

## Complex Analysis H A Priestly

In Guardians of the Buddha’s Home, Jessica Starling draws on nearly three years of ethnographic research to provide a comprehensive view of Jōdo Shinshū (True Pure Land) temple life with temple wives (known as bōmori, or temple guardians) at its center. Throughout, she focuses on “domestic religion,” a mode of doing religion centering on more informal religious expression that has received scant attention in the scholarly literature. The Buddhist temple wife’s movement back and forth between the main hall and the “back stage” of the kitchen and family residence highlights the way religious meaning cannot be confined to canonical texts or to the area of the temple prescribed for formal worship. Starling argues that attaining Buddhist faith (shinjin) is just as likely to occur in response to a simple act of hospitality, a sense of community experienced at an informal temple gathering, or an aesthetic affinity with the temple space that has been carefully maintained by the bōmori as it is from hearing the words of a Pure Land sutra intoned by a professional priest. For temple wives, the spiritual practice of button hōsha (repayment of the debt owed to the Buddha for one’s salvation) finds expression through the conscientious stewardship of temple donations, caring for the Buddha’s home and opening it to lay followers, raising the temple’s children, and propagating the teachings in the domestic sphere. Engaging with what religious scholars have called the “turn to affect,” Starling’s work investigates in personal detail how religious dispositions are formed in individual practitioners. The answer, not surprisingly, has as much to do with intimate relationships and quotidian practices as with formal liturgies or scripted sermons.

Recent decades have seen profound changes in the way we understand complex analysis. This new work presents a much-needed modern treatment of the subject, incorporating the latest developments and providing a rigorous yet accessible introduction to the concepts and proofs of this fundamental branch of mathematics. With its thorough review of the prerequisites and well-balanced mix of theory and practice, this book will appeal both to readers interested in pursuing advanced topics as well as those wishing to explore the many applications of complex analysis to engineering and the physical sciences.
\* Reviews the necessary calculus, bringing readers quickly up to speed on the material
\* Illustrates the theory, techniques, and reasoning through the use of short proofs and many examples
\* Demystifies complex versus real differentiability for functions from the plane to the plane
\* Develops Cauchy’s Theorem, presenting the powerful and easy-to-use winding-number version
\* Contains over 100 sophisticated graphics to provide helpful examples and reinforce important concepts

The purpose of this book is to demonstrate that complex numbers and geometry can be blended together beautifully. This results in easy proofs and natural generalizations of many theorems in plane geometry, such as the Napoleon theorem, the Ptolemy-Euler theorem, the Simson theorem, and the Morley theorem. The book is self-contained - no background in complex numbers is assumed - and can be covered at a leisurely pace in a one-semester course. Many of the chapters can be read independently. Over 100 exercises are included. The book would be suitable as a text for a geometry course, or for a problem solving seminar, or as enrichment for the student who wants to know more.

A well-researched work! Fr. Cornelius has put so much time, energy and skill into this book and it is my sincere wish that bishops, priests, formators, and seminarians get a copy of this book for both informative and formative study. I hope it will not just form part of our already bulky libraries but will be seriously and conscientiously read in view of formation towards transformation. A million thanks to the author for this soul-searching contribution towards an integrated formation for our seminarians in Igboland. If this challenge is taken seriously, the face of the priesthood in Igboland shall be renewed. Sr. Theresa Eke Clinical Psychologist & Formator, Daughters of Charity, Eleme, Portharcourt
The Future of the Catholic Priesthood in Igboland: Dangers and Challenges Ahead is a compelling book on the problems of the Catholic priesthood. The book makes it clear that as in Europe and America, priests in Nigeria sometimes constitute a source of great worry to the Church. The main reasons for priestly misbehavior among Igbo priests are wrong motive, as well as deficient training. The book calls for purity of intention among aspirants to the priesthood. Only Jesus Christ’s ideal of the priesthood as service is the true model. In it, Fr. Cornelius combines two apparently opposing styles of a bestseller and a research work. Let this book be read by all who want to see a drastic improvement in the quality of priests. Rev. Fr. Dr. Augustine Oburota Rector, Pope John Paul II Major Seminary, Okpuno, Awka

An Introduction to Laplace Transforms and Fourier Series

Domestic Religion in Contemporary Jōdo Shinshū

Geometry

Visual Complex Analysis

Complex Algebraic Curves

This textbook is intended for a one semester course in complex analysis for upper level undergraduates in mathematics. Applications, primary motivations for this text, are presented hand-in-hand with theory enabling this text to serve well in courses for students in engineering or applied sciences. The overall aim in designing this text is to accommodate students of different mathematical backgrounds and to achieve a balance between presentations of rigorous mathematical proofs and applications. The text is adapted to enable maximum flexibility to instructors and to students who may also choose to progress through the material outside of coursework. Detailed examples may be covered in one course, giving the instructor the option to choose those that are best suited for discussion. Examples showcase a variety of problems with completely worked out solutions, assisting students in working through the exercises. The numerous exercises vary in difficulty from simple applications of formulas to more advanced project-type problems. Detailed hints accompany the more challenging problems. Multi-part exercises may be assigned to individual students, to groups as projects, or serve as further illustrations for the instructor. Widely used graphics clarify both concrete and abstract concepts, helping students visualize the proofs of many results. Freely accessible solutions to every-other-odd exercise are posted to the book ’ s Springer website. Additional solutions for instructors ’ use may be obtained by contacting the authors directly. Complex analysis is a classic and central area of mathematics, which is studied and exploited in a range of important fields, from number theory to engineering. Introduction to Complex Analysis was first published in 1985, and for this much awaited second edition the text has been considerably expanded, while retaining the style of the original. More detailed presentation is given of elementary topics, to reflect the knowledge base of current students. Exercise sets have been substantially revised and enlarged, with carefully graded exercises at the end of each chapter. This is the latest addition to the growing list of Oxford undergraduate textbooks in mathematics, which includes: Biggs: Discrete Mathematics 2nd Edition, Cameron: Introduction to Algebra, Needham: Visual Complex Analysis, Kaye and Wilson: Linear Algebra, Acheson: Elementary Fluid Dynamics, Jordan and Smith: Nonlinear Ordinary Differential Equations, Smith: Numerical Solution of Partial Differential Equations, Wilson: Graphs, Colourings and the Four-Colour Theorem, Bishop: Neural Networks for Pattern Recognition, Gelman and Nolan: Teaching Statistics. Introduction to integration provides a unified account of integration theory, giving a practical guide to the Lebesgue integral and its uses, with a wealth of illustrative examples and exercises. The book begins with a simplified Lebesgue-style integral (in lieu of the more traditional Riemann integral), intended for a first course in integration. This suffices for elementary applications, and serves as an introduction to the core of the book. The final chapters present selected applications, mostly drawn from Fourier analysis. The emphasis throughout is on integrable functions rather than on measure. The book is designed primarily as an undergraduate or introductory graduate textbook. It is similar in style and level to Priestley’s Introduction to complex analysis, for which it provides a companion volume, and is aimed at both pure and applied mathematicians. Prerequisites are the rudiments of integral calculus and a first course in real analysis.

A lively and vivid look at the material from function theory, including the residue calculus, supported by examples and practice exercises throughout. There is also ample discussion of the historical evolution of the theory, biographical sketches of important contributors, and citations - in the original language with their English translation - from their classical works. Yet the book is far from being a mere history of function theory, and even experts will find a few new or long forgotten gems here. Destined to accompany students making their way into this classical area of mathematics, the book offers quick access to the essential results for exam preparation. Teachers and interested mathematicians in finance, industry and science will profit from reading this again and again, and will refer back to it with pleasure.

Introduction to Algebra

The Joy of the Gospel

Complex Variables with Applications

A Complex Analysis Problem Book

Introduction to Real Analysis

Mortality improvements, uncertainty in future mortality trends and the relevant impact on life annuities and pension plans constitute important topics in the field of actuarial mathematics and life insurance techniques. In particular, actuarial calculations concerning pensions, life annuities and other living benefits (provided, for example, by long-term care insurance products and whole life sickness covers) are based on survival probabilities which necessarily extend over a long time horizon. In order to avoid underestimation of the related liabilities, the insurance company (or the pension plan) must adopt an appropriate forecast of future mortality. Great attention is currently being devoted to the management of life annuity portfolios, both from a theoretical and a practical point of view, because of the growing importance of annuity benefits paid by private pension schemes. In particular, the progressive shift from defined benefit to defined contribution pension schemes has increased the interest in life annuities with a guaranteed annual amount. This book provides a comprehensive and detailed description of methods for projecting mortality, and an extensive introduction to some important issues concerning longevity risk in the area of life annuities and pension benefits. It relies on research work carried out by the authors, as well as on a wide teaching experience and in CPD (Continuing Professional Development) initiatives. The following topics are dealt with: life annuities in the framework of post-retirement income strategies; the basic mortality model; recent mortality trends that have been experienced; general features of projection models; discussion of stochastic projection models, with numerical illustrations; measuring and managing longevity risk.

Designed for the undergraduate student with a calculus background but no prior experience with complex analysis, this text discusses the theory of the most relevant mathematical topics in a student-friendly manner. With a clear and straightforward writing style, concepts are introduced through numerous examples, illustrations, and applications. Each section of the text contains an extensive exercise set containing a range of computational, conceptual, and geometric problems. In the text and exercises, students are guided and supported through numerous proofs providing them with a higher level of mathematical insight and maturity. Each chapter contains a separate section devoted exclusively to the applications of complex analysis to science and engineering, providing students with the opportunity to develop a practical and clear understanding of complex analysis. The Mathematica syntax from the second edition has been updated to coincide with version 8 of the software. --

Using an extremely clear and informal approach, this book introduces readers to a rigorous understanding of mathematical analysis and presents challenging math concepts as clearly as possible. The real number system. Differential calculus of functions of one variable.

Riemann integral functions of one variable. Integral calculus of real-valued functions. Metric Spaces. For those who want to gain an understanding of mathematical analysis and challenging mathematical concepts.

One of the ways in which topology has influenced other branches of mathematics in the past few decades is by putting the study of continuity and convergence into a general setting. This new edition of Wilson Sutherland’s classic text introduces metric and topological spaces by describing some of that influence. The aim is to move gradually from familiar real analysis to abstract topological spaces, using metric spaces as a bridge between the two. The language of metric and topological spaces is established with continuity as the motivating concept. Several concepts are introduced, first in metric spaces and then repeated for topological spaces, to help convey familiarity. The discussion develops to cover connectedness, compactness and completeness, a trio widely used in the rest of mathematics.

Topology also has a more geometric aspect which is familiar in popular expositions of the subject as ‘rubber-sheet geometry’, with pictures of Möbius bands, doughnuts, Klein bottles and the like: this geometric aspect is illustrated by describing some standard surfaces, and it is shown how all this fits into the same story as the more analytic developments. The book is primarily aimed at second- or third-year mathematics students. There are numerous exercises, many of the more challenging ones accompanied by hints, as well as a companion website, with further explanations and examples as well as material supplementary to that in the book.

Introduction to Metric and Topological Spaces

Complex Analysis with Applications

Evangelii Gaudium

Introduction and Applications

*Dr Smithies’ analysis of the process whereby Cauchy created the basic structure of complex analysis, begins by describing the 18th century background. He then proceeds to examine the stages of Cauchy’s own work, culminating in the proof of the residue theorem. Controversies associated with the the birth of the subject are also considered in detail. Throughout, new light is thrown on Cauchy’s thinking during this watershed period. This authoritative book is the first to make use of the whole spectrum of available original sources.*

*In August 1859 Bernhard Riemann, a little-known 32-year old mathematician, presented a paper to the Berlin Academy titled: “On the Number of Prime Numbers Less Than a Given Quantity.” In the middle of that paper, Riemann made an incidental remark à€” a guess, a hypothesis. What he tossed out to the assembled mathematicians that day has proven to be almost cruelly compelling to countless scholars in the ensuing years. Today, after 150 years of careful research and exhaustive study, the question remains. Is the hypothesis true or false? Riemann’s basic inquiry, the primary topic of his paper, concerned a straightforward but nevertheless important matter of arithmetic à€” defining a precise formula to track and identify the occurrence of prime numbers. But it is that incidental remark à€” the Riemann Hypothesis à€” that is the truly astonishing legacy of his 1859 paper. Because Riemann was able to see beyond the pattern of the primes to discern traces of something mysterious and mathematically elegant shrouded in the shadows à€” subtle variations in the distribution of those prime numbers. Brilliant for its clarity, astounding for its potential consequences, the Hypothesis took on enormous importance in mathematics. Indeed, the successful solution to this puzzle would herald a revolution in prime number theory. Proving or disproving it became the greatest challenge of the age. It has become clear that the Riemann Hypothesis, whose resolution seems to hang tantalizingly just beyond our grasp, holds the key to a variety of scientific and mathematical investigations. The making and breaking of modern codes, which depend on the properties of the prime numbers, have roots in the Hypothesis. In a series of extraordinary developments during the 1970s, it emerged that even the physics of the atomic nucleus is connected in ways not yet fully understood to this strange conundrum. Hunting down the solution to the Riemann Hypothesis has become an obsession for many à€” the veritable “great white whale” of mathematical research. Yet despite determined efforts by generations of mathematicians, the Riemann Hypothesis defies resolution. Alternating passages of extraordinarily lucid mathematical exposition with chapters of elegantly composed biography and history, Prime Obsession is a fascinating and fluent account of an epic mathematical mystery that continues to challenge and excite the world. Posited a century and a half ago, the Riemann Hypothesis is an intellectual feast for the cognoscenti and the curious alike. Not just a story of numbers and calculations, Prime Obsession is the engrossing tale of a relentless hunt for an elusive proof à€” and those who have been consumed by it.*

*This very well written and accessible book emphasizes the reasons for studying measure theory, which is the foundation of much of probability. By focusing on measure, many illustrative examples and applications, including a thorough discussion of standard probability distributions and densities, are opened. The book also includes many problems and their fully worked solutions.*

*David shows all that is in his heart to the LORD God, and accepts the blessing God offers; by submitting and expressing appreciation to God, which is to establish his throne forever! Then went King David in (to the tabernacle, where the Ark was kept?), and sat before the LORD, and he said, who am I, O Lord GOD (that God would take time out from running the universe to consider me)? And what is my house that thou hast brought me hitherto (or to this place of honor)? And this was yet a small thing in thy sight (or not a difficult thing at all for you to do), O Lord GOD; but thou hast spoken also of thy servant’s house for a great while to come (eternity, in fact, is what the LORD God said!). And is this the manner of man (or is this what God have in store (or the final state) for man?), O Lord GOD? And what can David say more unto thee? for thou, Lord GOD knows thy servant. For thy word’s sake, and according to thine own heart, hast thou done all these great things, to make thy servant know them (these great things). Wherefore thou art great, O LORD God: for there is none like thee, neither is there any God beside thee, according to all that we have (learned and, ) heard with our ears. And what one (or other?) nation in the earth is like thy people, even like Israel, whom God went to redeem for a people to himself, and to make him a name, and to do for you great things and terrible (or awesome things?), for thy land, before thy people, which thou redeemedst to thee from Egypt (or the heathen world), (and) from the (other?) nations and their gods (or false gods and idols!)? For thou hast confirmed to thyself thy people Israel to be a people unto thee forever: and thou, LORD, art become their God (forever?). -2 Samuel 7:18 through 7:24*

*Prime Obsession*

*Measure, Integral and Probability*

*Complex Numbers and Geometry*

*Purity and Danger*

*A Straightforward Approach*

The basics of what every scientist and engineer should know, from complex numbers, limits in the complex plane, and complex functions to Cauchy’s theory, power series, and applications of residues. 1974 edition.

Purity and Danger is acknowledged as a modern masterpiece of anthropology. It is widely cited in non-anthropological works and gave rise to a body of application, rebuttal and development within anthropology. In 1995 the book was included among the Times Literary Supplement’s hundred most influential non-fiction works since WWII. Incorporating the philosophy of religion and science and a generally holistic approach to classification, Douglas demonstrates the relevance of anthropological enquiries to an audience outside her immediate academic circle. She offers an approach to understanding rules of purity by examining what is considered unclean in various cultures. She sheds light on the symbolism of what is considered clean and dirty in relation to order in secular and religious, modern and primitive life.

The perfect gift! A specially priced, beautifully designed hardcover edition of The Joy of the Gospel with a foreword by Robert Barron and an afterword by James Martin, SJ. “The joy of the gospel fills the hearts and lives of all who encounter Jesus… In this Exhortation I wish to encourage the Christian faithful to embark upon a new chapter of evangelization marked by this joy, while pointing out new paths for the Church’s journey in years to come.” – Pope Francis This special edition of Pope Francis’s popular message of hope explores themes that are important for believers in the 21st century. Examining the many obstacles to faith and what can be done to overcome those hurdles, he emphasizes the importance of service to God and all his creation. Advocating for “the homeless, the addicted, refugees, indigenous peoples, the elderly who are increasingly isolated and abandoned,” the Holy Father shows us how to respond to poverty and current economic challenges that affect us locally and globally. Ultimately, Pope Francis demonstrates how to develop a more personal relationship with Jesus Christ, “to recognize the traces of God’s Spirit in events great and small.” Profound in its insight, yet warm and accessible in its tone, The Joy of the Gospel is a call to action to live a life motivated by divine love and, in turn, to experience heaven on earth. Includes a foreword by Robert Barron, author of Catholicism: A Journey to the Heart of the Faith and James Martin, SJ, author of Jesus: A Pilgrimage

This Second Edition of a classic algebra text includes updated and comprehensive introductory chapters,new material on axiom of Choice, p-groups and local rings, discussion of theory and applications, and over 300 exercises. It is an ideal introductory text for all Year 1 and 2 undergraduate students in mathematics.

AN INTRODUCTION TO COMPLEX ANALYSIS

A First Course in Algebraic Topology  
Mathematical Analysis

An Introduction to Complex Analysis  
1 and 2 Samuel (Thy Throne Forever I)

Introduction to Complex AnalysisOxford University Press, USA

This self-contained introduction to algebraic topology is suitable for a number of topology courses. It consists of about one quarter 'general topology' (without its usual pathologies) and three quarters 'algebraic topology' (centred around the fundamental group, a readily grasped topic which gives a good idea of what algebraic topology is). The book has emerged from a series of lectures given to senior undergraduates and beginning postgraduates. It has been written at a level which will enable the reader to use it for self-study as well as a course book. The approach is leisurely and a geometric flavour is evident throughout. The many illustrations and over 350 exercises will prove invaluable as a teaching aid. This account will be welcomed by advanced students. Episodes in the transformation of our understanding of sound and space, from binaural listening in the nineteenth century to contemporary sound art. The relationship between sound and space has become central to both creative practices in music and sound art and contemporary scholarship on sound. Entire subfields have emerged in connection to the spatial history of science and technology and the history of music and sound art. She investigates the binaural apparatus that allowed nineteenth-century listeners to observe sound in three dimensions; examines the development of military technologies for sound location during World War I; revisits experiments in stereo sound at Bell Telephone Laboratories in the 1920s; explores the development of multichannel "spatial music" in the 1950s and sound installation art in the 1960s; analyzes the mapping of soundscapes; and investigates contemporary approaches to sonic urbanism, sonic practices that reimagine urban environments through sound. Rich in detail but accessible and engaging. Includes maps, and diagrams of devices and artworks. Stereophonica brings an acute, imaginative, and much-needed historical sensibility to the growing literature around sound and space.

This second edition of Priestley's well-known text is aimed at students taking an introductory core course in Complex Analysis, a classical and central area of mathematics.

Their History, Culture, and Character

Sound and Space in Science, Technology, and the Arts

Complex Variables

Bernhard Riemann and the Greatest Unsolved Problem in Mathematics

The Dangers and Challenges Ahead

This text is a guided tour of geometry, from Euclid through to algebraic geometry. It shows how mathematicians use a variety of techniques to tackle problems, and it links geometry to other branches of mathematics. It is a teaching text, with a large number of exercises woven into the exposition. Topics covered include: ruler and compass constructions; transformations; triangle and circle theorems; classification of isometries and groups of isometries in dimensions 2 and 3; Platonic solids; conics; similarities; affine; projective and Möbius transformations; non-Euclidean geometry; projective geometry; and the beginnings of algebraic geometry.

This new edition of Introduction to Lattices and Order presents a radical reorganization and updating, though its primary aim is unchanged. The explosive development of theoretical computer science in recent years has, in particular, influenced the book's evolution: a fresh treatment of fixpoints testifies to this and Galois connections now feature prominently. An early presentation of concept analysis gives both a concrete foundation for the subsequent theory of complete lattices and a glimpse of a methodology for data analysis that is of commercial value in social science. Classroom experience has led to numerous pedagogical improvements and many new exercises have been added. As before, exposure to elementary abstract algebra and the notation of set theory are the only prerequisites, making the book suitable for advanced undergraduates and beginning graduate students. It will also be a valuable resource for anyone who meets ordered structures.

The theory of functions of a complex variable is a central theme in mathematical analysis that has links to several branches of mathematics. Understanding the basics of the theory is necessary for anyone interested in general mathematical training or for anyone who wants to use mathematics in applied sciences or technology. The book presents the basic theory of analytic functions of a complex variable and their points of contact with other parts of mathematical analysis. This results in some new approaches to a number of topics when compared to the current literature on the subject. Some issues covered are: a real version of the Cauchy-Goursat theorem, theorems of vector analysis with weak regularity assumptions, an approach to the concept of holomorphic functions of real variables, Green's formula with multiplicities, Cauchy's theorem for locally exact forms, a study in parallel of Poisson's equation and the inhomogeneous Cauchy-Riemann equations, the relationship between Green's function and conformal mapping, the connection between the solution of Poisson's equation and zeros of holomorphic functions, and the Whittaker-Shannon theorem of information theory. The text can be used as a manual for complex variable courses of various levels and as a reference book. The only prerequisite is a working knowledge of the topology of the plane and the differential calculus for functions of several real variables. A detailed treatment of harmonic functions also makes the book useful as an introduction to potential theory.

In addition to being mathematically elegant, complex variables provide a powerful tool for solving problems that are either very difficult or virtually impossible to solve in any other way. Part I of this text provides an introduction to the subject, including analytic functions, integration, series, and residue calculus and also includes transform methods, ODEs in the complex plane, numerical methods and more. Part II contains conformal mappings, asymptotic expansions, and the study of Riemann-Hilbert problems. The authors also provide an extensive array of applications, illustrative examples and homework exercises. This book is ideal for use in introductory undergraduate and graduate level courses in complex variables.

Introduction to Complex Analysis

A Testimony of Jesus 18

Stereophonica

Theory of Complex Functions

Elementary Real and Complex Analysis

Professor Binmore has written two chapters on analysis in vector spaces.

A new edition of a classic textbook on complex analysis with an emphasis on translating visual intuition to rigorous proof.

This introduction to Laplace transforms and Fourier series is aimed at second year students in applied mathematics. It is unusual in treating Laplace transforms at a relatively simple level with many examples. Mathematics students do not usually meet this material until later in their degree course but applied mathematicians and engineers need an early introduction. Suitable as a course text, it will also be of interest to physicists and engineers as supplementary material.

DIVExcellent undergraduate-level text offers coverage of real numbers, sets, metric spaces, limits, continuous functions, much more. Each chapter contains a problem set with hints and answers. 1973 edition. /div

Modelling Longevity Dynamics for Pensions and Annuity Business

Guardians of the Buddha's Home

The Sumerians

Introduction to Integration

An Analysis of Concepts of Pollution and Taboo

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.

This second edition presents a collection of exercises on the theory of analytic functions, including completed and detailed solutions. It introduces students to various applications and aspects of the theory of analytic functions not always touched on in a first course, while also addressing topics of interest to electrical engineering students (e.g., the realization of rational functions and its connections to the theory of linear systems and state space representations of such systems). It provides examples of important Hilbert spaces of analytic functions (in particular the Hardy space and the Fock space), and also includes a section reviewing essential aspects of topology, functional analysis and Lebesgue integration. Benefits of the 2nd edition Rational functions are now covered in a separate chapter. Further, the section on conformal mappings has been expanded.

Complex Number System 1–7 2. Complex Plane 8–26 3. Sets Of Complex Points 27–32 4. Analytic Functions 33–60 5. Sequences And Series 61–70 6. Power Series And Elementary Functions 71–101 7. Elementary And Conformal Mappings 102–137 8. Complex Integration 138–188 9. Taylor'S And Laurent'S Series 189–233 10. Residues 234–278 11. Meromorphic Functions 279–288

The Sumerians, the pragmatic and gifted people who preceded the Semites in the land first known as Sumer and later as Babylonia, created what was probably the first high civilization in the history of man, spanning the fifth to the second millenniums B.C. This book is an unparalleled compendium of what is known about them. Professor Kramer communicates his enthusiasm for his subject as he outlines the history of the Sumerian civilization and describes their cities, religion, literature, education, scientific achievements, social structure, and psychology. Finally, he considers the legacy of Sumer to the ancient and modern world. "There are few scholars in the world qualified to write such a book, and certainly Kramer is one of them. . . . One of the most valuable features of this book is the quantity of texts and fragments which are published for the first time in a form available to the general reader. For the layman the book provides a readable and up-to-date introduction to a most fascinating culture. For the specialist it presents a synthesis with which he may not agree but from which he will nonetheless derive stimulation."—American Journal of Archaeology "An uncontested authority on the civilization of Sumer,

Professor Kramer writes with grace and urbanity."—Library Journal

Cauchy and the Creation of Complex Function Theory

Introduction to Lattices and Order

Complex Analysis

Ancient and Modern

The Future of Catholic Priesthood in Igboland

Complex analysis is a classic and central area of mathematics, which is studied and exploited in a range of important fields, from number theory to engineering. Introduction to Complex Analysis was first published in 1985, and for this much awaited second edition the text has been considerably expanded, while retaining the style of the original. More detailed presentation is given of elementary topics, to reflect the knowledge base of current students. Exercise setshave been substantially revised and enlarged, with carefully graded exercises at the end of each chapter.This is the latest addition to the growing list of Oxford undergraduate textbooks in mathematics, which includes: Biggs: Discrete Mathematics 2nd Edition, Cameron: Introduction to Algebra, Needham: Visual Complex Analysis, Kaye and Wilson: Linear Algebra, Acheson: Elementary Fluid Dynamics, Jordan and Smith: Nonlinear Ordinary Differential Equations, Smith: Numerical Solution of Partial Differential Equations, Wilson: Graphs, Colourings and the Four-Colour Theorem, Bishop: Neural Networks forPattern Recognition, Gelman and Nolan: Teaching Statistics.

With this second volume, we enter the intriguing world of complex analysis. From the first theorems on, the elegance and sweep of the results is evident. The starting point is the simple idea of extending a function initially given for real values of the argument to one that is defined when the argument is complex. From there, one proceeds to the main properties of holomorphic functions, whose proofs are generally short and quite illuminating: the Cauchy theorems, residues, analytic continuation, the argument principle. With this background, the reader is ready to learn a wealth of additional material connecting the subject with other areas of mathematics: the Fourier transform treated by contour integration, the zeta function and the prime number theorem, and an introduction to elliptic functions culminating in their application to combinatorics and number theory. Thoroughly developing a subject with many ramifications, while striking a careful balance between conceptual insights and the technical underpinnings of rigorous analysis, Complex Analysis will be welcomed by students of mathematics, physics, engineering and other sciences. The Princeton Lectures in Analysis represents a sustained effort to introduce the core areas of mathematical analysis while also illustrating the organic unity between them. Numerous examples and applications throughout its four planned volumes, of which Complex Analysis is the second, highlight the far-reaching consequences of certain ideas in analysis to other fields of mathematics and a variety of sciences. Stein and Shakarchi move from an introduction addressing Fourier series and integrals to in-depth considerations of complex analysis; measure and integration theory, and Hilbert spaces; and, finally, further topics such as functional analysis, distributions and elements of probability theory.

Explores the interrelations between real and complex numbers by adopting both generalization and specialization methods to move between them, while simultaneously examining their analytic and geometric characteristics Engaging exposition with discussions, remarks, questions, and exercises to motivate understanding and critical thinking skills Enclues numerous examples and applications relevant to science and engineering students

This development of the theory of complex algebraic curves was one of the peaks of nineteenth century mathematics. They have many fascinating properties and arise in various areas of mathematics, from number theory to theoretical physics, and are the subject of much research. By using only the basic techniques acquired in most undergraduate courses in mathematics, Dr. Kirwan introduces the theory, observes the algebraic and topological properties of complex algebraic curves, and shows how they are related to complex analysis.