

Turbo Maths Grade 12

New Scientist magazine was launched in 1956 "for all those men and women who are interested in scientific discovery, and in its industrial, commercial and social consequences". The brand's mission is no different today - for its consumers, New Scientist reports, explores and interprets the results of human endeavour set in the context of society and culture.

101 fun maths games and activities for parents to play with kids aged 4 to 14 Need some help with addition? Play a game of Salute Having trouble with times tables? Try Times Table Donk Floundering with fractions? Get creative cutting up the toast with your kids at breakfast Busy mums or dads are crying out for quick and easy ways to help their children with primary school maths and beyond. Here are 101 simple tips, games and activities to make practising maths as engaging and enjoyable as possible, for you and your child. All can be incorporated into the everyday routine – at home and on the go – with minimal fuss and no expensive kit – helping children have fun with numbers. Indeed, most of the time they won't even realise that maths is involved. Sneaky!

Areas covered include, addition and subtraction, multiplication and division, fractions, ratio and proportion, telling the time, estimation, measurement, geometry and shapes, with an emphasis on problem solving throughout.

How to calculate almost anything in your head Did you know that it's easier to add and subtract from left to right, rather than the other way round? You can be taught to square a three-digit number in seconds. Learn how to perform lightning calculations in your head, discover methods of incredible memorisation and other feats of mental agility. Learn maths secrets for the real world, from shopping to calculating a restaurant tip and figuring out gambling odds (or how much you've won). Learn how to solve sudoku faster.

Language Arts

Practical C++ Programming

Think Like A Maths Genius

How to Remember (Almost) Everything, Ever!

Introductory Statistics

InfoWorld is targeted to Senior IT professionals. Content is segmented into Channels and Topic Centers. InfoWorld also celebrates people, companies, and projects.

With foreword by Tim Rice, this book will change the way you see the world. Why is it better to buy a lottery ticket on a Friday? Why are showers always too hot or too cold? And what's the connection between a rugby player taking a conversion and a tourist trying to get the best photograph of Nelson's Column? These and many other fascinating questions are answered in this entertaining and highly informative book, which is ideal for anyone wanting to remind themselves – or discover for the first time – that maths is relevant to almost everything we do. Dating, cooking, travelling by car, gambling and even life-saving techniques have links with intriguing mathematical problems, as you will find explained here. Whether you have a PhD in astrophysics or haven't touched a maths problem since your school days, this book will give you a fresh understanding of the world around you.

Struggling to remember all that information they're stuffing you with at school? Want to impress your friends with amazing memory feats? Can't keep on top of all your online passwords? Then you need this book! Packed with cool tricks and fun exercises, How To Remember Almost Everything, Ever will help you hone your memory to super-hero standards. Learn how imagining a walk down your street can help you remember a shopping list, how you can memorise a phone number by picturing the digits as letters, and how music, rhymes and even smells can help. Find out what your brain has in common with a computer, how spies committed things to memory, and how to flummox your parents with memory tricks. A completely updated, reillustrated and redesigned edition of a book first published in 2007, How to Remember Almost Everything, Ever is the perfect book for anyone who wants to improve their study skills and make their memory the best it can be.

Tips, tricks and fun to turbo-charge your memory

InfoWorld

Roundabouts

Vedic Mathematics for All Ages

Study and Master Mathematics Grade 12 CAPS Study Guide

These quick, easy-to-learn activities give students much-needed mental and physical breaks, plus safe, structured ways to interact with peers. As a result, students are refocused and recharged and can more fully engage with the content you teach. Some brain breaks, like

"In the Bag," are calming and reduce stress; others, like "Twisted Brain," energize bodies and minds. And you can use brain breaks anywhere, anytime! This handy book includes: Clear, easy-to-follow instructions Tips for success Sample words and actions Suggested

variations Reproducible handouts

Includes exercises that teach the basics of grammar and writing.

150 REAL GRE Quantitative Reasoning questions—direct from the test maker! The best way to prepare for the Quantitative Reasoning measure of the GRE revised General Test is with real GRE test questions—and that is what you will find in this unique guide! Specially created for you by ETS, it offers 150 actual Quantitative Reasoning questions with complete explanations. Plus, this guide includes a review of math topics likely to appear on the Quantitative Reasoning measure. Only ETS can show you exactly what to expect on the test. So for in-

depth practice and accurate test preparation for the Quantitative Reasoning measure, this guide is your best choice! Look inside to find: Real GRE Quantitative Reasoning test questions arranged by content and question type—to help you build your test-taking skills. Plus, mixed practice sets. Answers and explanations for every question! GRE Math Review covering math topics you need to know for the test. ETS's own test-taking strategies: Valuable hints and tips to help you do your best on the test. Official information on the GRE

Quantitative Reasoning measure: The facts about the test content, structure, scoring, and more—straight from ETS. English Handbook and Study Guide Information Theory, Inference and Learning Algorithms The Art of Calculating in Your Head Official GRE Quantitative Reasoning Practice Questions Captain Underpants and the Sensational Saga of Sir Stinks-a-Lot

From the author of the bestselling Buster Brain Games series for Clever Kids, this brain workout will keep bright sparks entertained for hours. The brain teasing tasks are timed and there are four difficulty levels so kids can either work their way to the top or give themselves the ultimate challenge. Let the brain training begin!

Table of contents

Covering the full range of channel codes from the most conventional through to the most advanced, the second edition of Turbo Coding, Turbo Equalisation and Space-Time Coding is a self-contained reference on channel coding for wireless channels. The book commences with a historical perspective on the topic, which leads to two basic component codes, convolutional and block codes. It then moves on to turbo codes which exploit iterative decoding by using algorithms, such as the Maximum-A-Posteriori (MAP), Log-MAP and Soft Output Viterbi Algorithm (SOVA), comparing their performance. It also compares Trellis Coded Modulation (TCM), Turbo Trellis Coded Modulation (TTCM), Bit-Interleaved Coded Modulation (BICM) and Iterative BICM (BICM-ID) under various channel conditions. The horizon of the content is then extended to incorporate topics which have found their way into diverse standard systems. These include space-time block and trellis codes, as well as other Multiple-Input Multiple-Output (MIMO) schemes and near-instantaneously Adaptive Quadrature Amplitude Modulation (AQAM). The book also elaborates on turbo equalisation by providing a detailed portrayal of recent advances in partial response modulation schemes using diverse channel codes. A radically new aspect for this second edition is the discussion of multi-level coding and sphere-packing schemes, Extrinsic Information Transfer (EXIT) charts, as well as an introduction to the family of Generalized Low Density Parity Check codes. This new edition includes recent advances in near-capacity turbo-transceivers as well as new sections on multi-level coding schemes and of Generalized Low Density Parity Check codes Comparatively studies diverse channel coded and turbo detected systems to give all-inclusive information for researchers, engineers and students Details EXIT-chart based irregular transceiver designs Uses rich performance comparisons as well as diverse near-capacity design examples

Mathematics and Computation

Fuzzy Set Theory — and Its Applications

An Informational Guide

EXIT-Chart-Aided Near-Capacity Designs for Wireless Channels

Popular Science

Aeronautical Engineer's Data Book is an essential handy guide containing useful up to date information regularly needed by the student or practising engineer. Covering all aspects of aircraft, both fixed wing and rotary craft, this pocket book provides quick access to useful aeronautical engineering data and sources of information for further in-depth information. Quick reference to essential data Most up to date information available

Introductory Statistics is designed for the one-semester, introduction to statistics course and is geared toward students majoring in fields other than math or engineering. This text assumes students have been exposed to intermediate algebra, and it focuses on the applications of statistical knowledge rather than the theory behind it. The foundation of this textbook is Collaborative Statistics, by Barbara Illowsky and Susan Dean. Additional topics, examples, and ample opportunities for practice have been added to each chapter. The development choices for this textbook were made with the guidance of many faculty members who are deeply involved in teaching this course. These choices led to innovations in art, terminology, and practical applications, all with a goal of increasing relevance and accessibility for students. We strove to make the discipline meaningful, so that students can draw from it a working knowledge that will enrich their future studies and help them make sense of the world around them. Coverage and Scope Chapter 1 Sampling and Data Chapter 2 Descriptive Statistics Chapter 3 Probability Topics Chapter 4 Discrete Random Variables Chapter 5 Continuous Random Variables Chapter 6 The Normal Distribution Chapter 7 The Central Limit Theorem Chapter 8 Confidence Intervals Chapter 9 Hypothesis Testing with One Sample Chapter 10 Hypothesis Testing with Two Samples Chapter 11 The Chi-Square Distribution Chapter 12 Linear Regression and Correlation Chapter 13 F Distribution and One-Way ANOVA

George and Harold, and their doubles, Yesterday George and Yesterday Harold, have a good thing going. Two of them go to school, while the other two hide in the tree house and play video games all day-then they switch! But when their malicious gym teacher, Mr Meaner, creates a method of mind control that turns their fellow students into attentive, obedient, perfect children, the future of all humanity will be in their hands!

The Arithmetic Teacher

Secrets Behind Faster Calculations

The Physics and Mathematics of MRI

Classroom Mathematics

A Theory Revolutionizing Technology and Science

TRB's National Cooperative Highway Research Program (NCHRP) Report 672: Roundabouts: An Informational Guide – Second Edition explores the planning, design, construction, maintenance, and operation of roundabouts. The report also addresses issues that may be useful in helping to explain the trade-offs associated with roundabouts. This report updates the U.S. Federal Highway Administration's Roundabouts: An Informational Guide, based on experience gained in the United States since that guide was published in 2000.

The author has attempted to codify several useful results embedded in the ancient lore, in a form which is easily accessible to the children learning mathematics. Many of the chapters deal with computations using simple techniques which will shorten the effort involved in the conventional approach. The price one pays, of course, is that one has to learn the tricks, memorize them and use the appropriate one for each problem. While one might think that this takes away the generality of the modern approach, it certainly has the element of charm and intrigue which children [and grown-ups!] will find entertaining. Even working out why many of these approaches lead to correct results is a valuable exercise by itself. Contents Foreword, Preface, Feedback, Introduction, 1. Complement, Subtraction, Multiplication by Specific Numbers, Base Multiplication, Working Base Multiplication, Multiplication, Algebra, Digital Roots, Divisibility, Division I, Division II, Squares, Straight Squaring, Cubes, Square roots of exact squares, Cube roots of exact cubes, Straight Division, Square roots II, Sutra's, Glossary, Index.

Get the only official guide to the GRE® General Test that comes straight from the test makers! If you're looking for the best, most authoritative guide to the GRE General Test, you've found it! The Official Guide to the GRE General Test is the only GRE guide specially created by ETS—the people who actually make the test. It's packed with everything you need to do your best on the test—and move toward your graduate or business school degree. Only ETS can show you exactly what to expect on the test, tell you precisely how the test is scored, and give you hundreds of authentic test questions for practice! That makes this guide your most reliable and accurate source for everything you need to know about the GRE revised General Test. No other guide to the GRE General Test gives you all this: • Four complete, real tests—two in the book and two on CD-ROM • Hundreds of authentic test questions—so you can study with the real thing • In-depth descriptions of the Verbal Reasoning and Quantitative Reasoning measures plus valuable tips for answering each question type • Quantitative Reasoning problem-solving steps and strategies to help you get your best score • Detailed overview of the two types of Analytical Writing essay tasks including scored sample responses and actual raters' comments Everything you need to know about the test, straight from the test makers!

Grade 2

Maths on the Go

Refocus and Recharge! 50 Brain Breaks for Middle Schoolers

CD-ROMs in Print

Software-Defined Radio for Engineers

Based on the popular Artech House classic, Digital Communication Systems Engineering with Software-Defined Radio, this book provides a practical approach to quickly learning the software-defined radio (SDR) concepts needed for work in the field. This up-to-date volume guides readers on how to quickly prototype wireless designs using SDR for real-world testing and experimentation. This book explores advanced wireless communication techniques such as OFDM, LTE, WLA, and hardware targeting. Readers will gain an understanding of the core concepts behind wireless hardware, such as the radio frequency front-end, analog-to-digital and digital-to-analog converters, as well as various processing technologies. Moreover, this volume includes chapters on timing estimation, matched filtering, frame synchronization message decoding, and source coding. The orthogonal frequency division multiplexing is explained and details about HDL code generation and deployment are provided. The book concludes with coverage of the WLAN toolbox with OFDM beacon reception and the LTE toolbox with downlink reception. Multiple case studies are provided throughout the book. Both MATLAB and Simulink source code are included to assist readers with their projects in the field.

Magnetic Resonance Imaging is a very important clinical imaging tool. It combines different fields of physics and engineering in a uniquely complex way. MRI is also surprisingly versatile, 'pulse sequences' can be designed to yield many different types of contrast. This versatility is unique to MRI. This short book gives both an in depth account of the methods used for the operation and construction of modern MRI systems and also the principles of sequence design and many examples of applications. An important additional feature of this book is the detailed discussion of the mathematical principles used in building optimal MRI systems and for sequence design. The mathematical discussion is very suitable for undergraduates attending medical physics courses. It is also more complete than usually found in alternative books for physical scientists or more clinically orientated works.

Popular Science gives our readers the information and tools to improve their technology and their world. The core belief that Popular Science and our readers share: The future is going to be better, and science and technology are the driving forces that will help make it better.

The Hidden Maths of Everyday Life

Standard Grade : Grade 12

Turbo Coding, Turbo Equalisation and Space-Time Coding

A Beginners' Guide

101 Fun Ways to Play with Maths

Practical C++ Programming thoroughly covers: C++ syntax · Coding standards and style · Creation and use of object classes · Templates · Debugging and optimization · Use of the C++ preprocessor · File input/output.

For all students who wish to understand current economic and business literature, knowledge of mathematical methods has become a prerequisite. Clear and concise, with precise definitions and theorems, Werner and Sotskov cover all the major topics required to gain a firm grounding in this subject including sequences, series, applications in finance, functions, differentiations, differentials and difference equations, optimizations with and without constraints, integrations and much more. Containing exercises and worked examples, precise definitions and theorems as well as economic applications, this book provides the reader with a comprehensive understanding of the mathematical models and tools used in both economics and business.

An introduction to computational complexity theory, its connections and interactions with mathematics, and its central role in the natural and social sciences, technology, and philosophy Mathematics and Computation provides a broad, conceptual overview of computational complexity theory—the mathematical study of efficient computation. With important practical applications to computer science and industry, computational complexity theory has evolved into a highly interdisciplinary field, with strong links to most mathematical areas and to a growing number of scientific endeavors. Avi Wigderson takes a sweeping survey of complexity theory, emphasizing the field's insights and challenges. He explains the ideas and motivations leading to key models, notions, and results. In particular, he looks at algorithms and complexity, computations and proofs, randomness and interaction, quantum and arithmetic computation, and cryptography and learning, all as parts of a cohesive whole with numerous cross-influences. Wigderson illustrates the immense breadth of the field, its beauty and richness, and its diverse and growing interactions with other areas of mathematics. He ends with a comprehensive look at the theory of computation, its methodology and aspirations, and the unique and fundamental ways in which it has shaped and will further shape science, technology, and society. For further reading, an extensive bibliography is provided for all topics covered. Mathematics and Computation is useful for undergraduate and graduate students in mathematics, computer science, and related fields, as well as researchers and teachers in these fields. Many parts require little background, and serve as an invitation to newcomers seeking an introduction to the theory of computation. Comprehensive coverage of computational complexity theory, and beyond High-level, intuitive exposition, which brings conceptual clarity to this central and dynamic scientific discipline Historical accounts of the evolution and motivations of central concepts and models A broad view of the theory of computation's influence on science, technology, and society Extensive bibliography

Why Do Buses Come in Threes?

Turbomaths Grade 12

Turbo Maths, 2004

The Official Guide to the GRE General Test, Third Edition

Be it calculating the spare change at your local grocery shop or adding travel expenses, an aptitude for quick calculations always comes in handy. Being fast with numbers is always an added advantage, especially when you need to solve questions in a constrained time limit, such as your college exams or even more importantly, entrance and competitive exams. Calculating quickly is not something that you master overnight, there are tricks that you need to master along with learning time management. That being said, performing calculations within seconds is useful not only for students, but also for professionals, housewives and everyone who wants to learn something new and interesting. GKP's 'Secrets Behind Faster Calculations:' by Author Praveen Tyagi is ideal for aspirants of all Government Exams, CAT, GATE, JEE etc. The book has been divided into 10 distinct chapters namely General Tricks, Addition and Subtraction, Multiplication, Squaring, Cubing, Square Root, Cube Root, Division, Percentage and Data Interpretation. All of these contain useful techniques which will assist students in enhancing their calculative ability to the maximum. When applied while practicing with regular study material, the book is going to provide incredible value for students. Features: 10 distinct sections with tips and techniques to do quick calculations Practice Tests to assess learning level Prepared in coherence with the needs of learners and aspirants of various competitive and entrance exams Contents 1. Some Special Tricks (General Tricks) 2. Addition and Subtraction 3. Multiplication 4. Squaring 5. Cubing 6. Square Root 7. Cube Roots 8. Division 9. Percentage 10. Data Interpretation

Suitable for school pupils aged 11–18, this Handbook covers everything you need to help you communicate in EnglishFor students, this reference book• is a practical guide to using English in all situations• may be used in the classroom or for independent home study• contains rules and explanations written in a simple, logical format to help you improve your English• provides tests on each section to help assess your progress and reinforce learning.For teachers, this reference book• is an invaluable teaching tool presented in a clear, user-friendly format• allows you to teach English in context by using whatever is relevant and of interest to your students• saves you preparation time• can be used alongside any other classroom textSections include:• Language • Literature• Analysing texts• Visual analysis• The writing process• Public speaking (oral communication)In addition there are self-tests on each major section.

Mathematics of Economics and Business

Aeronautical Engineer's Data Book

Learners' Book, Grade 8

New Scientist

Brainy Games for Bright Sparks, Ages 7 to 9