

Cambridge Essential Maths Year 10

Study & Master Mathematical Literacy Grade 10 has been especially developed by an experienced author team according to the Curriculum and Assessment Policy Statement (CAPS). This new and easy-to-use course helps learners to master essential content and skills in Mathematical Literacy. The Teacher's File includes: * a weekly teaching schedule, divided into the four terms to guide the teacher on what to teach * extra project templates for teachers to choose from * solutions to all the activities in the Learner's Book.

Written for use with the Cambridge Primary Mathematics Curriculum Framework, and endorsed by Cambridge International Examinations, the Cambridge Primary Mathematics series is informed by the most up-to-date teaching philosophies from around the world. It aims to support teachers to help all learners become confident and successful mathematicians through a fun and engaging scheme. Through an investigatory approach children learn the skills of problem solving in the context of other mathematical strands in the course. The course will encourage learners to be independent thinkers with the confidence to tackle a wide range of problems who understand the value and relevance of their mathematics. Classroom discussion is encouraged to help learners become good mathematical communicators, to justify answers and to make connections between ideas. This series is part of Cambridge Maths (www.cie.org.uk/cambridgeprimarymaths), a project between Cambridge University Press and Cambridge International Examinations and is appropriate for learners sitting the Primary Checkpoint test.

Engage students with examiner Sue Pemberton's unique, active-learning approach, ideal for EAL students. This new edition is fully aligned to the Extended part of the latest Cambridge IGCSE Mathematics syllabus (0580), for examination from 2020.

Mathematical Literacy, Grade 10

An Engaging Introduction to Proof

Print Bundle (Textbook and Hotmaths)

Essential Maths for the Victorian Syllabus Year 10 Digital Bundle (Interactive Textbook and Hotmaths)

Essential Mathematics for Cambridge Secondary 1 Stage 9

This self-help workbook covers mathematics essential to first-year undergraduate scientists and engineers. The second edition of this highly successful textbook has been completely revised and there is a totally new chapter on vectors. Mathematics underpins all science and engineering degrees, and this may cause problems for students whose understanding of the subject is weak. In this book Jenny Olive uses her extensive experience of teaching and helping students by giving a clear and confident presentation of the core mathematics needed by students starting science or engineering courses.

Clear and engaging introduction for graduate students in engineering and the physical sciences to essential topics of applied mathematics.

An introduction to a broad range of topics in deep learning, covering mathematical and conceptual background, deep learning techniques used in industry, and research perspectives.

“Written by three experts in the field, Deep Learning is the only comprehensive book on the subject.” —Elon Musk, cochair of OpenAI; cofounder and CEO of Tesla and SpaceX Deep learning is a form of machine learning that enables computers to learn from experience and understand the world in terms of a hierarchy of concepts. Because the computer gathers knowledge from experience, there is no need for a human computer operator to formally specify all the knowledge that the computer needs. The hierarchy of concepts allows the computer to learn complicated concepts by building them out of simpler ones; a graph of these hierarchies would be many layers deep. This book introduces a broad range of topics in deep learning. The text offers mathematical and conceptual background, covering relevant concepts in linear algebra, probability theory and information theory, numerical computation, and machine learning. It describes deep learning techniques used by practitioners in industry, including deep feedforward networks, regularization, optimization algorithms, convolutional networks, sequence modeling, and practical methodology; and it surveys such applications as natural language processing, speech recognition, computer vision, online recommendation systems, bioinformatics, and videogames. Finally, the book offers research perspectives, covering such theoretical topics as linear factor models, autoencoders, representation learning, structured probabilistic models, Monte Carlo methods, the partition function, approximate inference, and deep generative models. Deep Learning can be used by undergraduate or graduate students planning careers in either industry or research, and by software engineers who want to begin using deep learning in their products or platforms. A website offers supplementary material for both readers and instructors.

Mathematics for Australia 7

Pemberton Mathematics for Cambridge IGCSE® Extended

Essential Mathematics for Political and Social Research

College Physics

Exploring Mathematics

This series is endorsed by Cambridge International Examinations and is part of Cambridge Maths.

The Stage 9 Workbook supports and supplements the Stage 9 Student Book, with engaging exercises to support the curriculum framework. It provides summary notes for the theory required, extra questions for students to practice and apply the skills and

knowledge they have gained, and space for pupils to write their answers in. The Stage 9 Teacher's CD provides a range of resources to assist in the teaching of the course, including interactive class activities to engage all your students, right across the ability range, revision activities to aid student retention, supplementary worksheets to support lower ability students and stretch more able learners, and answers to all the exercises in the Stage 9 Student Book and Workbook.

This 2006 book addresses the comprehensive introduction to the mathematical principles needed by modern social scientists.

Essential Calculus with Applications

Essential Mathematics for the Australian Curriculum Year 8 2ed Digital Bundle (Interactive Textbook and Hotmaths)

Essential Mathematics for the Australian Curriculum Year 10

Cambridge Mathematics NSW Syllabus for the Australian Curriculum Year 10 5. 1, 5. 2 And 5. 3

Essential Mathematics Gold for the Australian Curriculum Year 7

Endorsed by Cambridge International Examinations, the Essential Mathematics for Cambridge Secondary 1 series has been created for the international student. Written by an expert author team with an experienced examiner it provides complete coverage of the syllabus. The workbook supports and supplements the student book, providing summary notes for the theory required, extra questions for students to practice and apply the skills and knowledge they have gained, and space for pupils to write their answers in.

The book contains blackline masters of stimulating activities in mathematics.._

Essential Mathematics Gold for the Australian Curriculum Year 7 contains the following features: • The three interconnected content strands are incorporated into 10–11 units of work that can be completed in the school year. • Carefully chosen and assessed language, design and sentence structures engage students who struggle with maths and potentially with reading. • Examples show explanations alongside solutions, and are closely linked to carefully graded exercises, giving students the opportunity for immediate success and to work independently. • Maths Words and Hint balloons reinforce the meaning of key terms and help students apply key concepts as they work through the exercises. • Every question is grouped according to the proficiency strands of the Australian Curriculum • Important terms are defined within the text for immediate understanding and included in the glossary for reference and revision. • Games and puzzles in every chapter • Chapter reviews include summary mind maps of key concepts and lots of revision questions to test understanding.

Cambridge Mathematics NSW Syllabus for the Australian Curriculum Year 10 5. 1 And 5. 2

Maths Enrichment

Digital Bundle (with Hotmaths)

A Self-Help Workbook for Science and Engineering Students

Year 10

Calculus is an extremely powerful tool for solving a host of practical problems in fields as diverse as physics, biology, and economics, to mention just a few. In this rigorous but accessible text, a noted mathematician introduces undergraduate-level students to the problem-solving techniques that make a working knowledge of calculus indispensable for any mathematician. The author first applies the necessary mathematical background, including sets, inequalities, absolute value, mathematical induction, and other "precalculus" material. Chapter Two begins the actual study of differential calculus with a discussion of the key concept of function, and a thorough treatment of derivatives and limits. In Chapter Three differentiation is used as a tool; among the topics covered here are velocity, continuous and differentiable functions, the indefinite integral, local extrema, and concrete optimization problems. Chapter Four treats integral calculus, employing the standard definition of the Riemann integral, and deals with the mean value theorem for integrals, the main techniques of integration, and improper integrals. Chapter Five offers a brief introduction to differential equations and their applications, including problems of growth, decay, and motion. The final chapter is devoted to the differential calculus of functions of several variables. Numerous problems and answers, and a newly added section of "Supplementary Hints and Answers," enable the student to test his grasp of the material before going on. Concise and well written, this text is ideal as a primary text or as a refresher for anyone wishing to review the fundamentals of this crucial discipline.

This is a guide to the Cambridge Mathematics NSW syllabus for the Australian curriculum for year 10.

The Digital option of this all-new comprehensive teaching and learning program gives you access to all of the online student resources for the series available on Cambridge GO. Minimum system requirements You must be connected to the internet to activate your account and download the PDF Textbook and additional online resources. The PDF Textbook is designed for full functionality using the latest version of Adobe Reader. The markup function is available in selected PDF readers for the iPad and other devices using iOS. Check your PDF reader specifications. At the time of printing Good Reader and PDF Expert were viable options. Help at help@cambridgego.com.au.

Essential Mathematics for Engineers and Scientists

Print Bundle (textbook and Hotmaths)

Cambridge Primary Mathematics Stage 1 Teacher's Resource with CD-ROM

Essential Mathematics for the Victorian Curriculum Year 9 Second Edition

Mathematics for Machine Learning

Written by a principal examiner to exactly match the 0580 syllabus, this text gives you a sequential and logical teaching path through the full syllabus, addressing the four curriculum areas. A full set of solutions, exam practice and worked examples encourage active learning, and a CD offers dynamic material for every section of the book.

The fundamental mathematical tools needed to understand machine learning include linear algebra, analytic geometry, matrix decompositions, vector calculus, optimization, probability and statistics. These topics are traditionally taught in disparate courses, making it hard for data science or computer science students, or professionals, to efficiently learn the mathematics. This self-contained textbook bridges the gap between mathematical and machine learning texts, introducing the mathematical concepts with a minimum of prerequisites. It uses these concepts to derive four central machine learning methods: linear regression, principal component analysis, Gaussian mixture models and support vector machines. For students and others with a mathematical background, these derivations provide a starting point to machine learning texts. For those learning the mathematics for the first time, the methods help build intuition and practical experience with applying mathematical concepts. Every chapter includes worked examples and exercises to test understanding. Programming tutorials are offered on the book's web site.

Exploring Mathematics gives students experience with doing mathematics - interrogating mathematical claims, exploring definitions, forming conjectures, attempting proofs, and presenting results - and engages them with examples, exercises, and projects that pique their interest. Written with a minimal number of pre-requisites, this text can be used by college students in their first and second years of study, and by independent readers who want an accessible introduction to theoretical mathematics. Core topics include proof techniques, sets, functions, relations, and cardinality, with selected additional topics that provide many possibilities for further exploration. With a problem-based approach to investigating the material, students develop interesting examples and theorems through numerous exercises and projects. In-text exercises, with complete solutions or robust hints included in an appendix, help students explore and master the topics being presented. The end-of-chapter exercises and projects provide students with opportunities to confirm their understanding of core material, learn new concepts, and develop mathematical creativity.

The Power of Passion and Perseverance

Essential Mathematics for the Australian Curriculum. Gold

Essential Mathematics for the Victorian Curriculum Year 8 Second Edition

Essential Mathematics for the Australian Curriculum Year 10 and 10A Third Edition

Cambridge Primary Mathematics Stage 6 Games Book with CD-ROM

Provides complete coverage of stages 4 and 5 of the NSW syllabus.

In this instant New York Times bestseller, Angela Duckworth shows anyone striving to succeed that the secret to outstanding achievement is not talent, but a special blend of passion and persistence she calls “grit.” “Inspiration for non-geniuses everywhere” (People). The daughter of a scientist who frequently noted her lack of “genius,” Angela Duckworth is now a celebrated researcher and professor. It was her early eye-opening stints in teaching, business consulting, and neuroscience that led to her hypothesis about what really drives success: not genius, but a unique combination of passion and long-term perseverance. In Grit, she takes us into the field to visit cadets struggling through their first days at West Point, teachers working in some of the toughest schools, and young finalists in the National Spelling Bee. She also mines fascinating insights from history and shows what can be gleaned from modern experiments in peak performance. Finally, she shares what she’s learned from interviewing dozens of high achievers—from JP Morgan CEO Jamie Dimon to New Yorker cartoon editor Bob Mankoff to Seattle Seahawks Coach Pete Carroll. “Duckworth’s ideas about the cultivation of tenacity have clearly changed some lives for the better” (The New York Times Book Review). Among Grit’s most valuable insights: any effort you make ultimately counts twice toward your goal; grit can be learned, regardless of IQ or circumstances; when it comes to child-rearing, neither a warm embrace nor high standards will work by themselves; how to trigger lifelong interest; the magic of the Hard Thing Rule; and so much more. Winningly personal, insightful, and even life-changing, Grit is a book about what goes through your head when you fall down, and how that—not talent or luck—makes all the difference. This is “a fascinating tour of the psychological research on success” (The Wall Street Journal). ESSENTIAL MATHEMATICS GOLD FOR THE AUSTRALIAN CURRICULUM YEAR 10 provides a practical interpretation of the Australian Curriculum to help students meet the minimum requirements of the achievement standards. It focuses on consolidating core mathematical

concepts and developing vital literacy and numeracy skills in a friendly and easy-to-follow layout. The three interconnected content strands are incorporated into 10-11 units of work that can be completed in the school year. Carefully chosen and assessed language, design and sentence structures engage students who struggle with maths and potentially with reading. Lets Start activities and Key Idea sections for every topic provide context and introduce core concepts. Examples show explanations alongside solutions, and are closely linked to carefully graded exercises, giving students the opportunity for immediate success and to work independently. Maths Words and Hint balloons reinforce the meaning of key terms and help students apply key concepts as they work through the exercises. Every question is grouped according to the proficiency strands of the Australian Curriculum with a particular emphasis placed on Understanding and Fluency to consolidate fundamental skills. Gold Star enrichment questions in each exercise allow enthusiastic students to challenge themselves. Important terms are defined within the text for immediate understanding and included in the glossary for reference and revision. Games and puzzles in every chapter give students a chance to have fun with mathematical ideas. Chapter reviews include summary mind maps of key concepts and lots of revision questions to test understanding. If you order this product you will receive the following components: Print Textbook: delivered in full colour print. PDF Textbook: a downloadable PDF version of the student text that enables students to take notes and bookmark pages. The PDF textbook can be used in class or as a reference at home. To access the PDF textbook, simply register for a Cambridge GO account and enter the 16 character access code found in the front inside cover of your textbook.

Cambridge Mathematics NSW Syllabus for the Australian Curriculum Year 9 5. 1, 5. 2 And 5. 3

Essential Mathematics for the Australian Curriculum Year 7 Third Edition

Deep Learning

Cambridge Primary Mathematics Stage 5 Teacher's Resource with CD-ROM

Essential Mathematics for the Australian Curriculum Year 10 2ed Teacher Support Print Option