises and extra challenge questions have been designed to deepen students’ understanding and stimulate interest in Mathematics. Answers to coursebook questions are in the back of the book.

*A fascinating examination of technological utopianism and its complicated consequences. In *The Charisma Machine*, Morgan Ames chronicles the life and legacy of the *One Laptop per Child* project and explains why—despite its failures—the same utopian visions that inspired OLPC still motivate other projects trying to use technology to “disrupt” education and development. Announced in 2005 by MIT Media Lab cofounder Nicholas Negroponte, *One Laptop per Child* promised to transform the lives of children across the Global South with a small, sturdy, and cheap laptop computer, powered by a hand crank. In reality, the project fell short in many ways—starting with the hand crank, which never materialized. Yet the project remained charismatic to many who were captivated by its claims of access to educational opportunities previously out of reach. Behind its promises, OLPC, like many technology projects that make similarly grand claims, had a fundamentally flawed vision of who the computer was made for and what role technology should play in learning. Drawing on fifty years of history and a seven-month study of a model OLPC project in Paraguay, Ames reveals that the laptops were not only frustrating to use, easy to break, and hard to repair, they were designed for “technically precocious boys”—idealized younger versions of the developers themselves—rather than the children who were actually using them. *The Charisma Machine* offers a cautionary tale about the allure of technology hype and the problems that result when utopian dreams drive technology development.*

This book constitutes the proceedings of the 8th International and Interdisciplinary Conference on Modeling and Using Context, CONTEXT 2013, held in Annecy, France, in October/November 2013. The 23 full papers and 9 short papers presented were carefully reviewed and selected from numerous submissions. In addition the book contains two keynote speeches and 9 poster papers. They cover cutting-edge results from the wide range of disciplines concerned with context, including: Cognitive Sciences (Linguistics, Psychology, Computer Science, Neuroscience), and computer science (artificial intelligence, logics, ubiquitous and pervasive computing, context-awareness systems), and the Social Sciences and Organizational Sciences, as well as the Humanities and all application areas, including Medicine and Law.

Near-Infrared Spectroscopy (NIRS) in Functional Research of Prefrontal Cortex

Critical Teacher Education

Sets And Computations

The Creative Artist, Mental Disturbance, and Mental Health

CTET Success Master Paper 1 for Class 1 to 5 for 2021 Exams

This book discusses Hong Kong’s use of onscreen marking (OSM) in public examinations. Given that Hong Kong leads the way in OSM innovation, this book has arisen from a recognised need to provide a comprehensive, coherent account of the findings of various separate but linked validation studies of onscreen public examinations in Hong Kong. The authors discuss their experience of the validation process, demonstrating how high-stakes innovation should be fully validated by a series of research studies in order to satisfy key stakeholders. Cambridge AS and A Level Mathematics is a revised series to ensure full syllabus coverage. This coursebook has been revised and updated to ensure that it meets the requirements for the Pure Mathematics 1 (P1) unit of Cambridge AS and A Level Mathematics (9709). Additional materials have been added to sections on quadratics, coordinate geometry, vectors and differentiation. All of the review questions have been updated to reflect changes in the style of questions asked in the course.

The volume takes on the much-needed task of describing and explaining the nature of the relations and interactions between mind, language and action in defining mentality. Papers by renowned philosophers unravel what is increasingly acknowledged to be the enacted nature of the mind, memory and language-acquisition, whilst also calling attention to Wittgenstein’s contribution. The volume offers unprecedented insight, clarity, scope, and currency.

This Cambridge IGCSE® Mathematics Core and Extended series has been authored to meet the requirements of the Cambridge IGCSE® Mathematics syllabus (0580/0980), for first examination from 2020. This second edition of Cambridge IGCSE® Mathematics Core and Extended Coursebook offers complete coverage of the Cambridge IGCSE Mathematics (0580/0980) syllabus. It contains detailed explanations and clear worked examples, followed by practice exercises to allow students to consolidate the required mathematical skills. The coursebook offers opportunities for checking prior knowledge before starting a new chapter and testing knowledge with end-of-chapter and exam-practice exercises. Core and Extended materials are presented within the same book and are clearly signposted to allow students to see the range of mathematics required for study at this level. Answers are at the back of the book.

Lying Numbers

The Quest to Understand Prime Numbers
 Validating Technological Innovation
 Cambridge International AS and A Level Mathematics: Pure Mathematics 1 Coursebook
 Proceedings of the 36th International Wittgenstein Symposium
 11th Annual Conference, TAMC 2014, Chennai, India, April 11-13, 2014, Proceedings

Scientists today have access to an unprecedented arsenal of high-tech tools that can be used to thoroughly characterize biological systems of interest. High-throughput “omics” technologies enable to generate enormous quantities of data at the DNA, RNA, epigenetic and proteomic levels. One of the major challenges of the post-genomic era is to extract functional information by integrating such heterogeneous high-throughput genomic data. This is not a trivial task as we are increasingly coming to understand that it is not individual genes, but rather biological pathways and networks that drive an organism’s response to environmental factors and the development of its particular phenotype. In order to fully understand the way in which these networks interact (or fail to do so) in specific states (disease for instance), we must learn both, the structure of the underlying networks and the rules that govern their behavior. In recent years there has been an increasing interest in methods that aim to infer biological networks. These methods enable the opportunity for better understanding the interactions between genomic features and the overall structure and behavior of the underlying networks. So far, such network models have been mainly used to identify and validate new interactions between genes of interest. But ultimately, one could use these networks to predict large-scale effects of perturbations, such as treatment by multiple targeted drugs. However, currently, we are still at an early stage of comprehending methods and approaches providing a robust statistical framework to quantitatively assess the quality of network inference and its predictive potential. The scope of this Research Topic in Bioinformatics and Computational Biology aims at addressing these issues by investigating the various, complementary approaches to quantify the quality of network models. These “validation” techniques could focus on assessing quality of specific interactions, global and local structures, and predictive ability of network models. These methods could rely exclusively on in silico evaluation procedures or they could be coupled with novel experimental designs to generate the biological data necessary to properly validate inferred networks.

Buku IGCSE ini merupakan aplikasi dari pelajaran matematika yang berbasis di University of Cambridge. Berisi kumpulan soal lengkap dengan kunci jawaban. Memudahkan para siswa dalam menghadapi pelajaran matematika. Semoga buku ini bisa menjadi jembatan bagi para siswa yang ingin menguasai mata pelajaran matematika dengan baik.

Developed by experienced professionals from reputed civil services coaching institutes and recommended by many aspirants of Civil Services Preliminary exam, General Studies Paper - I contains Precise and Thorough Knowledge of Concepts and Theories essential to go through the prestigious exam. Solved Examples are given to explain all the concepts for thorough learning. Explanatory Notes have been provided in every chapter for better understanding of the problems asked in the exam. #v&spublishers

Mathematics plays an important part in every person’s life, so why isn’t everyone good at it? The Routledge International Handbook of Dyscalculia and Mathematical Learning Difficulties brings together commissioned pieces by a range of hand-picked influential, international authors from a variety of disciplines, all of whom share a high public profile. More than fifty experts write about mathematics learning difficulties and disabilities from a range of perspectives and answer questions such as: What are mathematics learning difficulties and disabilities? What are the key skills and concepts for learning mathematics? How will IT help, now and in the future? What is the role of language and vocabulary? How should we teach mathematics? By posing notoriously difficult questions such as these and studying the answers The Routledge International Handbook of Dyscalculia and Mathematical Learning Difficulties is the authoritative volume and is essential reading for academics in the field of mathematics. It is an incredibly important contribution to the study of dyscalculia and mathematical difficulties in children and young adults.

Queering, Trans-Forming, and En-Gendering Mathematics and Mathematics Education

Learning from Emergent Bilingual Latinx Learners in K-12

Cambridge IGCSE Mathematics Core and Extended Coursebook with CD-ROM

The Routledge International Handbook of Dyscalculia and Mathematical Learning Difficulties

Shifting to Meet Today’s Standards

Degree-constrained editing of small-degree graphs

This volume contains contributions from the Gulf International Conference in Applied Mathematics, held at the Gulf University for Science & Technology. The proceedings reflects the three major themes of the conference. The first of these keynote address by Professor Philip Maini. The second theme was computational science/numerical analysis, including a keynote address by Professor Grigori Shishkin. The conference also addressed more general applications topics, with papers on mechanics, optimization, scheduling problems and engineering applications, as well as a keynote by Professor Ali Nayfeh.

This book constitutes the refereed proceedings of the 11th Annual Conference on Theory and Applications of Models of Computation, TAMC 2014, held in Chennai, India, in April 2014. The 27 revised full papers presented were carefully reviewed. The papers explore the algorithmic foundations, computational methods and computing devices to meet today’s and tomorrow’s challenges of complexity, scalability and sustainability, with wide-ranging impacts on everything from the design of understanding of economic markets and social networks.

This thesis deals with degree-constrained graph modification problems. In particular, we investigate the computational complexity of DAG Realization and Degree Anonymity. The DAG Realization problem is, given a multiset of positive integers k and s , to decide whether at most s graph modification operations can be performed in G in order to obtain a k -anonymous graph, that is, a graph where for each vertex there are $k \pm 1$ other vertices with the same degree. We claim there are presumably no polynomial-time algorithms that can solve every instance of these problems. Confronted with this worst-case intractability, we perform a parameterized complexity study in order to detect efficiently solvable special cases. Our goal herein is to develop fixed-parameter algorithms where the seemingly unavoidable exponential dependency in the running time is confined to a parameter of the input. If the parameter is small, then the corresponding fixed-parameter algorithm measures some structure in the input whose exploitation makes the particular input tractable. Considering Degree Anonymity, two natural parameters provided with the input are anonymity level k and solution size s . However, we will show with respect to the parameter s even if $k = 2$. This means that the existence of fixed-parameter algorithms for s and k is very unlikely. Thus, other parameters have to be considered. We will show that the parameter maximum vertex degree is v Degree Anonymity. Herein, for Degree Anonymity, we consider the maximum degree of the input graph. Considering DAG Realization, we take the maximum degree in a realizing DAG. Due to the problem definition, we can easily determine the maximum over all integers in the given multiset. We provide fixed-parameter algorithms with respect to the maximum degree for DAG Realization and for Anonym E-Ins. The later is the variant of Degree Anonymity when only edge insertions are allowed. If we allow edge deletions or vertex deletions as graph modification operations, then we can show that the corresponding variants of Degree Anonymity—called Anonym V-Del and Anonym E-Del—are NP-complete even if the maximum vertex degree is v . Strong intractability results for Anonym E-Del and Anonym V-Del proving that they remain NP-complete in several restricted graph classes. Studying the approximability of natural optimization problems associated with Anonym E-Del or Anonym V-Del, showing that none of the considered problems can be approximated in polynomial time better than within a factor of $n^{1/2}$ where n denotes the number of vertices in the input. Furthermore, for the optimization variants where the solution is required to be a subgraph of the input, the anonymity level k , this inapproximability even holds if we allow a running time that is exponential in s . Observe that DAG Realization also can be seen as degree-constrained graph modification problem where only arc insertions are allowed. Our task is to insert arcs to obtain a realizing DAG for the given multiset. The above classification with respect to the parameter maximum degree shows that in graphs with small maximum degree the modification operation edge deletion and arc deletion. There is a plausible explanation for this behavior: When the maximum degree is small, then there is a high freedom in inserting edges or arcs as for a given vertex almost all other vertices can be chosen as new neighbor. Observe that the requirement that the directed graph shall be acyclic restricts this freedom. In Anonym E-Ins, we do not have restrictions on this freedom. In fact, exploiting this freedom in our implementation for Anonym E-Ins, we show that our theoretical heuristics and lower bounds. Experiments on several large-scale real-world datasets show that our implementation significantly improves on a recent heuristic and provides (provably) optimal solutions on about 21 % (56 of 260) of the real-world instances. A mathematical record of bounded prime gaps breakthroughs, from Erdős to Polymath8, with linked computer programs and complete appendices.

How Maths and Statistics Are Twisted and Abused

The Latin Sisters, from Risorgimento to Fascism

Advances in Applied Mathematics

Policies and their consequences since the crisis

How to Find a Black Cat in a Dark Room

The Life, Death, and Legacy of One Laptop per Child

1. Success Master Study Guides focus in the preparation of CTET teaching Exam 2. This book deals with CTET Mathematics and Science Paper – I (Classes 1-5) 3. Divided into 5 main Sections completely prepared on the latest exam pattern. 4. Provides Previous years’ Solved Papers, 2 Practice Sets and more than 3000 MCQs are given for thorough practice. CTET provides you with an opportunity to make a mark as an educator while teaching in Central Government School. Prepared as per National Curriculum Framework, here’s representing the updated edition of “Success Master CTET Paper I (Class I-V)” that serves as a study guide for the candidates who are willing to appear for the exam this year. The book provides focused study material dividing the entire syllabus into 5 majors providing the complete coverage. With more than 3000 MCQs are provided for the quick revision of the concepts. Chapterwise coverage of the previous Years questions along with the Trend Analysis help aspirants for better preparation. Lastly, Solved Paper 2021 & 2 Practice Sets are given leaving no stones untouched. Preparation done from this book proves to be highly useful for CTET Paper 1 in achieving good rank in the exam. TOC Solved Paper 2021 (January), Solved Paper 2019 (December), Solved Paper 2019 (July), Solved Paper 2018 (December), Solved Paper 2016 (September), Child Development and Pedagogy, English Language and Pedagogy, Hindi Bhasha evm Shiksha-shastra, Mathematics and Pedagogy, Environmental Studies and Pedagogy, Practice Sets (1-2).

This volume documents a range of qualitative research approaches emerged within mathematics education over the last three decades, whilst at the same time revealing their underlying methodologies. Continuing the discussion as begun in the two 2003 ZDM issues dedicated to qualitative empirical methods, this book presents a state-of-the-art overview on qualitative research in mathematics education and beyond. The structure of the book allows the reader to use it as an actual guide for the selection of an appropriate methodology, on a basis of both theoretical depth and practical implications. The methods and examples illustrate how different methodologies come to life when applied to a specific question in a specific context. Many of the methodologies described are also applicable outside mathematics education, but the examples provided are chosen so as to situate the approach in a mathematical context.

To succeed in science and tech fields today, girls don’t have to change who they are. A girl who combines her natural talents, interests, and dreams with STEM skills has a greater shot at a career she loves and a salary she deserves. The authors present compelling research in a conversational, accessible style and provide specific advice and takeaways for each stage of schooling from elementary school through college, followed by comprehensive STEM resources. This isn’t a book about raising competitive, test-acing girls in lab coats; this is about raising happy, confident girls who realize the world of opportunities before them.

THE COMPLETE PHI LEARNING GUIDE TO MATHEMATICS FOR JEE(MAIN)

Empowering Girls to Combine Any Interests with STEM to Open Up a World of Opportunity

Quantitative Assessment and Validation of Network Inference Methods in Bioinformatics

Study Guide for CTET Paper 2 (Class 6 - 8 Teachers) Mathematics/ Science with Past Questions

IGCSE