

Encyclopedia of Mathematics and Society

Contents by Category

The following list is provided for readers to find articles related by topic.

Architecture and Engineering

Aircraft Design
Bridges
Canals
Carpentry
Castles
City Planning
Dams
Domes
Electricity
Elevators
Engineering Design
Fireworks
Green Design
Highways
Jackson, Shirley Ann
Landscape Design
Levers
Light Bulbs
Mattresses
Microwave Ovens
Nanotechnology
Packing Problems
Pulleys
Robots
Schools
Skyscrapers
Solar Panels
Symmetry
Televisions
Thermostat
Toilets
Tunnels
Vending Machines
Water Distribution
Windmills
Wright, Frank Lloyd

Arts, Music, and Entertainment

Animation and CGI
Ballet
Ballroom Dancing
Closed-Box Collecting
Comic Strips
Composing
Contra and Square Dancing

Cooking
Crochet and Knitting
Digital Cameras
Digital Images
Escher, M.C.
Geometry of Music
Golden Ratio
Harmonics
Literature
Magic
Movies, Making of
Movies, Mathematics in
Musical Theater
Nielsen Ratings
Optical Illusions
Origami
Painting
Percussion Instruments
Poetry
Plays
Popular Music
Pythagorean and Fibonacci Tuning
Quilting
Scales
Science Fiction
Sculpture
Step and Tap Dancing
String Instruments
Televisions
Textiles
Time Signatures
Wind Instruments
Writers, Producers, and Actors

Business, Economics, and Marketing

Accounting
Advertising
Bankruptcy, Business
Bankruptcy, Personal
Bar Codes
Budgeting
Burns, Ursula
Comparison Shopping
Coupons and Rebates
Credit Cards
Currency Exchange
Data Mining
Deming, W. Edwards
FICO Score
Forecasting
Gross Domestic Product (GDP)
Home Buying
Industrial Revolution

Insurance
Inventory Models
Loans
Market Research
Money
Mutual Funds
Payroll
Pensions, IRAs, and Social Security
Predicting Preferences
Quality Control
Sales Tax and Shipping Fees
Scheduling
Shipping
Stock Market Indices

Communication and Computers

Calculators in Society
Cell Phone Networks
Cerf, Vinton
Coding and Encryption
Digital Book Readers
Digital Storage
DVR Devices
Fax Machines
File Downloading and Sharing
Internet
Lovelace, Ada
MP3 Players
Neural Networks
Parallel Processing
Personal Computers
Radio
Satellites
Search Engines
Servers
SMART Board
Spam Filters
Wireless Communication

Friendship, Romance, and Religion

Birthday Problem
Cocktail Party Problem
Genealogy
Houses of Worship
Marriage
Mathematical Friendships and Romances
Mathematicians, Religious
Mathematics and Religion
Numbers and God
Predicting Divorce
Pythagorean School
Raghavan, Prabhakar
Religious Symbolism

Religious Writings
Sacred Geometry
Six Degrees of Kevin Bacon
Social Networks

Games, Sport, and Recreation

Acrostics, Word Squares, and Crosswords
Archery
Arenas, Sports
Auto Racing
Baseball
Basketball
Basketry
Betting and Fairness
Billiards
Board Games
Cheerleading
Climbing
Dice Games
Extreme Sports
Fantasy Sports Leagues
Fishing
Football
Game Theory
Garfield, Richard
Gymnastics
Hitting a Home Run
Hockey
Kicking a Field Goal
Knots
Lotteries
Martial Arts
Mathematical Puzzles
Newman, Ryan
Puzzles
Racquet Games
Rankings
Roller Coasters
Skating, Figure
Skydiving
Soccer
Sport Handicapping
Sudoku
Swimming
Tic-Tac-Toe
Tournaments
Video Games
Volleyball

Government, Politics, and History

African Mathematics
Arabic/Islamic Mathematics
Archimedes

Artillery
Atomic Bomb (Manhattan Project)
Babylonian Mathematics
Blackmun, Harry A.
Census
Chinese Mathematics
Civil War, U.S.
Cold War
Congressional Representation
Crime Scene Investigation
Deep Submergence Vehicles
Egyptian Mathematics
Elections
Firearms
Gerrymandering
Greek Mathematics
Incan and Mayan Mathematics
Income Tax
Infantry (Aerial and Ground Movements)
Intelligence and Counterintelligence
Middle Ages
Military Draft
Missiles
National Debt
Native American Mathematics
Pearl Harbor, Attack on
Pensions, IRAs, and Social Security
Perry, William J.
Predicting Attacks
Prehistory
Renaissance
Revolutionary War, U.S.
Roman Mathematics
Strategy and Tactics
Unemployment, Estimating
Vedic Mathematics
Vietnam War
Voting Methods
World War I
World War II

History and Development of Curricular Concepts

Addition and Subtraction
Algebra and Algebra Education
Axiomatic Systems
Binomial Theorem
Calculators in Classrooms
Calculus and Calculus Education
Conic Sections
Coordinate Geometry
Cubes and Cube Roots
Curves
Equations, Polar

Expected Values
Exponentials and Logarithms
Function Rate of Change
Functions
Functions, Recursive
Geometry and Geometry Education
Graphs
Infinity
Limits and Continuity
Linear Concepts
Mathematical Modeling
Matrices
Measurement, Systems of
Measurement in Society
Measurements, Area
Measurements, Length
Measurements, Volume
Measures of Center
Measuring Time
Measuring Tools
Multiplication and Division
Normal Distribution
Number and Operations
Number Theory
Numbers, Complex
Numbers, Real
Parallel Postulate
Perimeter and Circumference
Permutations and Combinations
Pi
Polygons
Polyhedra
Polynomials
Probability
Proof
Pythagorean Theorem
Randomness
Rational Numbers
Ruler and Compass Constructions
Sample Surveys
Scatterplots
Sequences and Series
Similarity
Squares and Square Roots
Statistics Education
Surfaces
Transformations
Trigonometry
Vectors
Visualization
Zero

Mathematics Around the World

Africa, Central
Africa, Eastern
Africa, North
Africa, Southern
Africa, West
Asia, Central and Northern
Asia, Eastern
Asia, Southeastern
Asia, Southern
Asia, Western
Caribbean America
Central America
Curricula, International
Europe, Eastern
Europe, Northern
Europe, Southern
Europe, Western
North America
Oceania, Australia and New Zealand
Oceania, Pacific Islands
South America
Mathematics Culture and Identity
Blackwell, David
Careers
Castillo-Chávez, Carlos
Clubs and Honor Societies
Competitions and Contests
Daubechies, Ingrid
Ethics
Graham, Fan Chung
Hunt, Fern
Math Gene
Mathematical Certainty
Mathematician Defined
Mathematicians, Amateur
Mathematics, Applied
Mathematics, Defined
Mathematics, Elegant
Mathematics, Theoretical
Mathematics, Utility of
Mathematics: Discovery or Invention
Mathematics Genealogy Project
Mathematics Research, Interdisciplinary
Minorities
Professional Associations
Ross, Mary G.
Tao, Terence
Wiles, Andrew
Women

Medicine and Health

Anesthesia
Apgar Scores

Body Mass Index
Brain
Chemotherapy
Cochlear Implants
Diagnostic Testing
Disease Survival Rates
Diseases, Tracking Infectious
Drug Dosing
EEG/EKG
Fertility
Fingerprints
Genetics
Growth Charts
HIV/AIDS
Intelligence Quotients
Joints
LD50/Median Lethal Dose
Life Expectancy
Medical Imaging
Medical Simulations
Molecular Structure
Nervous System
Nutrition
Pacemakers
Pregnancy
Psychological Testing
Stethoscopes
Surgery
Transplantation
Ultrasound
Viruses
Vision Correction

School and Society

Algebra in Society
Calculus in Society
Communication in Society
Connections in Society
Curriculum, College
Curriculum, K-12
Data Analysis and Probability in Society
Educational Testing
Geometry in Society
Government and State Legislation
Learning Exceptionalities
Learning Models and Trajectories
Mathematics Literacy and Civil Rights
Measurement in Society
Number and Operations in Society
Problem Solving in Society
Reasoning and Proof in Society
Representations in Society
Succeeding in Mathematics

Space, Time, and Distance

Astronomy
Black Holes
Calendars
Clocks
Einstein, Albert
Elementary Particles
Elevation
Geometry of the Universe
Gravity
Hawking, Stephen
Interplanetary Travel
Mapping Coastlines
Measuring Time
Moon
Planetary Orbits
Relativity
Ride, Sally
Telescopes
Temperature
Units of Area
Units of Length
Units of Mass
Units of Volume
Universal Constants
Universal Language

Travel and Transportation

Accident Reconstruction
Airplanes/Flight
Bicycles
Bus Scheduling
Fuel Consumption
GPS
Helicopters
HOV Lane Management
Maps
Segway
Smart Cars
Spaceships
Traffic
Trains
Travel Planning
Traveling Salesman Problem
Weightless Flight
Wheel

Weather, Nature, and Environment

Animals
Bees
Carbon Dating
Carbon Footprint

Caves and Caverns
Climate Change
Clouds
Coral Reefs
Crystallography
Deforestation
Doppler Radar
Earthquakes
Energy
Extinction
Farming
Floods
Forest Fires
Geothermal Energy
Green Mathematics
Hurricanes and Tornadoes
Light
Lightning
Plate Tectonics
Predator-Prey Models
Radiation
Recycling
Stalactites and Stalagmites
Sunspots
Synchrony and Spontaneous Order
Tides and Waves
Volcanoes
Water Quality
Weather Forecasting
Weather Scales
Wind and Wind Power