

Download Free The Art Of Infinite Pleasures Mathematics Robert M Kaplan Pdf Free Copy

The Art of the Infinite *The Pleasures of Pi, E and Other Interesting Numbers* *The Art of the Infinite* *To Infinity and Beyond* *Trigonometric Delights* *Eight Lessons on Infinity* *Beyond Infinity* *Understanding the Infinite* *A Brief History of Infinity* *God and the Mathematics of Infinity* *To Infinity and Beyond* *The Pleasures of Probability* *The Joy of X* *The Art of the Infinite* *The Pleasures Of Pi, E And Other Interesting Numbers* *Jean-Luc Nancy among the Philosophers* *Out of the Labyrinth* *Infinite Powers* *The Personality of Math* *Euclid in the Rainforest* *Beautiful Geometry* *Mathematics and the Imagination* *The Great Mathematical Problems* *Infinity* *Chaos* *The Infinite* *Computational Financial Mathematics using MATHEMATICA®* *Mathematical Expeditions* *Things to Make and Do in the Fourth Dimension* *One, Two, Three-- Infinity* *The Mystery of the Aleph* *Abstraction and Infinity* *A Practical Treatise on the descriptions and uses of portable mathematical instruments ... To which is added a complete system of land-surveying, etc e: The Story of a Number* *Mathematical Elegance* *The King of Infinite Space* *A Richer Picture of Mathematics* *Chances Are . . . Lacanian Coordinates*

God and the Mathematics of Infinity 2017-03-30 drawing on incontrovertible results from the science and mathematics of infinity h chris ransford analyzes the traditional concept of godhood and reaches astonishing conclusions he addresses humankind s abiding core debate on the meaning of spirituality and god using mathematics to explore key questions within this debate the author is led to counter intuitive conclusions including some that had long baffled humanity for instance why does evil exist if there is a god the book fastidiously does not take sides nor proffers opinions it only follows allowable mathematics wherever it leads by doing so it makes a major contribution to an understanding of the nature of reality

Euclid in the Rainforest 2006-07-25 an exquisite visual celebration of the 2 500 year history of geometry if you ve ever thought that mathematics and art don t mix this stunning visual history of geometry will change your mind as much a work of art as a book about mathematics beautiful geometry presents more than sixty exquisite color plates illustrating a wide range of geometric patterns and theorems accompanied by brief accounts of the fascinating history and people behind each with artwork by swiss artist eugen jost and text by math historian eli maor this unique celebration of geometry covers numerous subjects from straightedge and compass constructions to intriguing configurations involving infinity the result is a delightful and informative illustrated tour through the 2 500 year old history of one of the most important branches of mathematics

The Joy of X 2012 a comprehensive tour of leading mathematical ideas by an award winning professor and columnist for the new york times opinionator series demonstrates how math intersects with philosophy science and other aspects of everyday life by the author of the calculus of friendship 50 000 first printing

The Art of the Infinite 2014-07-01 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

Art of the Infinite 2006 traces the development of mathematical thinking and describes the characteristics of the republic of numbers in terms of humankind s fascination with and growing knowledge of infinity

Infinity 2007 based on only elementary mathematics this engaging account of chaos theory bridges the gap between introductions for the layman and college level texts it develops the science of dynamics in terms of small time steps describes the phenomenon of chaos through simple examples and concludes with a close look at a homoclinic tangle the mathematical monster at the heart of chaos the presentation is enhanced by many figures animations of chaotic motion available on a companion cd and biographical sketches of the pioneers of dynamics and chaos theory to ensure accessibility to motivated high school students care has been taken to explain advanced mathematical concepts simply including exponentials and logarithms probability correlation frequency analysis fractals and transfinite numbers these tools help to resolve the intriguing paradox of motion that is predictable and yet random while the final chapter explores the various ways chaos theory has been put to practical use

A Richer Picture of Mathematics 2018-02-13 psychoanalysis is an experience of truths and lies in language it is also a discourse and a praxis lacanian coordinates takes the reader from the beginning of lacan s teaching from the logic of the signifier and the lacanian subject to the drive and object a qua object a the paradoxes of guilt and finally to the desire of the other love and femininity the themes which are explored and developed in the forthcoming second volume of lacanian coordinates this book explores the points of lacanian orientation that lead us to the particularity of the subject and considers whether we find them not solely in the discourse of the universal to which religion science and philosophy testify but also in the analytic experience itself psychoanalysis creates conditions for an encounter with an analyst and with words forgotten neglected underestimated yet also bursting with meaning and surprises each chapter contributes to this subjective realisation taking as reference the clinic the voice of an analysand and everyday discourse

Things to Make and Do in the Fourth Dimension 2014-12-02 full of intellectual treats and tricks of whimsy and deep scientific philosophy it is highbrow entertainment at its best a teasing challenge to all who aspire to think about the universe new york herald tribune one of the world s foremost nuclear physicists celebrated for his theory of radioactive decay among other accomplishments george gamow possessed the unique ability of making the world of science accessible to the general reader he brings that ability to bear in this delightful expedition through the problems pleasures and puzzles of modern science among the topics scrutinized with the author s celebrated good humor and pedagogical prowess are the macrocosm and the microcosm theory of numbers relativity of space and time entropy genes atomic structure nuclear fission and the origin of the solar system in the pages of this book readers grapple with such crucial matters as whether it is possible to bend space why a rocket shrinks the end of the world problem excursions into the fourth dimension and a host of other tantalizing topics for the scientifically curious brimming with amusing anecdotes and provocative problems one two three infinity also includes over 120 delightful pen and ink illustrations by the author adding another dimension of good natured charm to these wide ranging explorations whatever your level of scientific expertise chances are you ll derive a great deal of pleasure stimulation and information from this unusual and imaginative book it belongs in the library of anyone curious about the wonders of the scientific universe in one two three infinity as in his other books george gamow succeeds where others fail because of his remarkable ability to combine technical accuracy choice of material dignity of expression and readability saturday review of literature

The Infinite 1990 given the explosion of interest in mathematical methods for solving problems in finance and trading a great deal of research and development is taking place in universities large brokerage firms and in the supporting trading software industry mathematical advances have been made both analytically and numerically in finding practical solutions this book provides a comprehensive overview of existing and original material about what mathematics when allied with mathematica can do for finance sophisticated theories are presented systematically in a user friendly style and a powerful combination of mathematical rigor and mathematica programming three kinds of solution methods are emphasized symbolic numerical and monte carlo nowadays only good personal computers are required to handle the symbolic and numerical methods that are developed in this book key features no previous knowledge of mathematica programming is required the symbolic numeric data management and graphic

capabilities of mathematica are fully utilized monte carlo solutions of scalar and multivariable sdes are developed and utilized heavily in discussing trading issues such as black scholes hedging black scholes and dupire pdes are solved symbolically and numerically fast numerical solutions to free boundary problems with details of their mathematica realizations are provided comprehensive study of optimal portfolio diversification including an original theory of optimal portfolio hedging under non log normal asset price dynamics is presented the book is designed for the academic community of instructors and students and most importantly will meet the everyday trading needs of quantitatively inclined professional and individual investors *Chances Are . . .* 2007-02-27

Abstraction and Infinity 2016 the interest earned on a bank account the arrangement of seeds in a sunflower and the shape of the gateway arch in st louis are all intimately connected with the mysterious number e in this informal and engaging history eli maor portrays the curious characters and the elegant mathematics that lie behind the number designed for a reader with only a modest mathematical background this biography brings out the central importance of e to mathematics and illuminates a golden era in the age of science

The King of Infinite Space 2014-04-08 a compelling journey through history mathematics and philosophy charting humanity s struggle against randomness our lives are played out in the arena of chance however little we recognize it in our day to day existence we are always riding the odds seeking out certainty but settling reluctantly for likelihood building our beliefs on the shadowy props of probability chances are is the story of man s millennia long search for the tools to manage the recurrent but unpredictable to help us prevent or at least mitigate the seemingly random blows of disaster disease and injustice in these pages we meet the brilliant individuals who developed the first abstract formulations of probability as well as the intrepid visionaries who recognized their practical applications from gamblers to military strategists to meteorologists to medical researchers from blackjack to our own mortality

A Practical Treatise on the descriptions and uses of portable mathematical instruments ... To which is added a complete system of land-surveying, etc 1806 the heart of mathematics is its elegance the way it all fits together unfortunately its beauty often eludes the vast majority of people who are intimidated by fear of the difficulty of numbers mathematical elegance remedies this using hundreds of examples the author presents a view of the mathematical landscape that is both accessible and fascinating at a time of concern that american youth are bored by math there is renewed interest in improving math skills mathematical elegance stimulates students along with those already experienced in the discipline to explore some of the unexpected pleasures of quantitative thinking invoking mathematical proofs famous for their simplicity and brainteasers that are fun and illuminating the author leaves readers feeling exuberant as well as convinced that their iqs have been raised by ten points a host of anecdotes about well known mathematicians humanize and provide new insights into their lofty subjects recalling such classic works as lewis carroll s introduction to logic and a mathematician reads the newspaper by john allen paulos mathematical elegance will energize and delight a wide audience ranging from intellectually curious students to the enthusiastic general reader

Mathematical Expeditions 2013-12-01 a book from the stand up mathematician that makes math fun again math is boring says the mathematician and comedian matt parker part of the problem may be the way the subject is taught but it s also true that we all to a greater or lesser extent find math difficult and counterintuitive this counterintuitiveness is actually part of the point argues parker the extraordinary thing about math is that it allows us to access logic and ideas beyond what our brains can instinctively do through its logical tools we are able to reach beyond our innate abilities and grasp more and more abstract concepts in the absorbing and exhilarating things to make and do in the fourth dimension parker sets out to convince his readers to revisit the very math that put them off the subject as fourteen year olds starting with the foundations of math familiar from school numbers geometry and algebra he reveals how it is possible to climb all the way up to the topology and to four dimensional shapes and from there to infinity and slightly beyond both playful and sophisticated things to make and do in the fourth dimension is filled with captivating games and puzzles a buffet of optional hands on activities that entices us to take pleasure in math that is normally only available to those studying at a university level things to make and do in the fourth dimension invites us to re learn much of what we missed in school and this time to be utterly enthralled by it *One, Two, Three-- Infinity* 1988-01-01 a compelling narrative that blends the story of infinity with the tragic tale of a tormented and brilliant mathematician

The Mystery of the Aleph 2001-08-28 mancosu offers an original investigation of key notions in mathematics abstraction and infinity and their interaction he gives a historical analysis of the theorizing of definitions by abstraction and explores a novel approach to measuring the size of infinite sets showing how this leads to deep mathematical and philosophical problems

Computational Financial Mathematics using MATHEMATICA® 2012-12-06 the stories of five mathematical journeys into new realms pieced together from the writings of the explorers themselves some were guided by mere curiosity and the thrill of adventure others by more practical motives in each case the outcome was a vast expansion of the known mathematical world and the realisation that still greater vistas remain to be explored the authors tell these stories by guiding readers through the very words of the mathematicians at the heart of these events providing an insight into the art of approaching mathematical problems the five chapters are completely independent with varying levels of mathematical sophistication and will attract students instructors and the intellectually curious reader by working through some of the original sources and supplementary exercises which discuss and solve or attempt to solve a great problem this book helps readers discover the roots of modern problems ideas and concepts even whole subjects students will also see the obstacles that earlier thinkers had to clear in order to make their respective contributions to five central themes in the evolution of mathematics

Chaos 2010-11-04 this historical study of the infinite covers all its aspects from the mathematical to the mystical anyone who has ever pondered the limitlessness of space and time or the endlessness of numbers or the perfection of god will recognize the special fascination of the subject beginning with an entertaining account of the main paradoxes of the infinite including those of zeno a w moore traces the history of the topic from aristotle to kant hegel cantor and wittgenstein

Beyond Infinity 2017-03-09 shortlisted for the 2017 royal society science book prize even small children know there are infinitely many whole numbers start counting and you ll never reach the end but there are also infinitely many decimal numbers between zero and one are these two types of infinity the same are they larger or smaller than each other can we even talk about larger and smaller when we talk about infinity in beyond infinity international maths sensation eugenia cheng reveals the inner workings of infinity what happens when a new guest arrives at your infinite hotel but you already have an infinite number of guests how does infinity give zeno s tortoise the edge in a paradoxical foot race with achilles and can we really make an infinite number of cookies from a finite amount of cookie dough wielding an armoury of inventive intuitive metaphor cheng draws beginners and enthusiasts alike into the heart of this mysterious powerful concept to reveal fundamental truths about mathematics all the way from the infinitely large down to the infinitely small

To Infinity and Beyond 2011-11-09 the infinite no other question has ever moved so profoundly the spirit of man no other idea has so fruitfully stimulated his intellect yet no other concept stands in greater need of clarification than that of the infinite david hilbert 1862 1943 infinity is a fathomless gulf there is a story attributed to david hilbert the preeminent mathe into which all things matician whose quotation appears above a man walked into a vanish hotel late one night and asked for a room sorry we don t have o marcus aurelius 121 180 roman emperor any more vacancies replied the owner but let s see perhaps and philosopher i can find you a room after all leaving his desk the owner reluctantly awakened his guests and asked them to change their rooms the occupant of room 1 would move to room 2 the occupant of room 2 would move to room 3 and so on until each occupant had moved one room over to the utter astonish ment of our latecomer room 1 suddenly became vacated and he happily moved in and settled down for the night but a numbing thought kept him from sleep how could it be that by merely moving the occupants from one room to another the first room had become vacated remember all of the rooms were occupied when he arrived

Infinite Powers 2019 this book shows that engaging with the personality of math is an essential key to learning and teaching math

e: The Story of a Number 2011-10-12 geometry defines the world around us helping us make sense of everything from architecture to military science to fashion and for over two thousand years geometry has been equated with euclid s elements arguably the most influential book in the

history of mathematics in the king of infinite space renowned mathematics writer david berlinski provides a concise homage to this elusive mathematician and his staggering achievements berlinski shows that for centuries scientists and thinkers from copernicus to newton to einstein have relied on euclid's axiomatic system a method of proof still taught in classrooms around the world euclid's use of elemental logic and the mathematical statements he and others built from it have dramatically expanded the frontiers of human knowledge the king of infinite space presents a rich accessible treatment of euclid and his beautifully simple geometric system which continues to shape the way we see the world

Jean-Luc Nancy among the Philosophers 2023-02-21 in this sparkling narrative mathematics is indeed set free michael shermer author of the believing brain in classrooms around the world robert and ellen kaplan's pioneering math circle program begun at harvard has introduced students ages six to sixty to the pleasures of mathematics exploring topics that range from roman numerals to quantum mechanics in out of the labyrinth the kaplans reveal the secrets of their highly successful approach which embraces the exhilarating joy of math's accessible mysteries stocked with puzzles colorful anecdotes and insights from the authors own teaching experience out of the labyrinth is both an engaging and practical guide for parents and educators and a treasure chest of mathematical discoveries for any reader who has felt the excitement of mathematical discovery or tried to convey it to someone else this volume will be a delightful and valued companion

The Pleasures of Probability 2013-11-11 the ideas of probability are all around us lotteries casino gambling the almost non stop polling which seems to mold public policy more and more these are a few of the areas where principles of probability impinge in a direct way on the lives and fortunes of the general public at a more removed level there is modern science which uses probability and its offshoots like statistics and the theory of random processes to build mathematical descriptions of the real world in fact twentieth century physics in embracing quantum mechanics has a world view that is at its core probabilistic in nature contrary to the deterministic one of classical physics in addition to all this muscular evidence of the importance of probability ideas it should also be said that probability can be lots of fun it is a subject where you can start thinking about amusing interesting and often difficult problems with very little mathematical background in this book i wanted to introduce a reader with at least a fairly decent mathematical background in elementary algebra to this world of probability to the way of thinking typical of probability and the kinds of problems to which probability can be applied i have used examples from a wide variety of fields to motivate the discussion of concepts

A Brief History of Infinity 2013-02-07 space is big really big you just won't believe how vastly hugely mind bogglingly big it is i mean you may think it's a long way down the street to the chemist but that's just peanuts to space douglas adams hitch hiker's guide to the galaxy we human beings have trouble with infinity yet infinity is a surprisingly human subject philosophers and mathematicians have gone mad contemplating its nature and complexity yet it is a concept routinely used by schoolchildren exploring the infinite is a journey into paradox here is a quantity that turns arithmetic on its head making it feasible that 1 0 here is a concept that enables us to cram as many extra guests as we like into an already full hotel most bizarrely of all it is quite easy to show that there must be something bigger than infinity when it surely should be the biggest thing that could possibly be brian clegg takes us on a fascinating tour of that borderland between the extremely large and the ultimate that takes us from archimedes counting the grains of sand that would fill the universe to the latest theories on the physical reality of the infinite full of unexpected delights whether st augustine contemplating the nature of creation newton and leibniz battling over ownership of calculus or cantor struggling to publicise his vision of the transfinite infinity's fascination is in the way it brings together the everyday and the extraordinary prosaic daily life and the esoteric whether your interest in infinity is mathematical philosophical spiritual or just plain curious this accessible book offers a stimulating and entertaining read

Trigonometric Delights 2013-02-24 trigonometry has always been an underappreciated branch of mathematics it has a reputation as a dry and difficult subject a glorified form of geometry complicated by tedious computation in this book eli maor draws on his remarkable talents as a guide to the world of numbers to dispel that view rejecting the usual arid descriptions of sine cosine and their trigonometric relatives he brings the subject to life in a compelling blend of history biography and mathematics he presents both a survey of the main elements of trigonometry and a unique account of its vital contribution to science and social development woven together in a tapestry of entertaining stories scientific curiosities and educational insights the book more than lives up to the title trigonometric delights maor whose previous books have demystified the concept of infinity and the unusual number e begins by examining the proto trigonometry of the egyptian pyramid builders he shows how greek astronomers developed the first true trigonometry he traces the slow emergence of modern analytical trigonometry recounting its colorful origins in renaissance europe's quest for more accurate artillery more precise clocks and more pleasing musical instruments along the way we see trigonometry at work in for example the struggle of the famous mapmaker gerardus mercator to represent the curved earth on a flat sheet of paper we see how m c escher used geometric progressions in his art and we learn how the toy spirograph uses epicycles and hypocycles maor also sketches the lives of some of the intriguing figures who have shaped four thousand years of trigonometric history we meet for instance the renaissance scholar regiomontanus who is rumored to have been poisoned for insulting a colleague and maria agnesi an eighteenth century italian genius who gave up mathematics to work with the poor but not before she investigated a special curve that due to mistranslation bears the unfortunate name the witch of agnesi the book is richly illustrated including rare prints from the author's own collection trigonometric delights will change forever our view of a once dreaded subject

Beautiful Geometry 2017-04-11 with wit and clarity the authors progress from simple arithmetic to calculus and non euclidean geometry their subjects geometry plane and fancy puzzles that made mathematical history tantalizing paradoxes more includes 169 figures

Eight Lessons on Infinity 2019-04-16 a fun non technical and wonderfully engaging guide to that most powerful and mysterious of mathematical concepts infinity in this book best selling author and mathematician haim shapira presents an introduction to mathematical theories which deal with the most beautiful concept ever invented by humankind infinity in this book best selling author and mathematician haim shapira presents an introduction to mathematical theories which deal with the most beautiful concept ever invented by humankind infinity written in clear simple language and aimed at a lay audience this book also offers some strategies that will allow readers to try their ability at solving truly fascinating mathematical problems infinity is a deeply counter intuitive concept that has inspired many great thinkers in this book we will meet many sages both familiar and unfamiliar zeno and pythagoras georg cantor and bertrand russell sofia kovalevskaya and emmy noether al khwarizmi and euclid sophie germain and srinivasa ramanujan the world of infinity is inhabited by many paradoxes and so is this book zeno paradoxes hilbert's infinity hotel achilles and the gods paradox the paradox of heaven and hell the ross littlewood paradox involving tennis balls the galileo paradox and many more aimed at the curious but non technical reader this book refrains from using any fearsome mathematical symbols it uses only the most basic operations of mathematics adding subtracting multiplication division powers and roots that is all but that doesn't mean that a bit of deep thinking won't be necessary and rewarding writing with humour and lightness of touch haim shapira banishes the chalky pallor of the schoolroom and offers instead a truly thrilling intellectual journey fasten your seatbelt we are going to infinity and beyond

Out of the Labyrinth 2014-02-04 from preeminent math personality and author of the joy of x a brilliant and endlessly appealing explanation of calculus how it works and why it makes our lives immeasurably better without calculus we wouldn't have cell phones tv gps or ultrasound we wouldn't have unraveled dna or discovered neptune or figured out how to put 5 000 songs in your pocket though many of us were scared away from this essential engrossing subject in high school and college steven strogatz's brilliantly creative down to earth history shows that calculus is not about complexity it's about simplicity it harnesses an unreal number infinity to tackle real world problems breaking them down into easier ones and then reassembling the answers into solutions that feel miraculous infinite powers recounts how calculus tantalized and thrilled its inventors starting with its first glimmers in ancient greece and bringing us right up to the discovery of gravitational waves a phenomenon predicted by calculus strogatz reveals how this form of math rose to the challenges of each age how to determine the area of a circle with only sand and a stick how to explain why mars goes backwards sometimes how to make electricity with magnets how to ensure your rocket doesn't miss the moon how to turn the tide in the fight against aids as strogatz proves calculus is truly the language of the universe by unveiling the principles of that language infinite powers makes us marvel at the world anew

The Art of the Infinite 2004-08-26 it is easy to be wary of mathematics but as this book shows drawing on science literature and philosophy its patterns are everywhere in witty and eloquent prose robert and ellen kaplan take mathematics back to its estranged audience bringing understanding

and clarity to a traditionally difficult subject and revealing the beauty behind the equations only by letting loose our curiosity can we learn to appreciate the wonder that can be found in mathematics an art invented by humans which is also timeless

The Art of the Infinite 2014-02-04 traces the development of mathematical thinking and describes the characteristics of the republic of numbers in terms of humankind's fascination with and growing knowledge of infinity

The Personality of Math 2022-06-06 like douglas hofstadter's gödel escher bach and david berlinski's a tour of the calculus euclid in the rainforest combines the literary with the mathematical to explore logic the one indispensable tool in man's quest to understand the world underpinning both math and science it is the foundation of every major advancement in knowledge since the time of the ancient greeks through adventure stories and historical narratives populated with a rich and quirky cast of characters mazur artfully reveals the less than airtight nature of logic and the muddled relationship between math and the real world ultimately mazur argues logical reasoning is not purely robotic at its most basic level it is a creative process guided by our intuitions and beliefs about the world

Mathematics and the Imagination 2013-04-22 there are some mathematical problems whose significance goes beyond the ordinary like fermat's last theorem or goldbach's conjecture they are the enigmas which define mathematics the great mathematical problems explains why these problems exist why they matter what drives mathematicians to incredible lengths to solve them and where they stand in the context of mathematics and science as a whole it contains solved problems like the poincaré conjecture cracked by the eccentric genius grigori perelman who refused academic honours and a million dollar prize for his work and ones which like the riemann hypothesis remain baffling after centuries stewart is the guide to this mysterious and exciting world showing how modern mathematicians constantly rise to the challenges set by their predecessors as the great mathematical problems of the past succumb to the new techniques and ideas of the present

Mathematical Elegance 2017-09-08 historian david e rowe captures the rich tapestry of mathematical creativity in this collection of essays from the years ago column of the mathematical intelligencer with topics ranging from ancient greek mathematics to modern relativistic cosmology this collection conveys the impetus and spirit of rowe's various and many faceted contributions to the history of mathematics centered on the göttingen mathematical tradition these stories illuminate important facets of mathematical activity often overlooked in other accounts six sections place the essays in chronological and thematic order beginning with new introductions that contextualize each section the essays that follow recount episodes relating to the section's overall theme all of the essays in this collection with the exception of two appeared over the course of more than 30 years in the mathematical intelligencer based largely on archival and primary sources these vignettes offer unusual insights into behind the scenes events taken together they aim to show how göttingen managed to attract an extraordinary array of talented individuals several of whom contributed to the development of a new mathematical culture during the first decades of the twentieth century

The Great Mathematical Problems 2013-03-07 this book offers an entertaining yet thorough explanation of the concept of yes infinity accessible to non mathematicians this book also cleverly connects mathematical reasoning to larger issues in society

To Infinity and Beyond 2017-11-21 eli maor examines the role of infinity in mathematics and geometry and its cultural impact on the arts and sciences he evokes the profound intellectual impact the infinite has exercised on the human mind from the horror infiniti of the greeks to the works of m c escher from the ornamental designs of the moslems to the sage giordano bruno whose belief in an infinite universe led to his death at the hands of the inquisition but above all the book describes the mathematician's fascination with infinity a fascination mingled with puzzlement maor explores the idea of infinity in mathematics and in art and argues that this is the point of contact between the two best exemplified by the work of the dutch artist m c escher six of whose works are shown here in beautiful color plates los angeles times eli maor's enthusiasm for the topic carries the reader through a rich panorama choice fascinating and enjoyable places the ideas of infinity in a cultural context and shows how they have been espoused and molded by mathematics science

Understanding the Infinite 2009-06-30 an accessible history and philosophical commentary on our notion of infinity how can the infinite a subject so remote from our finite experience be an everyday tool for the working mathematician blending history philosophy mathematics and logic shaughan lavine answers this question with exceptional clarity making use of the mathematical work of jan mycielski he demonstrates that knowledge of the infinite is possible even according to strict standards that require some intuitive basis for knowledge praise for understanding the infinite understanding the infinite is a remarkable blend of mathematics modern history philosophy and logic laced with refreshing doses of common sense it is a potted history of and a philosophical commentary on the modern notion of infinity as formalized in axiomatic set theory an amazingly readable book given the difficult subject matter most of all it is an eminently sensible book anyone who wants to explore the deep issues surrounding the concept of infinity will get a great deal of pleasure from it ian stewart new scientist how in a finite world does one obtain any knowledge about the infinite lavine argues that intuitions about the infinite derive from facts about the finite mathematics of indefinitely large size the issues are delicate but the writing is crisp and exciting the arguments original this book should interest readers whether philosophically historically or mathematically inclined and large parts are within the grasp of the general reader highly recommended d v feldman choice

The Pleasures Of Pi, E And Other Interesting Numbers 2006 this volume focuses on the relational aspect of jean luc nancy's thinking as nancy himself showed thinking might be a solitary activity but it is never singular in its dimension building on or breaking away from other thoughts especially those by thinkers who had come before thinking is always plural relational this singular plural dimension of thought in nancy's philosophical writings demands explication in this book some of today's leading scholars in the theoretical humanities shed light on how nancy's thought both shares with and departs from descartes hegel marx heidegger weil lacan merleau ponty and lyotard elucidating the sharing of voices in nancy's phrase between nancy and these thinkers contributors georges van den abbeele emily apter rodolphe gasché werner hamacher eleanor kaufman marie eve morin timothy murray jean luc nancy and john h smith

The Pleasures of Pi, E and Other Interesting Numbers 2006-11-01 this is a mathematics book written specifically for the enjoyment of non mathematicians and those who hated math in school the book is organized into two sections i beauty for the eye shallow water for the non swimmer and ii a feast for the mind slowly getting deeper for the more adventurous the author covers beautiful infinite series beginning with those that a young child can understand to one that even isaac newton gottfried liebniiz and the famous bernoulli brothers could not sum

Lacanian Coordinates 2018-03-29