

Math

Glencoe Textbook Website

www.glencoe.com/

- Textbook website that contains online catalogs where you can search for the textbooks and support material that meet your needs for various high school classes
- E-flash cards, online quizzes, web tours, digital projects, lesson plans, websites, Teacher weblinks, Cyberspace activities, Student online activities
- Addresses reading intervention, test preparation, Technology and Academic Integration, Math Proficiency, Keyboarding
- Online Math Tools including self-check algebra quizzes
- Graphing calculator tool
- Multimedia applications

Bankrate.com

www.bankrate.com

- Top shelf website for all things in the world of finance
- Mortgage, credit card, investment, college loans
- Wide array of calculators available
- Comparison charts
- Financial literacy pages for self-

Yahoo Finance

<http://finance.yahoo.com>

- A treasure trove of financial information that is unceasingly current
- News and opinion articles in every economic topic available
- Extensive stock research capabilities
- Calculators and other interactive options
- Vast educational features

Yahoo Finance Education

<http://finance.yahoo.com/education>

- Fantastic resource for self-motivated students, group work, and presentations
- Easy to follow, interactive
- Helpful question and answer format

Annual Credit Report

www.annualcreditreport.com

- This is the portal site for the three major credit agencies to comply with federal law
- All consumers are able to get up to three credit reports per year
- Do not mistake with agency sites like freecreditreport.com
- **THIS IS FREE OF CHARGE**
- Sample credit reports can be perused

Ebay's Tutorial Site

<http://pages.ebay.com/education/index.html? trksid=m37>

- This is ebay's main education page
- Can be used as a means to teach about markets and the changing nature of our economy
- Free demonstration videos available
- Can also be a tie-in to discuss entrepreneurship, success, and innovation

Federal Reserve Instruction

www.federalreserveeducation.org

- Slam dunk website for teaching monetary policy!
- Classroom guides, quizzes, glossary
- The Fed Today, a fantastic quick video is available on DVD and via the net
- Games provided
- Teacher resources also provided
- Maintained by the Philly Fed Branch

Cleveland's Fed Branch

www.clevelandfed.org

- Many educational aspects and information repeated from other Fed sites
- A virtual tour of our branch available
- News of local interest provided
- Opinions of local economists and their takes on the news
- Useful glossary

Google Finance

<http://finance.google.com>

- Videos at the bottom of the page really set it apart from Yahoo Finance
- Not quite as educational
- Its best feature is the stock research charts – they are interactive and show price fluctuations and how they relate to news releases
- Essential for any Economics research project
- Requires Flash player be installed on your machine

Internal Revenue Service

www.irs.gov

- Great for students to explore – not much in the way of educational resources, BUT
- There is a link to tax information for students
- Most students will have jobs at the point that they take Econ, so they'll take great interest in that section
- Scrolling down the publications list is also a funny thing for students to see

U.S. Treasury

www.ustreas.gov

- Education section of this site is quite helpful
- Links to the Bureaus of Labor Statistics, and Economic Analysis, Engraving and Printing, Public Debt – all worthy of browsing
- The virtual tour in the education section is worthwhile

Bureau of Engraving and Printing

www.moneyfactory.com

- The Bureau of Engraving and Printing's site
- Games, quizzes, news
- Interactive notes explain security features
- Try the “catch the fake” game
- These are useful if you have projector or smart board

U.S. Mint

www.usmint.gov

- The United States mint – very interesting information regarding investment grade coinage
- The education page has some tremendous flash type interactive teaching devices like timelines and coin design

Regulatory Agency Portal

www.regulations.gov

- Great for any discussion of the regulatory power of the federal government
- Provides speedy HTML text links to all proposed changes to how the Federal Government regulates the economy – law change proposals are in printer friendly format
- Good to relate to a current news story to show students the importance of citizen oversight of the government

Yahoo Industry Stock Search

<http://biz.yahoo.com/ic/>

- Yahoo Finance Industry Center research pages
- This is a great way to show students how to compare and contrast the performance of the many different companies in a particular industry
- Easy to read tables

Yahoo Economic Calendar

<http://biz.yahoo.com/c/e.html>

- Yahoo Finance Economic Calendar
- This is easy to read, organized, and concise tables
- Organized by week, all the most widely reported macro economic data
- Upcoming data press releases are accompanied by expert predictions

U.S. Census Bureau

www.census.gov

- Reliable, up to date, demographic and economic information
- Multiple formats available, graphs, tables
- Dozens of economic figures:
 - Housing starts
 - Retail sales
 - Durable goods, construction spending
 - Historic comparisons available

National Priorities Project

http://nationalpriorities.org/index.php?option=com_content&task=view&id=55&Itemid=107

- The National Priorities Project
- A non-profit, apolitical group that compiles data on the spending of congress
- Charts are very helpful
- Will provoke a lot of discussion in class
- Try the “Federal Budget 101” link – it’s very useful

Cleveland

www.city.cleveland.oh.us/

- Cleveland's official city website
- www.din.com/cr.index2006.2006Budget.pdf - the location of the current budget
- The local legislative process and links to council explained very well
- Provides material for discussions about local governments involvement in the economy

Cuyahoga County

www.cuyahogacounty.us/

- Official site of Cuyahoga County
- Great links to learn about how the county serves as a conduit of federal dollars and mandatory services like Medicaid

Cuyahoga County Auditor

<http://auditor.cuyahogacounty.us/repi/>

- The site of the Auditor of Cuyahoga county
- This allows you to search any property in the county by address or name
- The property records tell all about a house and land, all the owners back 90 years, and even how big the dwelling is
- Students have fun doing market research when learning about mortgages

Realtor.com

www.realtor.com

- Nationwide listings of every house on the market in the whole USA
- Kids can choose where they want to live, choose a house, then do market research at the county website and figure out the taxes, and past values
- They then can amortize loans at sites like Bankrate.com

Securities and Exchange Commission

www.sec.gov

- Securities and Exchange Commission
- A very dry site, but there is a video regarding “SEC’s Tradition of Excellence” which can be downloaded
- Rules for brokerages are particularly interesting

Federal Deposit Insurance Commission

www.fdic.gov

- Federal Deposit Insurance Corporation
– make your banks safe
- Not much in the way for kids, but it's worth seeing for the “loan pool” link
- Kids need to know that loans are bought and sold just like any other investment

American Association of Retired Persons

www.aarp.org

- The site of the country's most powerful lobby
- The budget and member information is very impressive
- Also, the legislative agenda it prescribes will be increasingly important in the face of the aging baby boomer generation

Congressional Budget Office

www.cbo.gov

- Congressional Budget Office
 - Kids should see the fact sheet
- CBO's mandate is to provide the Congress with:
- Objective, nonpartisan, and timely analyses to aid in economic and budgetary decisions on the wide array of programs covered by the federal budget and
- The information and estimates required for the Congressional budget process.
- A lot of economic research available that is pertinent to fiscal and monetary policy

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It All Adds Up

www.italladdsup.org/

- A personal finance site for teens
- Some interactive games and real life scenarios
- Check with some of the links, as some have not aged well



Student Resources for Intermediate Algebra

<http://www.mhhe.com/dugopolski>

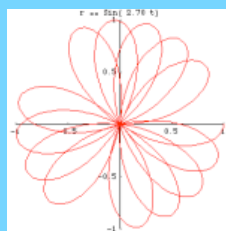
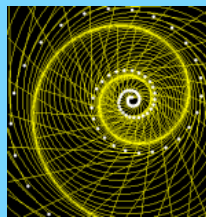
- Web-based, interactive learning is available for your students on the Online Learning Center, located at <http://www.mhhe.com/dugopolski>.
- Student resources are located in the OLC's Student Center and include interactive applications, algorithmically-generated practice exercises, online quizzing, audio/visual tutorials, all chapters of the text in PDF format, and web links.
- this Online Learning Center is not passcode-protected, so no special code is needed. You can access the student materials on this site without using a password code
 - <http://www.mhhe.com/dugopolski>
 - http://highered.mcgraw-hill.com/sites/0072450282/student_view0/
 - <http://highered.mcgraw-hill.com/sites/0072450282/>



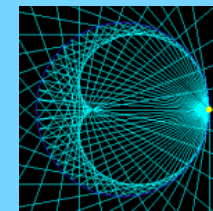
Visual Dictionary of Special Plane Curves

http://xahlee.org/SpecialPlaneCurves_dir/specialPlaneCurves.html

- Teacher and student notes on rectangular and polar coordinate systems
- Visual images of different curves, lines, 3-d images (parabolas, hyperbolas, conic sections, etc..)
- Excellent examples of various mathematical equations



Algebra and Advanced Math
resource



MathML at MIT

<http://web.mit.edu/ist/topics/web-publishing/mathml/>

- MathML (Mathematical Markup Language) is an XML application from the [World Wide Web Consortium \(W3C\) Math Working Group](#) for describing mathematical notation and capturing both its structure and content. It provides a much needed foundation for the inclusion of mathematical expressions in web pages.
- On this page, you will find basic information to help you get started with using MathML. Although intended primarily for an MIT audience and focused on tools and software used and supported at MIT, the information should be useful to a broader public.

$$\int_0^{\infty} e^{-x^2} dx = \frac{\sqrt{\pi}}{2}$$

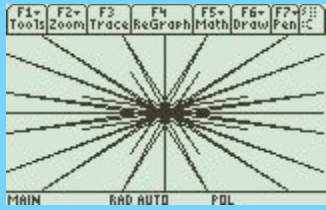
All high school Math courses



Geometry Applets

- Online applets for various topics
- <http://www.maththatcounts.com/page6.htm>
- PowerPoint Presentations for Basic math, algebra, geometry
- <http://www.maththatcounts.com/page10.html>





Techno Plaza



www.technoplaza.net/

- Programs and Instructions for TI Calculators
- Free Downloads of programs and Games
- Cool polar graphs
- Sequences
- 3-D graphs
- Differential Graphs

Texas Instruments

http://education.ti.com/educationportal/activityexchange/activity_list.do?cid=us

Free, collaborative forum where educators can share favorite activities using TI technology.
You can begin browsing for activities by selecting a subject area below.

- Environmental Science... (28)
- Life Science... (30)
- Physical Science... (94)
- Physics... (116)
- Other Subjects
- English/Language Arts... (134)
- Math Algebra I... (797)
- Algebra II... (172)
- Calculus... (242)
- Math General... (258)
- PreAlgebra... (337)
- Precalculus / Trig... (198)
- Statistics... (328)
- [Economics \(13\)](#)
- [Social Studies - General \(35\)](#)
- [U.S. History \(65\)](#)
- [World Geography \(16\)](#)
- [World History \(34\)](#)
- [World Languages... \(32\)](#)
- [German \(2\)](#)
- [Spanish \(17\)](#)
- [World Languages - General \(12\)](#)



Texas Instruments

Inside Track - Resources by Subject Area

Texas Instruments provides a wide range of educational tools, resources and support for both teachers and parents.

The information below is conveniently grouped by subject.

- [Pre-service Teachers](#)

Pre-service discount program, product information, activities to use in the classroom, professional development and more.

[Learn more](#)

- [Algebra I & II](#)

Tutorials, classroom activities, test preparation, professional development, product information and more.

[Learn more](#)

- [Geometry](#) Cabri Jr. trial kit, weekly activities sign up, professional development, product information and more.

[Learn more](#)

- [Science](#)

Data collection activities, supplement books, professional development, product information and more.

[Learn more](#)

- [Tools for Parents](#)

What are educators saying our TI, why choose graphing, homework help and more.

[Learn more](#)

Mathematics, Science Resources

National Council on Economic Education

www.ncee.net

- The single greatest source of information and links for anyone seeking to improve the way they teach Econ
- They set the national standards
- Many publications and helpful multimedia for sale –very affordable
- Be sure to get “Virtual Economics”
- Many programs and awards available

National Standards Site

www.ncee.net/ea/standards/standards.pdf

- The national standards from the NCEE
- These are often required for use when applying for any grant or award program

Money Instructor

[www.moneyinstructor.com/lesson/
riskreturn.asp](http://www.moneyinstructor.com/lesson/riskreturn.asp)

- Content created by teachers
- Much of the lessons and interactive activities are free, some are restricted and must be paid for
- The flash based lessons and activities are very good and fun to play

Ohio Insurance Institute

[www.ohioinsurance.org/teachers/
lesson_plan.asp](http://www.ohioinsurance.org/teachers/lesson_plan.asp)

- Ohio Insurance Institute
- Links and information pages – geared for high school students
- Downloadable lesson plans
- Some games and crosswords
- Free materials and speakers available too

National Foundation for Teaching Entrepreneurship

www.nfte.com

- Solid materials available for purchase
- Affiliated for E City – free summer programs available for students
- Good videos showing student entrepreneurs proposing business ideas

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Free Stock Market Game

<http://vse.marketwatch.com/Game/Homepage.aspx>

- This is a fantastic and free stock market simulation
- it's very easy to set up

General Accounting Office

www.gao.gov

- This agency serves as the government's auditing and spending accountability resource
- Provides a good source for the discussion of fiscal responsibility

Crain's Cleveland Business

www.craainscleveland.com

- This is the Cleveland branch of the national business magazines that specialize in local business stories
- This is a must have for any in depth research into local entrepreneurship

Entrepreneur Magazine

www.entrepreneur.com

- Great articles and business leads for any project which involves students creating a mock business plan
- Provides links to business opportunities like franchisers

World Bank

www.worldbank.org

- Good data and research resource
- Many of the world's most pressing problems are explained in good detail
- Slideshows and overview videos are particularly valuable

International Monetary Fund

www.imf.org

- Economic data, country information, and world outlook
- Analysis of the world's most pressing problems
- Manuals and guides available
- Online discussion groups

Shodor's Interactivate

www.shodor.org/interactivate1.0

- Project Interactivate provides interactive Java-based courseware for explorations in math and science.
- Student pages provide activities and term dictionary.
- Lesson pages for teachers provide a script to follow when using the activities and discussions .

Geometry Applet Gallery

www.saltire.com/gallery.html

- Saltire's Geometry Gallery is a collection of Java applets showing interesting geometry configurations.
- All applets are *dynamic* in that user input can cause the configuration to change.
- In some cases, points can be dragged. In other cases dimensions can be changed via edit controls.
- Some of the applets feature animation.

Advance Mathematical Concepts

[www.glencoe.com/sec/math/pr
ecalculus/amc_01/06-1.html](http://www.glencoe.com/sec/math/pr
ecalculus/amc_01/06-1.html)

- Interactive diagram allows students to build a conceptual understanding of radians and experience converting degrees to radians and vice versa.
- Reminds students of the distinction between arc length and arc measure.

Math League

www.mathleague.com/help/geometry/geometry.htm

- This website provides clear and thorough information about geometry concepts.
- Topics include: basic terms, angles and angle terms, figures and polygons, area and perimeter, coordinates and similar figures, space figures and basic solids.

NCTM Illuminations

<http://illuminations.nctm.org/>

- Includes a library of 94 online activities that help to make math come alive.
- There is also a collection of 523 lessons for preK-12 math educators.
- Hundreds of exemplary online resources, as identified by an editorial panel are provided.

National Library of Virtual Manipulatives

http://nlvm.usu.edu/en/nav/category_g_4_t_3.html

- Provides a collection of virtual manipulatives related to the NCTM *Geometry* standard for grades 9 - 12.
- This site is supported by the National Science Foundation and is maintained through Utah State University.

Cool Math for Kids

www.coolmath.com/home.htm

- Math games and manipulatives.
- Some high school topics but much is geared toward younger students.
- Information for teachers, students and parents.

International Information Programs

<http://usinfo.state.gov>

- Links to government sites that give information on economic, trade and finance topics
- Two articles are *What is a Market Economy* and *System of Markets*

Yahoo

<http://finance.yahoo.com>

- Gives financial information on companies, stock prices, historical stock prices, charts, stock symbols and news and opinion articles on companies

Holt, Rhinehart & Winston

<http://go.hrw.com>

- This website serves as technical support for an Economics book. It provides enrichment links for topics covered in each chapter, as well as practice quizzes and news stories

Top Business Entrepreneurs

<http://topbusinessEntrepreneurs.com>

- This website gives short biographies of famous entrepreneurs and the history of the companies they started.

Business Week

<http://businessweek.com>

This website has links to the top 50 philanthropists and the names of their foundations. It also has links to articles on philanthropy.

Government Lesson Plans:

www.mdk12.org/instruction/curriculum/hsa/government/lesson_plan/lesson16.html

This website identifies the different types of economic systems, and how each system answers the questions what to produce, how to produce and for whom to produce?. It also discusses characteristics of mixed economies.

RUBISTAR

<http://rubistar.4teachers.org/index.php>

It is a free resource that helps teachers create rubrics. It allows the teacher to use existing rubrics, create rubrics , or edit rubrics.

Texas Instruments TI Algebra

www.tialgebra.com/activities

- Activities to use in Algebra 1 and Algebra 2 using graphing calculators

Tom Reardon

www.austintown.k12.oh.us/%7Eaust_tr/teachers.htm

- Many links to Math teachers activities
- Tom Reardon has given MANY inservices about math and technology

OGT Jeopardy

www.stpaulschool.org/miller/miller_downloads

- A terrific review for the OGT from two math teachers at St. Paul School in Norwalk, Ohio

Cool Math

www.coolmath.com/home.html

- An amusement park of math designed for fun!
- Bored with math?
- Confused by math?
- Hate math?
- Coolmath can fix that.

Statistics: What do the numbers tell us?

www.learner.org/exhibits/statistics/activity0/frontpoll.phtml

- A website loaded with information on statistics, polling, and “random samples”

Mathematics WWW Virtual Library

www.math.fsu.edu/Virtual/index.php?f=4

- This collection of Mathematics-related resources is maintained by the [Florida State University Department of Mathematics](#) as a free service to the online community.

Glumbert.com

www.glumbert.com/media/multiply

- Watch the video to learn a wild new way to multiply!

Bureau of Economic Analysis

www.bea.gov

- US Department of Commerce
Bureau of Economic Analysis

Linear Regression Applet

www.math.csusb.edu/faculty/stanton/m262/regress/regress.html

- This applets let you mark the locations of order pairs (X, Y) , and then determines the equation of the regression line and graphs it

Purple Math

www.purplemath.com/modules/linearprog.htm

- A website of multiple Algebra topics

Activities Exchange

http://education.ti.com/educationportal/activityexchange/activity_list.do?cid=us

- Free, collaborative forum where educators can share favorite activities using TI (Texas Instruments) technology

MathWorld

www.mathworld.com

- Extensive mathematical resource, provided as a free service

Ask Dr. Math

http://mathforum.org/library/drmath/sets/high_alg_toc.html

- A question and answer service for math students and their teachers.
- A searchable archive is available by level and topic, as well as summaries of Frequently Asked Questions.

Teacher2Teacher

<http://mathforum.org/t2t>

- A resource for teachers and parents who have questions about teaching mathematics.

Algebra Help

www.algebrahelp.com/worksheets

- A website with worksheets for all areas of Algebra

National Council of Teachers of Mathematics

[www.nctm.org/resources/high.a
spX?id=7862](http://www.nctm.org/resources/high.asp?id=7862)

- Teaching resources and links

Online Journal of School Mathematics

http://my.nctm.org/eresources/journal_home.asp?journal_id=6

- Online journal from the National Teachers of Mathematics

Illuminations

<http://illuminations.nctm.org/>

- Activities, Lessons, Standards and Web Links from the National Council of Mathematics Teachers

Greater Cleveland Council of Teachers of Mathematics

www.mygcctm.org/links.htm

- Links to many math websites