Maths 1e S

Active maths: problem solving for 10- to 12-year-old students: photo copy masters.
La collection Exos résolus s'adresse à tous ceux qui veulent réussir dans les matières scientifiques, de la 3e à la terminale, grâce à un entraînement intensif. Chaque titre présente des batteries d'exercices minutés, classés par thèmes et par niveaux de difficulté. Vous y trouverez :- Des résumés de cours pour réviser les connaissances indispensables.- Des exercices de contrôle des connaissances pour assimiler les notions fondamentales.- Des exercices d'entraînement pour s'exercer et se perfectionner.- 25 sujets du BAC et des QCM pour bien se préparer à l'épreuve.- Tous les corrigés détaillés, avec de nombreux conseils. In 1917, Johann Radon published his fundamental work, where he introduced what is now called the Radon transform. Including important contributions by several experts, this book reports on ground-breaking developments related to the Radon transform throughout these years, and also discusses novel mathematical research topics and applications for the next century.
100 Exercises for Building Logic
The Python 3 Standard Library by Example
The great story of a huge collective success.
Actes de la Table Ronde du C.N.R.S., tenue a l'Universite Louis Pasteur, Strasbourg, 26 au 30 avril 1976
Geometric and Topological Methods for Quantum Field Theory
The Journey of a Successful Entrepreneur

The conference String-Math 2014 was held from June 9-13, 2014, at the University of Alberta. This edition of String-Math is the first to include satellite workshops: "String-Math Summer School" (held from June 2-6, 2014, at the University of British Columbia), "Calabi-Yau Manifolds and their Moduli" (held from June 14-18, 2014, at the University of Alberta), and "Quantum Curves and Quantum Knot Invariants" (held from June 16-20, 2014, at the Banff International Research Station). This volume presents the proceedings of the conference and satellite workshops. For mathematics, string theory has been a source of many significant inspirations, ranging from Seiberg-Witten theory in four-manifolds, to enumerative geometry and Gromov-Witten theory in algebraic geometry, to work on the Jones polynomial in knot theory, to recent progress in the geometric Langlands program and the development of derived algebraic geometry and n-category theory. In the other direction, mathematics has provided physicists with powerful tools, ranging from powerful differential geometric techniques for solving or analyzing key partial differential equations, to toric geometry, to K-theory and derived categories in D-branes, to the analysis of Calabi-Yau manifolds and string compactifications, to modular forms and other arithmetic techniques. Articles in this book address many of these topics.

Einstein's equations stem from General Relativity. In the context of Riemannian manifolds, an independent mathematical theory has developed around them. This is the first book which presents an overview of several striking results ensuing from the examination of Einstein's equations in the context of Riemannian manifolds. Parts of the text can be used as an introduction to modern Riemannian geometry through topics like homogeneous spaces, submersions, or Riemannian functionals.

Math and Art: An Introduction to Visual Mathematics explores the potential of mathematics to generate visually appealing objects and reveals some of the beauty of mathematics. It includes numerous illustrations, computer-generated graphics, photographs, and art reproductions to demonstrate how mathematics can inspire or generate art. Focusing on accessible, visually interesting, and mathematically relevant topics, the text unifies mathematics subjects through their visual and conceptual beauty. Sequentially organized according to mathematical maturity level, each chapter covers a cross section of mathematics, from fundamental Euclidean geometry, tilings, and fractals to hyperbolic geometry, platonic solids, and topology. For art students, the book stresses an understanding of the mathematical background of relatively complicated yet intriguing visual objects. For science students, it presents various elegant mathematical theories and notions. Features Provides an accessible introduction to mathematics in art Supports the narrative with a self-contained mathematical theory, with complete proofs of the main results (including the classification theorem for similarities) Presents hundreds of figures, illustrations, computer-generated graphics, designs, photographs, and art reproductions, mainly presented in full color Includes 21 projects and approximately 280 exercises, about half of which are fully solved Covers Euclidean geometry, golden section, Fibonacci numbers, symmetries, tilings, similarities, fractals, cellular automata, inversion, hyperbolic geometry, perspective drawing, Platonic and Archimedean solids, and topology New to the Second Edition New exercises, projects and artworks Revised, reorganized and expanded chapters More use of color throughout

Science Education Research and Practices in Taiwan
Graph Coloring Problems
Statistical Learning with Math and R
A confutation of the Rhemists translation, glosses and annotations on the New Testament
Agriculture Handbook
Les bases mathématiques en 1e S

This graduate-level text presents mathematical theory and problem-solving techniques associated with enumeration problems. Subjects include the combinatorics of the ordinary generating function and the exponential generating function, the combinatorics of sequences, and the combinatorics of paths. The text is complemented by approximately 350 exercises with full solutions. 1983 edition. Foreword by Gian-Carlo Rota. References. Index.

Avec Interro surprise : préparez vos interros ; trouvez les réponses à vos questions ; révisez le cours avec les exercices. Au programme : le cours en 68 questions ; 200 exercices chronométrés et notés ; les corrections détaillées et commentées de tous les exercices. Bonus : les conseils d'un professeur expérimenté.

This unique volume presents a collection of the extensive journal publications written by Kai Lai Chung over a span of 70-odd years. It was produced to celebrate his 90th birthday. The selection is only a subset of the many contributions that he made throughout his prolific career. Another volume, Chance and Choice, published by World Scientific in 2004, contains yet another subset, with four articles in common with this volume. Kai Lai Chung''s research contributions have had a major influence on several areas in probability. Among his most significant works are those related to sums of independent random variables, Markov chains, time reversal of Markov processes, probabilistic potential theory, Brownian excursions, and gauge theorems for the SchrAdinger equation.As Kai Lai Chung''s contributions spawned critical new developments, this volume also contains retrospective and perspective views provided by collaborators and other authors who themselves advanced the areas of probability and mathematics.''

rappels de cours, exercices et problèmes corrigés. Fiches méthode
Pyth 3 Stan Libr Exam _2
Soutien scolaire en vidéos - Maths 1e S
Measure Theory
String-Math 2014
Geometry of Banach Spaces - Selected Topics

Tout pour réussir sa 1er S : des synthèses de cours pour retenir l'essentiel : des méthodes pour traiter tous les types d'exercices : de nombreux exercices corrigés pour s'entraîner.

The book serves as a first introduction to computer programming of scientific applications, using the high-level Python language. The exposition is example and problem-oriented, where the applications are taken from mathematics, numerical calculus, statistics, physics, biology and finance. The book teaches "Matlab-style" and procedural programming as well as object-oriented programming. High school mathematics is a required background and it is advantageous to study classical and numerical one-variable calculus in parallel with reading this book. Besides learning how to program computers, the reader will also learn how to solve mathematical problems, arising in various branches of science and engineering, with the aid of numerical methods and programming. By blending programming, mathematics and scientific applications, the book lays a solid foundation for practicing computational science. From the reviews: Langtangen ... does an excellent job of introducing programming as a set of skills in problem solving. He guides the reader into thinking properly about producing program logic and data structures for modeling real-world problems using objects and functions and embracing the object-oriented paradigm. ... Summing Up: Highly recommended. F. H. Wild III, Choice, Vol. 47 (8), April 2010 Those of us who have learned scientific programming in Python 'on the streets' could be a little jealous of students who have the opportunity to take a course out of Langtangen's Primer." John D. Cook, The Mathematical Association of America, September 2011 This book goes through Python in particular, and programming in general, via tasks that scientists will likely perform. It contains valuable information for students new to scientific computing and would be the perfect bridge between an introduction to programming and an advanced course on numerical methods or computational science. Alex Small, IEEE, CiSE Vol. 14 (2), March /April 2012 "This fourth edition is a wonderful, inclusive textbook that covers pretty much everything one needs to know to go from zero to fairly sophisticated scientific programming in Python..." Joan Horvath, Computing Reviews, March 2015

This book giving an exposition of the foundations of modern measure theory offers three levels of presentation: a standard university graduate course, an advanced study containing some complements to the basic course, and, finally, more specialized topics partly covered by more than 850 exercises with detailed hints and references. Bibliographical comments and an extensive bibliography with 2000 works covering more than a century are provided.

nouveau programme
Folk tales and fairy lore in Gaelic and English
Proceedings of the 2009 Villa de Leyva Summer School
Uniqueness and Non-Uniqueness in the Cauchy Problem
1re ES
Stochastic Relations

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Master the Powerful Python 3 Standard Library through Real Code Examples "The genius of Doug's approach is that with 15 minutes per week, any motivated programmer can learn the Python Standard Library. Doug's guided tour will help you flip the Switch to fully power-up Python's batteries." –Raymond Hettinger, Distinguished Python Core Developer The Python 3 Standard Library contains hundreds of modules for interacting with the operating system, interpreter, and Internet-all extensively tested and ready to jump-start application development. Now, Python expert Doug Hellmann introduces every major area of the Python 3.x library through concise source code and output examples. Hellmann's examples fully demonstrate each feature and are designed for easy learning and reuse. You'll find practical code for working with text, data structures, algorithms, dates/times, math, the file system, persistence, data exchange, compression, archiving, crypto, processes/threads, networking, Internet capabilities, email, developer and language tools, the runtime, packages, and more. Each section fully covers one module, with links to additional resources, making this book an ideal tutorial and reference. The Python 3 Standard Library by Example introduces Python 3.x's new libraries, significant functionality changes, and new layout and naming conventions. Hellmann also provides expert porting guidance for moving code from 2.x Python standard library modules to their Python 3.x equivalents. Manipulate text with string, textwrap, re (regular expressions), and difflib Use data structures: enum, collections, array, heapq, queue, struct, copy, and more Implement algorithms elegantly and concisely with functools, itertools, and contextlib Handle dates/times and advanced mathematical tasks Archive and data compression Understand data exchange and persistence, including json, dbm, and sqlite Sign and verify messages cryptographically Manage concurrent operations with processes and threads Test, debug, compile, profile, language, import, and package tools Control interaction at runtime with interpreters or the environment

The first part of this book concerns the present state of the theory of chains (= total or linear orderings), in connection with some refinements of Ramsey's theorem, due to Galvin and Nash-Williams. This leads to the fundamental Laver's embeddability theorem for scattered chains, using Nash-Williams' better quasi-orderings, barriers and forerunning. The second part (chapters 9 to 12) extends to general relations the main notions and results from order-type theory. An important connection appears with permutation theory (Cameron, Pouzet, Livingstone and Wagner) and with logics (existence criterion of Pouzet-Vaught for saturated relations). The notion of bound of a relation (due to the author) leads to important calculus of thresholds by Frasnay, Hodges, Lachlan and Shelah. The redaction systematically goes back to set-theoretic axioms and precise definitions (such as Tarski's definition for finite sets), so that for each statement it is mentioned either that ZF axioms suffice, or what other axioms are needed (choice, continuum, dependent choice, ultrafilter axiom, etc.).

Soutien scolaire en MATH en vidéo pour les élèves de Première S @ Année scolaire 2015 - 2016 @ Cours + Exercices corrigés + Méthodes + Rédaction @ Conformes au programmes de l'Éducation Nationale @ Bénéficiez d'un accompagnement scolaire en math pour toute l'année scolaire grâce à ces vidéos qui se lisent sur ordinateurs, tablettes, smartphones, consoles de jeux, lecteurs DVD, et sans connexion internet Ce DVD-Rom d'une durée totale de 11 heures et 58 minutes contient : 22 vidéos - 11 chapitres : - Trinômes du Second Degré- Étude de Fonctions- Nombre dérivé- Fonction dérivée- Suites- Vecteurs et droites dans le plan- Trigonométrie- Produit scalaire dans le plan- Statistique descriptive- Probabilités- Loi binomiale et échantillonnage Chacun des 11 chapitres du programme se compose - d'une vidéo du Cours et - d'une vidéo avec les Exercices fondamentaux corrigés, les méthodes et la rédaction appropriée. Ces vidéos sont aussi disponibles en téléchargement sur mon site. A privilégier si vous habitez à l'étranger. @ Pendant les GRANDES VACANCES, ces vidéos sont un excellent moyen de préparer la prochaine rentrée scolaire. Les visuels des vidéogrammes présentés dans le site sont sujets à modification et ne peuvent en aucun cas être considérés comme des éléments contractuels.

Einstein Manifolds
Fractional Calculus and Its Applications
BASIC MATHEMATICS For Grade 9 ALGEBRA AND GEOMETRY
GRAPHS OF BASIC POWER AND RATIONAL FUNCTIONS

Combinatorial Enumeration

Des rappels de cours simples, présentés en doubles pages et illustrés d'exercices résolus. Des fiches Méthode, avec exemples d'application, pour maîtriser toutes les techniques de base. Des exercices gradués pour s'entraîner et progresser. Tous les corrigés, entièrement détaillés et commentés.

This book is the first volume of proceedings from the joint conference X International Symposium "Quantum Theory and Symmetries" (QTS-X) and XII International Workshop "Lie Theory and Its Applications in Physics" (LT-XII), held on 19-25 June 2017 in Varna, Bulgaria. The QTS series was founded on the core principle that symmetries underlie all descriptions of quantum systems. It has since evolved into a symposium at the forefront of theoretical and mathematical physics. The LT series covers the whole field of Lie theory in its widest sense, together with its applications in many areas of physics. As an interface between mathematics and physics, the workshop serves as a meeting place for mathematicians and theoretical and mathematical physicists. In dividing the material between the two volumes, the Editor has sought to select papers that are more oriented toward mathematics for the first volume, and those focusing more on physics for the second. However, this division is relative, since many papers are equally suitable for either volume. The topics addressed in this volume represent the latest trends in the fields covered by the joint conferences: representation theory, integrability, entanglement, quantum groups, number theory, conformal geometry, quantum affine superalgebras, noncommutative geometry. Further, they present various mathematical results: on minuscule modules, symmetry breaking operators, Kashiwara crystals, meta-conformal invariance, the superintegrable Zernike system.

Collecting information previously scattered throughout the vast literature, including the author's own research, Stochastic Relations: Foundations for Markov Transition Systems develops the theory of stochastic relations as a basis for Markov transition systems. After an introduction to the basic mathematical tools from topology, measure theory, and categories, the book examines the central topics of congruences and morphisms, applies these to the monoidal structure, and defines bisimilarity and behavioral equivalence within this framework. The author views developments from the general theory of coalgebras in the context of the subprobability functor. These tools show that bisimilarity and behavioral and logical equivalence are the same for general modal logics and for continuous time stochastic logic with and without a fixed point operator. With numerous problems and several case studies, this book is an invaluable study of an important aspect of computer science theory.

Active Maths
Theory of Relations
Mathematical Reviews
L'essentiel
Dynamical Systems, and Control Science: Lecture Notes in Pure and Applied Mathematics Series/152
Quantum Theory and Symmetries with Lie Theory and Its Applications in Physics Volume 1

The main reason I write this book was just to fullfil my long time dream to be able to tutor students. Most students do not bring their text books at home from school. This makes it difficult to help them. This book may help such students as this can be used as a reference in understanding Algebra and Geometry.

Contains a wealth of information previously scattered in research journals, conference proceedings and technical reports. Identifies more than 200 unsolved problems. Every problem is stated in a self-contained, extremely accessible format, followed by comments on its history, related results and literature. The book will stimulate research and help avoid efforts on solving already settled problems. Each chapter concludes with a comprehensive list of references which will lead readers to original sources, important contributions and other surveys.

Ce faire le point propose, pour chacune des notions fondamentales du programme : un rappel de cours ; un apprentissage méthodique des principales techniques de résolution des exercices, avec chaque fois un exercice type entièrement résolu et commenté, un récapitulatif de la technique ou des astuces mises en œuvre, un ou plusieurs exercices d'entraînement ; de nombreux problèmes de synthèse ; tous les corrigés des exercices et des problèmes.

Maths 1re S
Challenges and Opportunities

Mathématiques
The First 100 Years and Beyond
Problem Solving for 10 to 12 Year Old Students
Differential Equations

The most crucial ability for machine learning and data science is mathematical logic for grasping their essence rather than knowledge and experience. This textbook approaches the essence of machine learning and data science by considering math problems and building R programs. As the preliminary part, Chapter 1 provides a concise introduction to linear algebra, which will help novices read further to the following main chapters. Those succeeding chapters present essential topics in statistical learning: linear regression, classification, resampling, information criteria, regularization, nonlinear regression, decision trees, support vector machines, and unsupervised learning. Each chapter mathematically formulates and solves machine learning problems and builds the programs. The body of a chapter is accompanied by proofs and programs in an appendix, with exercises at the end of the chapter. Because the book is carefully organized to provide the solutions to the exercises in each chapter, readers can solve the total of 100 exercises by simply following the contents of each chapter. This textbook is suitable for an undergraduate or graduate course consisting of about 12 lectures. Written in an easy-to-follow and self-contained style, this book will also be perfect material for independent learning.

An extensive dictionary (almost 1800 pages) of the Upriver dialects of Halkomelem, an Amerindian language of B.C.,giving information from almost 80 speakers gathered by the author over a period of 40 years. Entries include names and dates of citation, dialect information, phonological, morphological, syntactic, and semantic information, domain memberships of each alloseme, examples of use in sentences, and much cultural information.

Presents recent developments in the areas of differential equations, dynamical systems, and control of finke and infinite dimensional systems. Focuses on current trends in differential equations and dynamical system research-from Darameterdependence of solutions to robui control laws for inflnite dimensional systems.

Foundations for Markov Transition Systems
Mathématiques, 1re S et Term. S
Exos +
Selected Works of Kai Lai Chung
QTS-X/LT-XII, Varna, Bulgaria, June 2017
Dictionary of Upriver Halkomelem

His name is Patrice X. Thiry. He is 48 years old. In 2000, he founded his start-up: ProwebCE. In 2017, he sold it to Edenred for 300 million euros. This is his story and the one of his teams.

Des rappels de cours simples, présentés en doubles pages et illustrés d'exercices résolus. Des fiches méthode avec exemples d'application, pour maîtriser toutes les techniques de base. De nombreux exercices gradués pour s'entraîner et progresser. Tous les corrigés, entièrement détaillés et commentés.

This book highlights the development and outcomes of research on and practical experience in science education in Taiwan. As the outcomes of the scholarship on science education in Taiwan have garnered attention in science education communities around the world, this book gathers the most relevant research on Taiwan, presenting it in a cohesive overview that will move science education forward in terms of policy, research and practice.

Maths 1e S
An Introduction to Visual Mathematics
Proceedings of the International Conference held at the University of New Haven, June 1974
Math and Art
A Primer on Scientific Programming with Python
Combinatoire et Representation du Groupe Symetrique

Set includes revised editions of some issues.

Based on lectures given at the renowned Villa de Leyva summer school, this book provides a unique presentation of modern geometric methods in quantum field theory. Written by experts, it enables readers to enter some of the most fascinating research topics in this subject. Covering a series of topics on geometry, topology, algebra, number theory methods and their applications to quantum field theory, the book covers topics such as Dirac structures, holomorphic bundles and stability, Feynman integrals, geometric aspects of quantum field theory and the standard model, spectral and Riemannian geometry and index theory. This is a valuable guide for graduate students and researchers in physics and mathematics wanting to enter this interesting research field at the borderline between mathematics and physics.

Révisions
Nouveau programme
The Radon Transform