

Core Maths For Advanced Level

A witty, conversational, and accessible tour of math's profoundest mysteries. Mathematical symbols, for mathematicians, store worlds of meaning, leap continents and centuries. But we need not master symbols to grasp the magnificent abstractions they represent, and to which all art aspires. Through language, anyone can come to delight in the works of mathematical art, which are among our kind's greatest glories. Taking the concept of infinity, in its countless guises, as a starting point and a helpful touchstone, the founders of Harvard's pioneering Math Circle program Robert and Ellen Kaplan guide us through the "Republic of Numbers," where we meet both its upstanding citizens and its more shadowy dwellers, explore realms where only the imagination can go, and grapple with math's most profound uncertainties, including the question of truth itself: do we discover mathematical principles, or invent them?

Written for the Edexcel syllabus B and similar schemes offered by the Awarding Bodies, this book incorporates modern approaches to mathematical understanding. It provides worked examples and exercises to support the text.

Includes a section on matrices and transformations, this book features worked examples and exercises to illustrate concepts at every stage of its development. It caters for the "Pure Mathematics" content of various courses in Further Mathematics and also for preparation for the Advanced Extension Award.

This teacher's resource file covers the requirements of all AS and Advanced level mathematics courses and major specifications. There is a section on chapter objectives that lists all the key areas covered in each chapter to aid lesson planning or assessment. Teaching notes provide guidance and ideas on developing and enhancing the material provided in the core book as well as a list of topics that students are likely to find difficult. A question bank of material is included for use in revision with fully worked solutions to all consolidation A questions.

A Level Further Mathematics for OCR A Pure Core Student Book 2 (Year 2)

Core Maths for Advanced Level

Core Maths Advanced Level 3rd Edition

The Complete Course for AQA C4

Edexcel AS and a Level Modular Mathematics Core Mathematics 1 C1

A popular resource written by best-selling authors and completely in line with National Curriculum for 2001.

Written by the renowned author team of Bostock and Chandler, this best-selling textbook covers all major A Level Mathematics specifications.

The Nelson Mathematics for Cambridge International AS & A Level series is tailored to the needs of A and AS level students of the latest 9709 syllabus. Developed by a team of experienced examiners and international authors, it provides comprehensive coverage for this syllabus and effective preparation for the Cambridge exams. The Nelson Pure Mathematics 1 for Cambridge International A Level text is designed for students taking the P1 exam paper. It provides introductions to topics and step-by-step worked examples to aid students in their understanding of the course material. Regular summaries and mixed exercises are included, enabling students to consolidate their learning. Students are well equipped to reach their full potential, with practice exam papers providing opportunities for effective exam preparation.

A classic single-volume textbook, popular for its direct and straightforward approach. Understanding Pure Mathematics starts by filling the gap between GCSE and A Level and builds on this base for candidates taking either single-subject or double-subject A Level.

Advanced Level Mathematics (pure and Applied)

The Prime Number Conspiracy

Core Mathematics

A Journey Through Viral Maths

Understanding Pure Mathematics

Help students to develop their knowledge and apply their reasoning to mathematical problems with textbooks that draw on the well-known MEI (Mathematics in Education and Industry) series, updated and tailored to the 2017 OCR (MEI) specification and developed by subject specialists and MEI. - Ensure targeted development of reasoning and problem-solving skills with plenty of practice questions and structured exercises that build mathematical skills and techniques. - Build connections between topics, using real-world contexts to help develop mathematical modelling skills, thus providing a fuller and more coherent understanding of mathematical concepts. - Address the new statistics requirements with five dedicated statistics chapters and questions around the use of large data sets. - Help students to overcome misconceptions and develop insight into problem solving with annotated worked examples. - Develop understanding and measure progress with graduated exercises that support students at every stage of their learning. - Provide clear paths of progression that combine pure and applied maths into a coherent whole. - Reinforce Year 1 content with short review chapters - Core FM Year 2 only.

Quanta Magazine's stories of mathematical explorations show that "inspiration strikes willy-nilly," revealing surprising solutions and exciting discoveries. If you're a science and data nerd like me, you may be interested in "Alice and Bob Meet the Wall of Fire" and "The Prime Number Conspiracy" from Quanta Magazine and Thomas Lin. - Bill Gates These stories from Quanta Magazine map the routes of mathematical exploration, showing readers how cutting-edge research is done, while illuminating the productive tension between conjecture and proof, theory and intuition. The stories show that, as James Gleick puts it in the foreword, "inspiration strikes willy-nilly." One researcher thinks of quantum chaotic systems at a bus stop; another suddenly realizes a path to proving a theorem of number theory while in a friend's backyard; a statistician has a "bathroom sink epiphany" and discovers the key to solving the Gaussian correlation inequality. Readers of The Prime Number Conspiracy, says Quanta editor-in-chief Thomas Lin, are headed on "breathtaking intellectual journeys to the bleeding edge of discovery strapped to the narrative rocket of humanity's never-ending pursuit of knowledge." Quanta is the only popular publication that offers in-depth coverage of the latest breakthroughs in understanding our mathematical universe. It communicates mathematics by taking it seriously, wrestling with difficult concepts and clearly explaining them in a way that speaks to our innate curiosity about our world and ourselves. Readers of this volume will learn that prime numbers have decided preferences about the final digits of the primes that immediately follow them (the "conspiracy" of the title); consider whether math is the universal language of nature (allowing for "a unified theory of randomness"); discover surprising solutions (including a pentagon tiling proof that solves a century-old math problem); ponder the limits of computation; measure infinity; and explore the eternal question "Is mathematics good for you?" Contributors Ariel Bleicher, Robbert Dijkgraaf, Kevin Hartnett, Erica Klarreich, Thomas Lin, John Pavlus, Siobhan Roberts, Natalie Wolchover Copublished with Quanta Magazine

This companion to Core Maths for A-level covers all the work necessary for the mechanics component of all boards' syllabuses for A-level mathematics.

New 2017 Cambridge A Level Maths and Further Maths resources to help students with learning and revision. Written for the AQA AS/A Level Further Mathematics specification for first teaching from 2017, this print Student Book covers the Mechanics content for AS and A Level. It balances accessible exposition with a wealth of worked examples, exercises and opportunities to test and consolidate learning, providing a clear and structured pathway for progressing through the course. It is underpinned by a strong pedagogical approach, with an emphasis on skills development and the synoptic nature of the course. Includes answers to aid independent study. This book has entered an AQA approval process.

Core Mathematics for Cambridge IGCSE

AS/a Level Maths for Edexcel - Core 1

A Level Mathematics for AQA Student Book 2 (Year 2)

Nelson Mathematics for Cambridge International A Level: Pure Mathematics 1

Edexcel AS and a Level Modular Mathematics Core Mathematics 2 C2

New 2017 Cambridge A Level Maths and Further Maths resources to help students with learning and revision. Written for the AQA AS/A Level Further Mathematics specifications for first teaching from 2017, this print Student Book covers the compulsory content for AS and the first year of A Level. It balances accessible exposition with a wealth of worked examples, exercises and opportunities to test and consolidate learning, providing a clear and structured pathway for progressing through the course. It is underpinned by a strong pedagogical approach, with an emphasis on skills development and the synoptic nature of the course. Includes answers to aid independent study. This book has entered an AQA approval process.

Easing the transition from GCSE to AS Level, this textbook meets the 2004 Edexcel specifications and provides numerous worked examples and solutions to aid understanding of key concepts.

Updated for the 2004 specification, these new Core books are in full colour to ease the transition from GCSE to A Level. Tailor-made for the new specification and written by members of an experienced Senior Examining Team, you can be sure they provide everything students need to succeed.

Core Maths C1- C2 is part of a brand new series of books that match the AQA specifications for Maths A-level, to be first taught in September 2004. The book has been produced in collaboration with a Senior Examiner to ensure complete and authoritative coverage of the Pure Core 1 and Pure Core 2 modules. It contains all the pure maths that students need to know for AS-level Mathematics, or for the first year of an A-Level.

The Pleasures of Mathematics

Mechanics for A-level

A-Level Mathematics for AQA Core 4

AS/A Level Maths for AQA - Core 1: Student Book

Mathematics

Core Maths Advanced Level 3rd EditionOxford University Press, USA

AS/A Level Maths for Edexcel - Core 3: Student Book

AS/A Level Maths for Edexcel - Core 1: Student Book

AS/A Level Maths for AQA - Core 1: Student Book

A Level Further Mathematics for AQA Student Book 1 (AS/Year 1)

Using the Common Core State Standards for Mathematics With Gifted and Advanced Learners

Core Maths Advanced Level

Advanced Maths for Aqa - Decision Maths

The Core Course for A-level

Motivating readers by making maths easier to learn, this work includes complete past exam papers and student-friendly worked solutions which build up to practice questions, for all round exam preparation. It also includes a Live Text CDROM which features fully worked solutions examined step-by-step, and animations for key learning points.

Since the launch of the Human Genome project in 1990, understanding molecular and clinical genetics has become an essential aspect of modern medical education. Solid knowledge of genetics is now crucial to a host of healthcare professionals including primary care physicians, nurses and physician assistants. This third edition takes this crucial information and incorporates it into a student-friendly format that focuses on the core concept of human genetics. Each chapter uses the same problem-based approach as the previous editions, and addresses the important role of genetics and disease by integrating molecular and clinical genetics.

This volume continues the work covered in Core Maths or Mathematics - The Core Course for Advanced Level to provide a full two-year course in Pure Mathematics for A-Level.

New 2017 Cambridge A Level Maths and Further Maths resources to help students with learning and revision. Written for the OCR AS/A Level Mathematics specifications for first teaching from 2017, this print Student Book covers the content for AS and the first year of A Level. It balances accessible exposition with a wealth of worked examples, exercises and opportunities to test and consolidate learning, providing a clear and structured pathway for progressing through the course. It is underpinned by a strong pedagogical approach, with an emphasis on skills development and the synoptic nature of the course. Includes answers to aid independent study.

Core Maths C1, C2

MEI a Level Further Mathematics Year 2 4th Edition

Core Mathematics C3

Core Maths for A-level

Edexcel Further Maths: Core Pure Year 1/AS Level

New 2017 Cambridge A Level Maths and Further Maths resources to help students with learning and revision. Written for the OCRA Level Further Mathematics specification for first teaching from 2017, this print Student Book covers the Pure Core content for the second year of A Level. It balances accessible exposition with a wealth of worked examples, exercises and opportunities to test and consolidate learning, providing a clear and structured pathway for progressing through the course. It is underpinned by a strong pedagogical approach, with an emphasis on skills development and the synoptic nature of the course.

Includes answers to aid independent study.

A comprehensive series of bespoke resources developed for the 2017 AS/A Level Mathematics specifications. Written for the AQA A Level Mathematics specification for first teaching from 2017, this print Student Book covers the content for the second year of A Level. It balances accessible exposition with a wealth of worked examples, exercises and opportunities to test and consolidate learning, providing a clear and structured pathway for progressing through the course. It is underpinned by a strong pedagogical approach, with an emphasis on skills development and the synoptic nature of the course. Includes answers to aid independent study.

Maths but not as you know it: a fresh take that develops problem-solving skills with new and innovative resources that place contemporary contexts at the centre of learning to maximise student potential. - Supports a wide ability range with challenges for all levels. - Provides assessment practice and guidance with practice questions and worked examples to help each student to reach their potential by boosting the skills they need to understand the demands of the new AQA Level 3 Certificate in Mathematical Studies specification. - Saves you time with a variety of new ideas for use in the classroom and at home. - Places mathematical problems into real life contexts helping your students to apply their knowledge across subjects. - Supports the non-specialist or less-confident teacher.

In full colour and written specifically for the AQA Level 3 Certificate in Mathematical Studies, this book provides plenty of worked examples, practice questions and practice exam papers. Set in engaging contexts relevant to a wide range of other post-16 subjects, AQA Mathematical Studies is also supported by online teacher notes.

Math on Trial

Level 3 Mathematical Studies Student Book

AS/a Level Maths for Edexcel - Core 3

Student Book

Maths Tricks to Blow Your Mind

Using the Common Core State Standards for Mathematics With Gifted and Advanced Learners provides teachers and administrators examples and strategies to implement the new Common Core State Standards (CCSS) with advanced learners at all stages of development in K-12 schools. The book describes—and demonstrates with specific examples from the CCSS—what effective differentiated activities in mathematics look like for top learners. It shares how educators can provide rigor within the new standards to allow students to demonstrate higher level thinking, reasoning, problem solving, passion, and inventiveness in mathematics. By doing so, students will develop the skills, habits of mind, and attitudes toward learning needed to reach high levels of competency and creative production in mathematics fields.

In the wrong hands, math can be deadly. Even the simplest numbers can become powerful forces when manipulated by politicians or the media, but in the case of the law, your liberty -- and your life -- can depend on the right calculation. In Math on Trial, mathematicians Leila Schneps and Coralie Colmeze describe ten trials spanning from the nineteenth century to today, in which mathematical arguments were used -- and disastrously misused -- as evidence. They tell the stories of Sally Clark, who was accused of murdering her children by a doctor with a faulty sense of calculation; of nineteenth-century tycoon Hetty Green, whose dispute over her aunt's will became a signal case in the forensic use of mathematics; and of the case of Amanda Knox, in which a judge's misunderstanding of probability led him to discount critical evidence -- which might have kept her in jail. Offering a fresh angle on cases from the nineteenth-century Dreyfus affair to the murder trial of Duch nueur Lucia de Berk, Schneps and Colmeze show how the improper application of mathematical concepts can mean the difference between walking free and life in prison. A colorful narrative of mathematical abuse, Math on Trial blends courtroom drama, history, and math to show that legal expertise isn't always enough to prove a person innocent.

Assuming GCSE as a starting point (National Curriculum Level 7/8), this A-Level mathematics text provides transitional material in the early chapters for students from a variety of mathematical backgrounds, and caters for a wide spread of ability. It contains the core for A-Level mathematics as outlined in all examination board syllabuses, and additional coverage is included to cater for the pure maths content of A-Level mathematics courses combining pure maths with mechanics / statistics / decision (discrete) maths, and the first half of A-Level pure mathematics.

*Engage and motivate your Level 3 Mathematical Studies students, and deliver the new specification with confidence. Authentic real-life examples and ready to use data sets from a range of contexts develop mathematical skills and understanding. * Brings the subject to life by putting mathematics in context and showing its power and relevance in the real world * Closely matches the new AQA Mathematical Studies specification, with separate sections for compulsory units and optional pathways * Covers all ability levels within the A* to C range at GCSE * Encourages students to become effective problem solvers with a willingness to test out their ideas * Competence statements at the end of each chapter allow students to measure their own progress * The book includes a section on pre-release data to support students in their exam preparation*

Collins AQA Core Maths

A Level Further Mathematics for AQA Mechanics Student Book (AS/A Level)

A Level Mathematics for OCR A Student Book 1 (AS/Year 1)

Core 3 and 4 for OCR

AQA Mathematical Studies Student Book: Level 3 Certificate

AS/A Level Maths for AQA - Core 4: Student Book

Written by the renowned author team of Bostock and Chandler, this best-selling textbook covers all major A Level Mathematics specifications. Suitable for all points of entry to Advanced Level with appropriate supporting material in the early sections of the books. Each chapter contains a variety of exercises and questions for practice and preparation. Extended summary sections reinforce and consolidate learning.

"This book helps in raising and sustaining motivation for better grades. These books are the best possible match to the specification, motivating readers by making maths easier to learn. They include complete past exam papers and student-friendly worked solutions which build up to practice questions, for all round exam preparation. These books also feature real-life applications of maths through the 'Life-links' and 'Why ...?' pages to show readers how this maths relates, presenting opportunities to stretch and challenge more apply students. Each book includes a Live Text CDROM which features: fully worked solutions examined step-by-step, animations for key learning points, and revision support through the Exam Cafe."--Publisher's description

Decision Maths D1 is part of a brand new series of books that match the AQA specifications for Maths A-level, to be first taught from September 2004. The book has been produced in consultation with a Senior Examiner to ensure complete and authoritative coverage of the Decision 1 module. It contains all the discrete maths that students need to know for AS-level Mathematics, or for the first year of an A-level.

AQA Level 3 Certificate in Mathematical Studies

Further Pure Mathematics

Pure Mathematics 2

The Art of the Infinite

How Numbers Get Used and Abused in the Courtroom

Extended Mathematics for Cambridge IGCSE provides for the second year of a two-year course leading to the Cambridge IGCSE Mathematics Extended Level examination from University of Cambridge International Examinations. This is the second of two books (Core and Extended), which together completely cover the syllabus for the Cambridge IGCSE Mathematics Extended Level. Students may either study the whole of the Core course in their first year, followed by the Extended in their second year, or they may study the books are designed to be worked through sequentially and can be used both as classroom textbooks and for self-study.

Fully endorsed by OCR for use with OCR Mathematics GCSE specification

This Student Book provides full support for the Further Pure 1 paper in the Edexcel AS and A Level exams. The explanations throughout are clear and concise, with an emphasis on visual presentation, worked examples and learning by doing. Dedicated exercises in every chapter provide practice for the new exam-style problem-solving questions.

What is 4% of 75? Can you calculate 60 + 60 x 0 + 1? Which is bigger, an 18-inch pizza or two 12-inch pizzas? Join award-winning maths presenter Kyle D Evans on an entertaining tour of viral maths problems that have gone wild on social media in recent years. From the infamous 'Hannah's sweets' exam question to percentages 'life-hacks', viral maths problems seem to capture the public's imagination without fail. In Maths Tricks to Blow Your Mind, Kyle presents over 50 viral maths problems with background information in a humorous, accessible and inclusive manner. Want to dazzle and delight your friends and family? This book shows you how!

Statistics

The Biggest Ideas in Math from Quanta