Mathographics Dover Recreational Math

The Mathematica GuideBook for Programming
Shapes, Space, and Symmetry
Spaceland
Excursions in Geometry
Disquisitiones Arithmeticae
Pi: A Source Book
Handbook of Mathematics and Computational Science
Perspective Made Easy
Mathematical Recreations and Essays
A Catalog of Special Plane Curves
Geometry Revisited
Famous Problems of Geometry and How to Solve Them
Elementary Real Analysis
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Squaring the Circle

Introductory Discrete Mathematics
Modern Geometry
Classics On Fractals
Introduction to Higher Geometry
Madachy's Mathematical Recreations
Mathematical graphics I
More Mathematical Morsels
An Elementary Treatise on Modern Pure Geometry
The Geometry of Art and Life
CRC Concise Encyclopedia of Mathematics
Circles: A Mathematical View
Mathematical Recreations
Mathographics
Modern Differential Geometry of Curves and Surfaces with Mathematica
The Baumgarten Corruption
The Fourth Dimension: Toward a Geometry of Higher Reality
Game, Set and Math
Geometry and the Visual Arts
Contact
The Penguin Dictionary of Curious and Interesting Geometry

The Book of Numbers
Modern Geometry
Mathematical Snapshots
College Geometry
Tilings and Patterns

MATTEO DUNCAN

The Mathematica GuideBook for Programming Springer Science & Business Media College Geometry is divided into two parts. Part I is a sequel to basic high school geometry and introduces the reader to some of the important modern extensions of elementary geometry-extension that have largely entered into the mainstream of mathematics. Part II treats notions of geometric structure that arose with the non-Euclidean revolution in the first half of the nineteenth century. *Shapes, Space, and Symmetry* Springer A straightedge, compass, and a little thought are all that's needed to discover the intellectual excitement of geometry. Harmonic division and Apollonian circles, inversive geometry, hexlet, Golden Section, more. 132 illustrations. Spaceland Createspace Independent Publishing Platform

This survey traces the effects of geometry on artistic achievement and clearly discusses its importance to artists and scientists. It also surveys projective geometry, mathematical curves, theories of perspective, architectural form, and concepts of space.
Excursions in Geometry Courier Corporation
Tilings and Patterns: An Introduction presents in convenient paperback form the first half of Tilings and Patterns. Omitting the more specialized material of the earlier volume, this abbreviated edition make's the authors' contributions to tiling theory and its practical applications accessible to a wide audience.
Disquisitiones Arithmeticae Courier Corporation
This concise, undergraduate-level text focuses on combinatorics, graph theory with applications to some standard network optimization problems, and algorithms. More than 200 exercises, many with complete solutions. 1991 edition.
Pi: A Source Book CRC Press
One of the most talented contemporary authors of cutting-edge math and science books conducts a fascinating tour of a higher reality, the Fourth Dimension. Includes problems, puzzles, and 200 drawings. "Informative and mind-dazzling." — Martin Gardner.
Handbook of Mathematics and Computational Science Courier Corporation
"...the great feature of the

book is that anyone can read it without excessive head scratching...You'll find plenty here to keep you occupied, amused, and informed. Buy, dip in, wallow." -IAN STEWART, NEW SCIENTIST "...a delightful look at numbers and their roles in everything from language to flowers to the imagination." -SCIENCE NEWS "...a fun and fascinating tour of numerical topics and concepts. It will have readers contemplating ideas they might never have thought were understandable or even possible." -WISCONSIN BOOKWATCH "This popularization of number theory looks like another classic." -LIBRARY JOURNAL

Perspective Made Easy Simon and Schuster

This book gathers thousands of up-to-date equations, formulas, tables, illustrations, and explanations into one invaluable volume. It includes over a thousand pages of mathematical material as well as chapters on probability, mathematical statistics, fuzzy logic, and neural networks. It also contains computer language overviews of C, Fortran, and Pascal.

Mathematical Recreations and Essays Springer Science & Business Media

Ranging from ancient Greek and Roman problems to the most modern applications of special mathematical techniques for amusement, this popular volume contains material to delight both beginners and advanced mathematicians. Its 250 lively puzzles, problems,

situations, and demonstrations of recreational mathematics feature full solutions and analyses. Fifty-seven highly unusual historic problems are derived from ancient Greek, medieval European, Arabic, and Hindu sources. Other problems are based on "mathematics without numbers," geometry, topology, the calendar, arithmetic, and the mathematics of chess moves. Fifty pages comprise numerical pastimes built out of figurate numbers, Mersenne numbers, Fermat numbers, cyclic numbers, automorphic numbers, and prime numbers; probability problems are also fully analyzed. More than forty pages are devoted to magic squares, and the concluding portion of the book presents more than twenty-five new positional and permutational games of permanent value. A discussion of fairy chess is followed by rules and procedural information on latruncles, go, reversi, jinx, ruma, lasca, tricolor, four-story towers, tetrachrome, and other games. More than a collection of wonderful puzzles, this volume offers a thorough, rigorous, and entertaining sampler of recreational mathematics, highlighted by numerous insights into specialized fields.

A Catalog of Special Plane Curves Courier Corporation

Among the many beautiful and nontrivial theorems in geometry found in Geometry Revisited are the theorems of Ceva,

Menelaus, Pappus, Desargues, Pascal, and Brianchon. A nice proof is given of Morley's remarkable theorem on angle trisectors. The transformational point of view is emphasized: reflections, rotations, translations, similarities, inversions, and affine and projective transformations. Many fascinating properties of circles, triangles, quadrilaterals, and conics are developed.

Geometry Revisited

American Mathematical Society

Mathematical Recreations and Essays W. W. Rouse Ball For nearly a century, this sparkling classic has provided stimulating hours of entertainment to the mathematically inclined. The problems posed here often involve fundamental mathematical methods and notions, but their chief appeal is their capacity to tease and delight. In these pages you will find scores of "recreations" to amuse you and to challenge your problem-solving faculties-often to the limit. Now in its 13th edition, Mathematical Recreations and Essays has been thoroughly revised and updated over the decades since its first publication in 1892. This latest edition retains all the remarkable character of the original, but the terminology and treatment of some problems have been updated and new material has been added. Among the challenges in store for you: Arithmetical and geometrical recreations; Polyhedra; Chess-board recreations; Magic squares; Map-coloring

problems; Unicursal problems; Cryptography and cryptanalysis; Calculating prodigies; ... and more. You'll even find problems which mathematical ingenuity can solve but the computer cannot. No knowledge of calculus or analytic geometry is necessary to enjoy these games and puzzles. With basic mathematical skills and the desire to meet a challenge you can put yourself to the test and win. "A must to add to your mathematics library."-The Mathematics Teacher We are delighted to publish this classic book as part of our extensive Classic Library collection. Many of the books in our collection have been out of print for decades, and therefore have not been accessible to the general public. The aim of our publishing program is to facilitate rapid access to this vast reservoir of literature, and our view is that this is a significant literary work, which deserves to be brought back into print after many decades. The contents of the vast majority of titles in the Classic Library have been scanned from the original works. To ensure a high quality product, each title has been meticulously hand curated by our staff. Our philosophy has been guided by a desire to provide the reader with a book that is as close as possible to ownership of the original work. We hope that you will enjoy this wonderful classic work, and that for you it becomes an enriching experience.

Famous Problems of Geometry and How to

Solve Them American Mathematical Soc.
Twelve essays take a playful approach to mathematics, investigating the topology of a blanket, the odds of beating a superior tennis player, and how to distinguish between fact and fallacy.
Elementary Real Analysis University of Chicago Press
"A companion volume to the author's "Dictionary of Curious and Interesting Numbers", which focuses on arithmetic and number theory. The entries in this book cover curves, topology, tilings and all branches of plane and three-dimensional geometry, from Euclid to fractals."
Mathographics Courier Corporation
This comprehensive, detailed reference provides readers with both a working knowledge of Mathematica in general and a detailed knowledge of the key aspects needed to create the fastest, shortest, and most elegant implementations possible. It gives users a deeper understanding of Mathematica by instructive implementations, explanations, and examples from a range of disciplines at varying levels of complexity. The three volumes -- Programming, Graphics, and Mathematics, total 3,000 pages and contain more than 15,000 Mathematica inputs, over 1,500 graphics, 4,000+ references, and more than 500 exercises. This first volume begins with the structure of Mathematica expressions, the syntax of

Mathematica, its programming, graphic, numeric and symbolic capabilities. It then covers the hierarchical construction of objects out of symbolic expressions, the definition of functions, the recognition of patterns and their efficient application, program flows and program structuring, and the manipulation of lists. An indispensible resource for students, researchers and professionals in mathematics, the sciences, and engineering.

Squaring the Circle

Courier Corporation

Presenting theory while using Mathematica in a complementary way, Modern Differential Geometry of Curves and Surfaces with Mathematica, the third edition of Alfred Gray’s famous textbook, covers how to define and compute standard geometric functions using Mathematica for constructing new curves and surfaces from existing ones. Since Gray’s death, authors Abbena and Salamon have stepped in to bring the book up to date. While maintaining Gray's intuitive approach, they reorganized the material to provide a clearer division between the text and the Mathematica code and added a Mathematica notebook as an appendix to each chapter. They also address important new topics, such as quaternions. The approach of this book is at times more computational than is usual for a book on the subject. For example, Brioshi’s formula for the

Gaussian curvature in terms of the first fundamental form can be too complicated for use in hand calculations, but Mathematica handles it easily, either through computations or through graphing curvature. Another part of Mathematica that can be used effectively in differential geometry is its special function library, where nonstandard spaces of constant curvature can be defined in terms of elliptic functions and then plotted. Using the techniques described in this book, readers will understand concepts geometrically, plotting curves and surfaces on a monitor and then printing them. Containing more than 300 illustrations, the book demonstrates how to use Mathematica to plot many interesting curves and surfaces. Including as many topics of the classical differential geometry and surfaces as possible, it highlights important theorems with many examples. It includes 300 miniprograms for computing and plotting various geometric objects, alleviating the drudgery of computing things such as the curvature and torsion of a curve in space.

Introductory Discrete Mathematics Springer Science & Business Media

Upon publication, the first edition of the CRC Concise Encyclopedia of Mathematics received overwhelming accolades for its unparalleled scope, readability, and utility. It soon took its place among the top selling books in the history of Chapman & Hall/CRC, and its

popularity continues unabated. Yet also unabated has been the d

Modern Geometry

Wiley-Blackwell

PrefaceList of AbbreviationsChapter One: The Mathematical Career of the Monster of MalmesburyChapter Two: The Reform of Mathematics and of the UniversitiesIdeological Origins of the DisputeChapter Three: De Corpore and the Mathematics of MaterialismChapter Four: Disputed FoundationsHobbes vs. Wallis on the Philosophy of MathematicsChapter Five: The "Modern Analytics" and the Nature of DemonstrationChapter Six: The Demise of Hobbesian GeometryChapter Seven: The Religion, Rhetoric, and Politics of Mr. Hobbes and Dr. WallisChapter Eight: Persistence in ErrorWhy Was Hobbes So Resolutely Wrong?Appendix: Selections from Hobbes's Mathematical WritingsReferencesIndex

Classics On Fractals

Courier Corporation

Read the masters! Experience has shown that this is good advice for the serious mathematics student. This book contains a selection of the classical mathematical papers related to fractal geometry. For the convenience of the student or scholar wishing to learn about fractal geometry, nineteen of these papers are collected here in one place. Twelve of the nineteen have been translated into English

from German, French, or Russian. In many branches of science, the work of previous generations is of interest only for historical reasons. This is much less so in mathematics.1 Modern-day mathematicians can learn (and even find good ideas) by reading the best of the papers of bygone years. In preparing this volume, I was surprised by many of the ideas that come up.

Introduction to Higher Geometry Courier Corporation
Perspective is easy; yet, surprisingly few artists know the simple rules that make it so. Remedy that situation with this simple, step-by-step book, the first devoted entirely to the topic. 256 illustrations.
Madachy's Mathematical Recreations Tor Books
This classic study probes the geometric interrelationships between art and life in discussions ranging from dissertations by Plato, Pythagoras, and Archimedes to examples of modern architecture and art. Other topics include the Golden Section, geometrical shapes on the plane, geometrical shapes in space, crystal lattices, and other fascinating subjects. 80 plates and 64 figures.

• Dark Future: Uncovering The Great Reset's Terrifying Next Phase (the Great Reset Series)
• Goodnight Moon
• If Animals Kissed Good Night By Ann Whitford Paul
• Playground
• The Wager: A Tale Of Shipwreck, Mutiny And Murder
• Atomic Habits: An Easy & Proven Way To Build Good Habits & Break Bad Ones By James Clear
• Spare By Prince Harry The Duke Of Sussex
• The Alchemist, 25th Anniversary: A Fable About Following Your Dream