Supplement to: How to Keep Up in Mathematics

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Information Sources

General Science Publications (in rough order of usefulness)

New York Times: `http://query.nytimes.com/search/advanced`
Free search of archive from 1/1/1996; search yields lead paragraph, retrieval of entire text requires fee or subscription.

Science News: `http://www.sciencenews.org/archives/index.asp`
Free access to full text of articles that are available online (18% of all articles), bibliographic references and sources for all articles published in Science News, and online-only features, since 1996.

New Scientist: `www.newscientist.com/`
Free 7-day trial of archive to non-subscribers.

American Scientist: `http://www.sigmaxi.org/amsci/subject/Com-math`
Full text and illustrations available for some articles.

Science: `www.sciencemag.org`
Weekly. Abstracts available online; full-text requires subscription.

Scientific American: `https://www.sciamarchive.com/`
Free search of archive to 1993; retrieval of articles requires subscription.

Nature: `http://www.nature.com/`

Mathematics Indexes

Mathematics Teacher Cumulative Index for 1986–2000: `http://my.nctm.org/eresources/MT/index/`
Subject and author indexes of articles in the *Mathematics Teacher* 1986–2000 about teaching mathematics at the high-school level.

Mathematics Didactics Database (MATHDI): `http://www.emis.de/MATH/DI.html`
Index since 1976 of reviews of articles in journals worldwide about the teaching of mathematics and computer science. Subscription needed, but query in free demo mode returns first three matches.

Zentralblatt Math Database: `http://www.emis.de/ZMATH/`
Index since 1931 of reviews of articles in journals worldwide about mathematics. Subscription needed, but query in free demo mode returns first three matches.

MathSciNet: `www.ams.org/mathscinet`
Index since 1940 of reviews of articles in journals worldwide about mathematics. Subscription needed but free citation checker can function as searcher.

Electronic Research Archive for Mathematics (ERAM): `www.emis.de/MATH/JFM/`
Index for the years 1868 to 1911 (eventually to 1942) of reviews of articles in journals worldwide about mathematics, from *Jahrbuch über die Fortschritte der Mathematik*. Includes links to digitized facsimiles of some articles. Free.

Online indexes to *Mathematics Magazine* and the *College Mathematics Journal*: `http://www.math.hmc.edu/journalsearch/`
Database contains also the first paragraph of all *College Mathematics Journal* articles and most *Mathematics Magazine* articles after 1974. Free.

Front for the Mathematics ArXiv: `http://front.math.ucdavis.edu/`
Source for current preprints in research mathematics and mathematical physics. Free.

JSTOR: `http://www.jstor.org/cgi-bin/jstor/listjournal`
Full searchable text of digitized facsimile articles of journal issues except for the current year and the previous five years. Available through many libraries.
MATHEMATICS: Amer. J. Math., Amer. Math. Monthly, Annals of Math., J. Symbolic Logic, J. Amer. Math. Soc., Math. of Computation, Math. Tables . . . , Proc. Amer. Math. Soc., SIAM J. Appl. Math., J. Soc. for Industrial and Appl. Math., SIAM J. Num. Anal., SIAM Review, Trans. Amer. Math. Soc.
STATISTICS: Annals Appl. Prob.. Annals Math. Stat., Annals Prob., Annals Stat., Applied Stat., Biometrika, J. Amer. Stat. Assoc., J. Royal Stat. Soc., Stat. Sci., Statistician.

The Cornell Historic Math Book Collection: `library5.library.cornell.edu/cdl-math-browse.html`
Online collection of digitized facsimiles of old mathematics books, indexed by author and title. Free.

People Finders

- mathematicians: `http://www.ams.org/cml`
- statisticians: `http://www.amstat.org/membersearch/`
- computer scientists: `http://www.acm.org/membership/dir/`
- operations researchers: `http://www.informs.org/DIr/jDir.html`

Other Web Sources

MAA Online Columns: http://www.maa.org/news/columns.html
Ivars Peterson's MathTrek (weekly), Devlin's Angle by Keith Devlin (monthly), Cut The Knot! by Alex Bogomolny (monthly), Math News from Science News (occasional), Ivars Peterson's MatheMUSEments! for Kids (monthly).

Chance News: http://www.dartmouth.edu/~chance/chance_news/news.html
Indexed bi-monthly newsletter analyzing stories in the popular press that involve probability or statistics. Free access and free subscription.

limsup: Mathematics for Mathematicians: http://www.limsup.org/
Short articles announcing mathematical news with links to relevant papers. " . . . less formal than official pages sponsored by the American Math Society, less focused than sites such as ArXiv (xxx.lanl.gov) that specialize in mathematical preprints, and more thoughtfully moderated than open math discussion groups that succumb at times to abuses and flames." The site was launched April 2002 from the University of Pittsburgh math department.

Math Forum: Search for Math on the Internet: http://mathforum.org/grepforum.html
Search engine for Math Forum's own Web pages and select discussion groups, as well as for topics in mathematics education, including software. Free.

Frequently Asked Questions in Mathematics: http://db.uwaterloo.ca/~alopez-o/math-faq/math-faq.html
Topics treated are the construction of number systems, Fermat's Last Theorem, prime numbers, famous mathematical constants, Bourbaki, Four Color Theorem, angle trisection, Hilbert's 23 problems, unsolved problems, Monty Hall problem, Mastermind, the Axiom of Choice and the Continuum Hypothesis, and special formulas. Entire file available for download in various formats 250–500 KB. Last updated February 1998.

Mathematical Quotations Server: http://math.furman.edu/~mwoodard/mquot.html
Searchable collection of quotations related to mathematics. Entire file available for download, 250 KB. Sample: "Life is good for only two things, discovering mathematics and teaching mathematics"—Siméon Poisson.

The MacTutor History of Mathematics Archive: http://www-groups.dcs.st-and.ac.uk:80/~history/index.html
Biographies, historical topics, famous curves, prizes, and links to dozens of other history of math sites.

Mathematical Digest: http://www.ams.org/new-in-math/mathdigest/index.html
Short summaries of articles on mathematics in the popular press. No links to original full text. Coers ABC News, American Scientist, Boston Globe,

Chronicle of Higher Education, CNN, Discover magazine, Eurekalert, The Guardian, International Herald Tribune, LA Times, Mathematical Intelligencer, Nature, New Scientist, New York Times, NPR, Publishers Weekly, Science, Science News, Scientific American, SIAM News, Unisci, and Washington Post.

MagPortal.Com: `http://www.magportal.com/c/sci/math/`
Catalogs links to articles in popular science magazines (mostlyk *Science News*), with search engine.

Eric Weisstein's World of Mathematics, `http://mathworld.wolfram.com/`.
Online encyclopedia of mathematics. Available in book form as *CRC Concise Encyclopedia of Mathematics*, CRC Press, 1999 ("concise"? It's 1,970 pp!); but the online version is kept up to date.

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