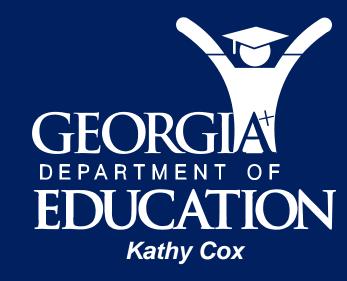
The Georgia Performance Standards for K-12 Mathematics



State Superintendent of Schools

Accelerated Mathematics I Training

May and June 2008

Overview of Day 3

- Taking the mathematics deeper
- Resources to Support GPS and Standardsbased Mathematics Instruction
- Action Plans for Next Steps



Essential Question 1

How do we take the mathematics deeper?

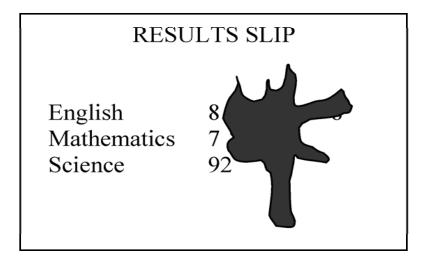


"The comments from the students can be synthesized into three broad recommendations for modifications and changes in emphasis to existing traditional mathematics courses:

- more emphasis on why, instead of how, something is done;
- more depth, less breadth of coverage;
 and
- more challenge"

A Singapore Grade 6 Hard Problem You Won't See on U.S. Grade 8 State Assessments

Mary spilled some soya sauce on her Continual Assessment Results Slip, as shown below. Part of her English and Mathematics marks cannot be seen.



Her average score is 84 marks. What can be the largest difference between her English and Mathematics marks?

Source: Singapore MOE

Why is this question different from what we usually ask?

Why does
Singapore focus on
this type of
question?

Could we use these types of questions in our classroom?

What would they look like?

At your table write a question that you could ask about Paula's Peaches revisited?

Share what your group wrote



Morning Break

Painted Cubes Learning
Task



Lunch

Web Resources Available to Teachers

- Mathematics Curriculum Page
- Georgiamath.org
- GeorgiaStandards.org

How do you get there?

Start at: http://www.gadoe.org



How do you get there?

Start at: http://www.gadoe.org

Link to Mathematics
Curriculum Page can
be found under
'Curriculum'



Mathematics Curriculum Page



Research & Reports:

What can you find at the Mathematics Curriculum Page?

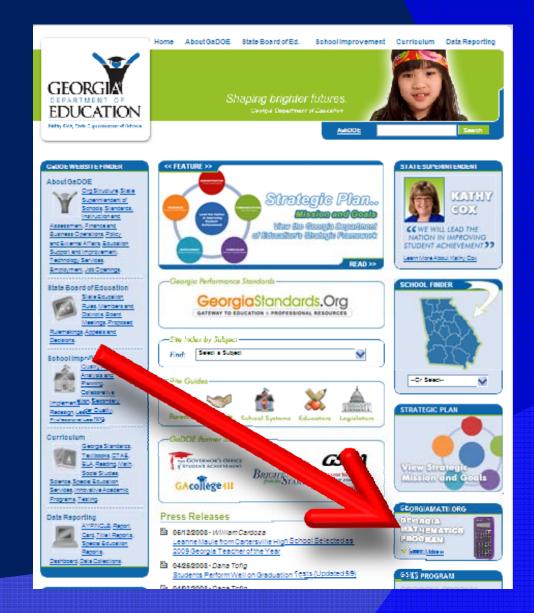
- Contact Information for Mathematics Team
- Research and Reports
- What's New
- What's Coming
- Information for Administrators
- Mathematics Information for Educators
- Support Materials
 - ✓ Textbook/Instructional Materials
 - ✓ Vertical Alignment Charts

What is georgiamath.org?

From http://www.gadoe.org

Look for the calculator!

Or go directly to: georgiamath.org



www.georgiamath.org

CONTACT INFORMATION

For questions about Georgia's Mathematics Curriculum, please contact the appropriate party

Schools Should Contact:

Math Program

1754 Twin Towers East 205 Jesse Hill Jr. Drive SE Atlanta. GA 30334

math@gadoe.org
Math Program

Parents Should Contact:

AskDOE

2054 Twin Towers East 205 Jesse Hill Jr. Drive SE Atlanta. GA 30334

(404) 656-2800

(800) 311-3627 (GA)

askdoe@doe.k12.ga.us

Media Should Contact:

Dana Tofig

Georgia Performance Standards - Mathematics

Please take a moment to view a welcome message from State Superintendent of Schools Kathy Cox..



WHAT OTHERS ARE SAYING

- **♦** GSCM
- ♦ GCTM
- ♦ Chancellor Erroll B. Davis, Jr.
- ♦ Georgia Tech
- ♦ Dr. Steven Ballowe GCSS

» Mo

PRESENTATIONS

 Raising Achievement and Closing Gaps – Piedmont Triad Education Consortium

VIDEOS

♦ Middle S

- Inside a Standards-Based Middle School Classroom
- Inside a Standards-Based

HELPFULL Teach

- Mathematics Frameworks
- High School Research and Resource Manual
- Mathematics Support Class
- Raising the Bar in Mathematics for All Georgia Students: Information for Educators
- Training Dates and Information
- Online Mathematics | Training Materials and Videos
- Online Mathematics K-8 Training Materials
- Mathematics Standards
- Questioning in the Classroom
- ElluminateLIVE K-8 Math TALKS

Administrators

- Online Mathematics I Training Materials and Videos
- Online Mathematics K-8 Training Materials
- GPS Principals' Mathematics Toolkit
- Administrators GPS Mathematics Training
- Raising the Bar in Mathematics for All Georgia Students: Information for Educators
- Training Dates and Information

Teachers

What can you find at the georgiamath.org page?

- Introductory Video by Kathy Cox
- Comparison of QCC and GPS Course Content
- Information about learners requiring acceleration and learners requiring support
- Resources for Parents, Teachers and Educators
- General Information
- Link to GeorgiaStandards.org

What is georgiastandards.org?

Start at: http://www.gadoe.org

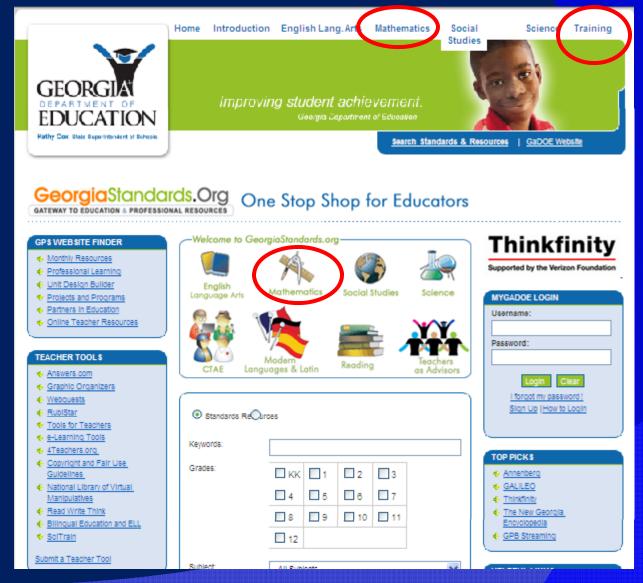
Click Here!



What can you find there?

Links to Mathematics

Link to Training



Under the Mathematics Menu



GPS WEBSITE FINDER

- Monthly Resources
- Professional Learning
- Unit Design Builder
- Projects and Programs
- Partners in Education
- Online Teacher Resources

TEACHER TOOLS

Answers.com



Under the Mathematics Icon

Introduction to Mathematics Performance Standards

- Comparison of QCC and GPS Course Content
- Executive Summary
- Math Framework
- Online Training, Phase III Day 1: 3-5
- . GPS Training Materials
- Math Support Class
- Math GPS High School Research and Resource Manual
- . Credit Recovery Program

Middle School Math Course Transition

- GPS Course Transition
- MS Math Acceleration
- Middle School Math Remediation
 - Resourc

GPS Revisions

Mathematics Revisions Approved on 7/13/2006

Grades K-5

- . Grades K-2 Mathematics Standards
- Grades 3-5 Mathematics Standard

Grades 6-8

Grades 6-8 Mathematics Standards

Grades 9-12

- Mathematics I: Algebra / Geometry / Statistics1
- Mathematics II: Geometry / Algebra II / Statistics
- Mathematics III: Advanced Algebra / Statistics
- Mathematics IV: Pre-Calculus Trigonometry / Statistics
- Accelerated Mathematics I: Geometry / Algebra II / Statistics
- Accelerated Mathematics II: Advanced Algebra / Geometry / Statistics
- Accelerated Mathematics III: Pre-Calculus Trigonometry / Statistics

On the Frameworks page:

Grades 9-12

HS Mathematics Training, Mathematics I: Algebra / Geometry / Statistics:
 Using the Online High School Mathematics Training Materials

Student Editions

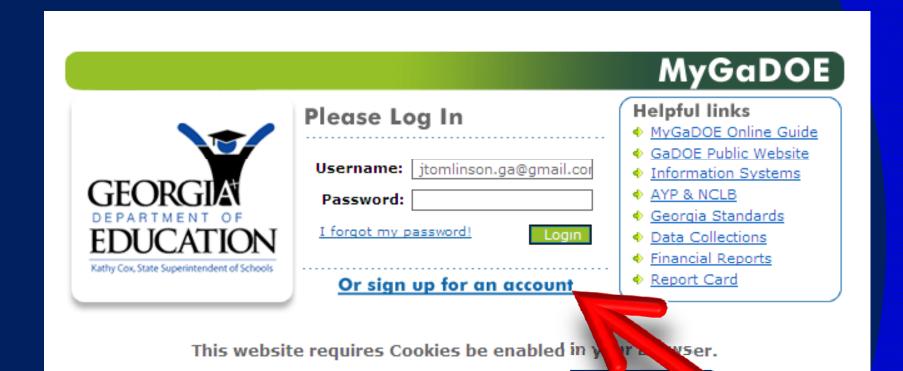
- Mathematics I: Algebra / Geometry / Statistics Student Edition
 - O Curriculum Map
 - O Unit 1 Function Families
 - O Unit 2 Algebra Investigations
 - O Unit 3 Geometry
 - O Unit 4 The Chance of Winning
 - O Unit 5 Algebraic Investigations
 - O Unit 6 Coordinate Geometry
- Mathematics II: Geometry / Algebra II / Statistics
 - O Curriculum Map
- Accelerated Mathematics I: Geometry / Algebra II / Statistics
 - O Curriculum Map
- Accelerated Mathematics I: Geometry / Algebra II / Statistics
 - O Curriculum Map
 - Unit 1 Characteristics of Functions

- Mathematics I: Algebra / Geometry / Statistics
 Teacher Edition (MS Word Format)
 - O Curriculum Map
 - O Unit 1 Function Families
 - O Unit 2 Algebra Investigations
 - O Unit 3 Geometry
 - O Unit 4 The Chance of Winning
 - O Unit 5 Algebraic Investigations
 - O Unit 6 Coordinate Geometry
 - Appendix Mathematics
 - O Foreword Mathematics
- Mathematics I: Algebra / Geometry / Statistics
 Teacher Edition (PDF Format)
 - Curriculum Map
 - Unit 1 Function Families
 - Unit 2 Algebra Investigations
 - O Unit 3 Geometry
 - Unit 4 The Chance of Winning
 - O Unit 5 Algebraic Investigations
 - O Unit 6 Coordinate Geometry
 - Appendix Mathematics
 - Foreword Mathematics
- Accelerated Mathematics I: Teacher Edition (MS Word Format)
 - Unit 1 Characteristics of Functions
- Accelerated Mathematics I: Teacher Edition (PDF Format)
 - Unit 1 Characteristics of Functions

Teacher Editions

Log-in required for access

Logging in to Teacher Editions



If you do not have a GaDOE account, create a new account.

Also on the Frameworks page:

Webcasts
And
Podcasts

Grade 8

- O Curriculum Map
 - Unit 1 Probability
 - Unit 2 Exponents
 - Unit 3 Linear Equations
 - Unit 4 Functions Relations
 - Unit 5 Slippery Slope
 - Unit 6 Parallel Lines & Cong
 - Unit 7 <u>Systems of Equations</u> Inequalities
- O Grade 8 Sample Multiple Choice

Download Windows Media Plugin (Mac)

Grade 8 Webcasts

- O Absolute Value via Manipulatives and TI-83
- Algebra and Water Tanks via TI-83
- D Exponents with Powers of Two
- Inequalities, Basketball, and Sales
- Linear and Nonlinear Functions from Data
- Parallels, Transversals, Congruence, and Cabri Jr.
- O Probability and Calico Cats
- Pythagorean Th and Cabri Jr via TI-83
- Simplifying Radicals with Squares and Area
- Systems of Equations via Manipulatives

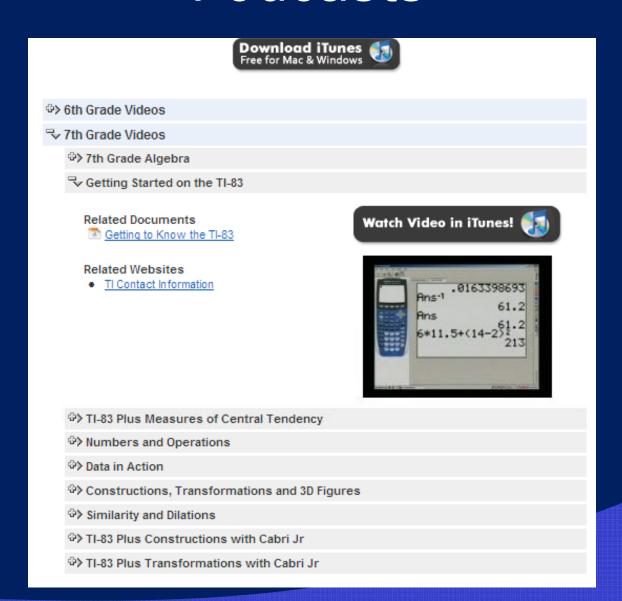
If you experience technical difficulties with any webcast, please call the Help Desk at (800) 869-1011 for assistance.

Mac us are unable to view the webcasts

The Mathematics Podcast page.

Asso, are and-alone links have been provided by the Mac users will need to download either "Flip4Mac" or "Windows Media Player for Mac" (depending on the operating system) at the link below, install and launch the player to view the videos. Please note that Mac users may experience a delay of up to two minutes before the video begins.

Podcasts

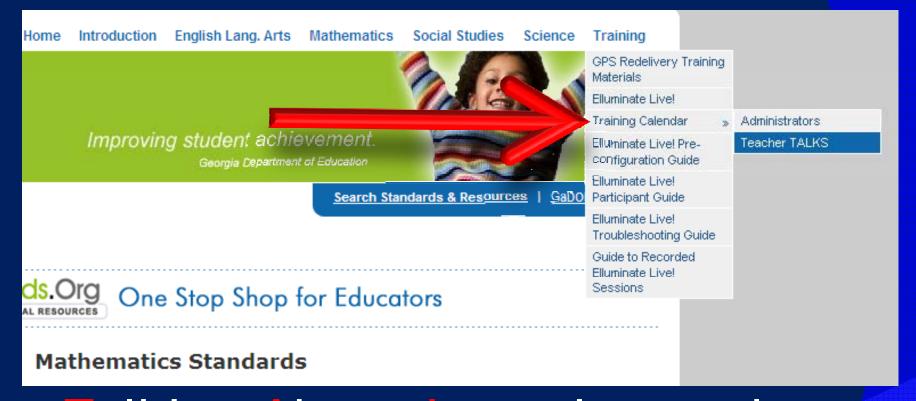


A Closer Look at the Training Menu



Mathematics Standards

Math Teacher TALKS



Talking About Learning and Kids

Elluminate Sessions

 Math Teacher TALKS are a part of the Elluminate Sessions offered by GaDOE

 Elluminate Live Sessions are offered for all curriculum areas and for administrators

To Log in to an Elluminate Live Session:

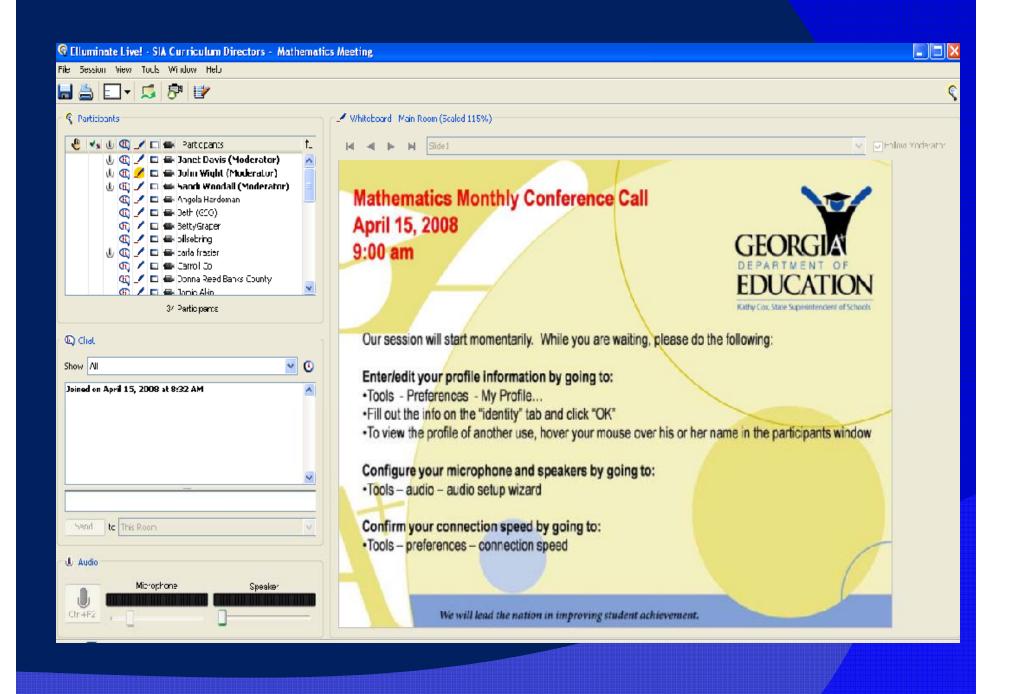


To Log in to an Elluminate Live Session:

- 05/09/2008 Kathy Politis Georgia Learning Connections Web Site
- 03/11/2008 Tony Vlachakis GeorgiaStandards.Org Announces a Podcast Available to **Teachers**
- 03/18/2008 Kathy Politis GeorgiaStandards.Org Proudly Partners with Verizon Thinkfinity
- 02/22/2008 Kathy Politis Tell Us Your Story
- View All News Items...

Georgia Standards Calendar

No events have been posted for this calendary



More Training Available through the e-Learning Space

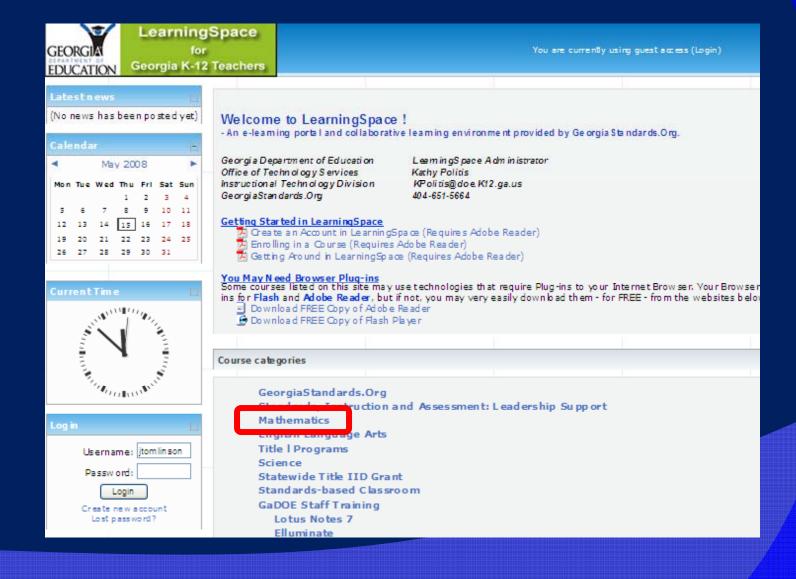
From here:



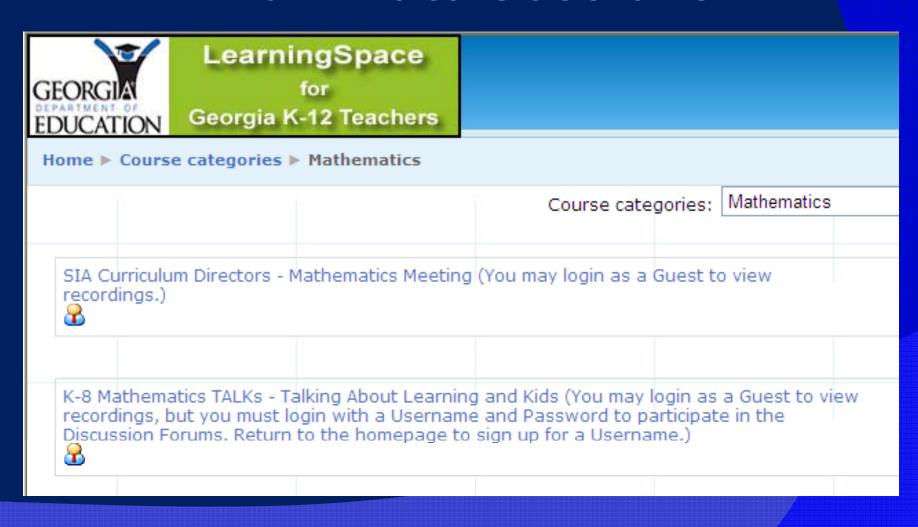
Scroll down and Click here



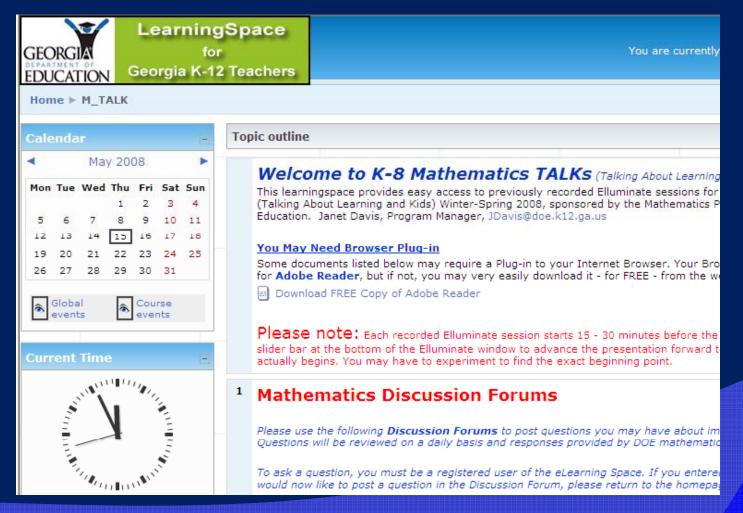
Choose Mathematics



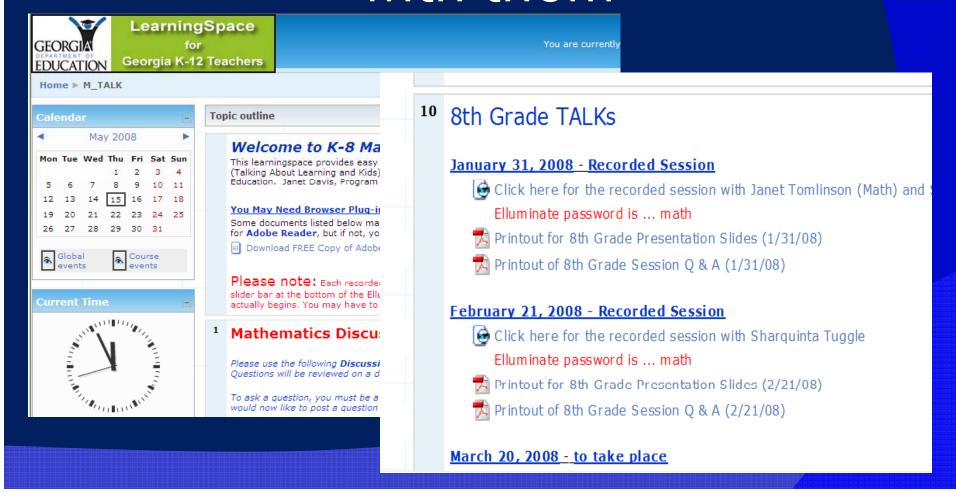
Access Recorded Elluminate Sessions



Discussion Forums are associated with the TALKs



Recorded TALKs and the Discussion Forums associated with them



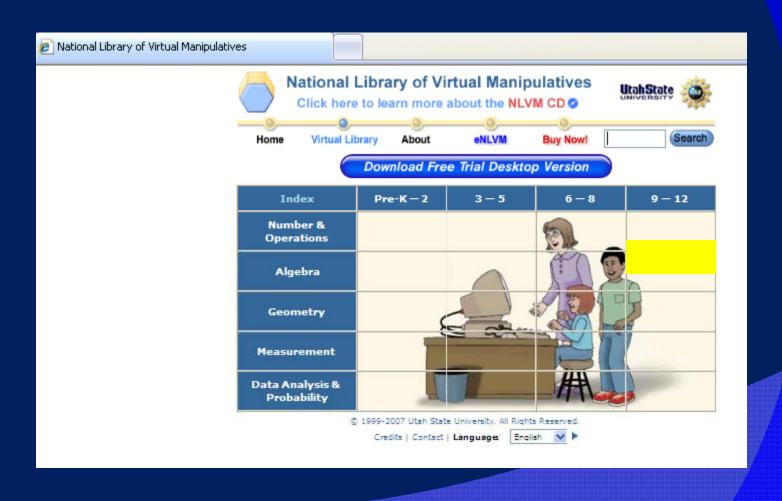
Teachers Tools and Helpful Links



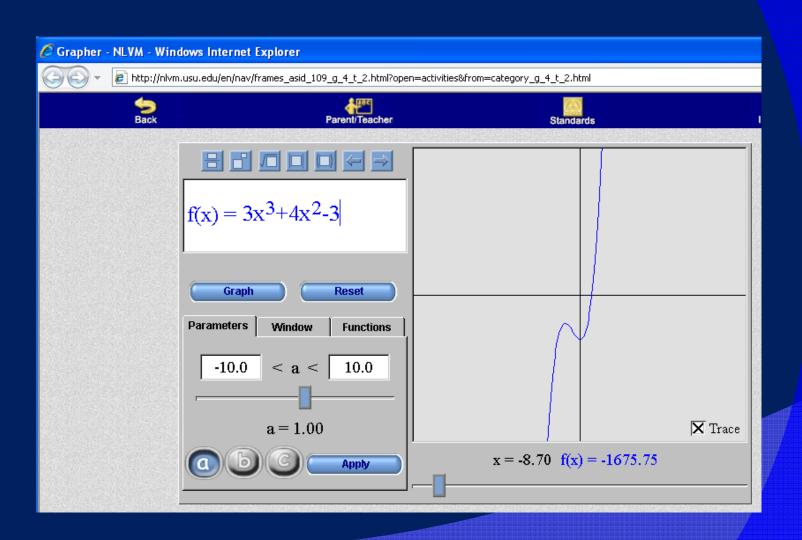
National Library of Virtual Manipulatives



National Library of Virtual Manipulatives



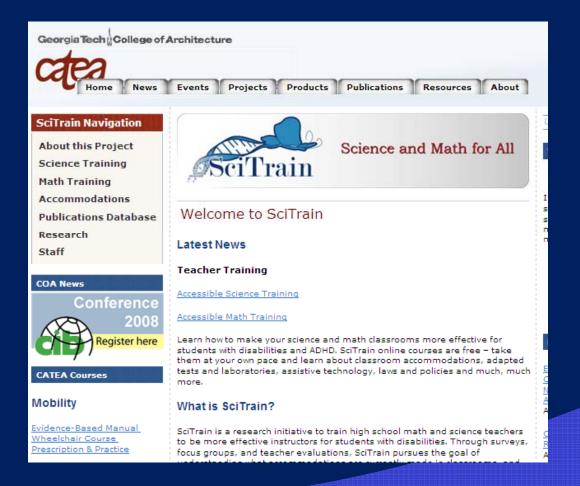
Free Computer Graphing Tool



SciTrain



Support for Students with Disabilities



GPS Monthly Resources



Find out what's new in Math!

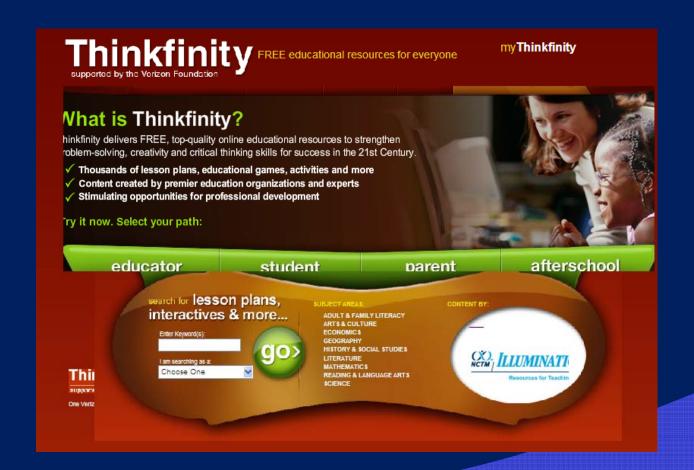
New Georgia Standards. Org Content April 2008

- > Teachers-As-Advisors
- > English Language Arts
- > Mathematics
- > Social Studies
- > Science
- > CTAE
- > Training
- > Additional Information

Thinkfinity



Mathematics Resources

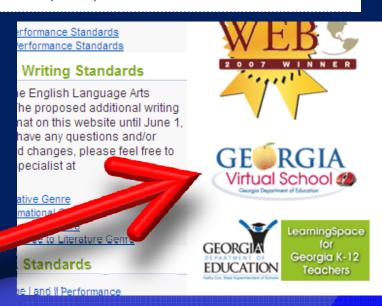


On-line Courses for Students

From here:



Scroll down and Click here





Home About Us Courses Registration FAQ Careers Contact Us

Shaping brighter futures.



Select Role to Login

- Student
- Parent
- Facilitator/Monitor
- Staff



Important Information = and Links

Register for Courses

Summer 2008

Fall 2008 - Spring 2009

Demo Course

Is Online Learning for Me?

Home School Students

Support Team

GADOE Credit Recovery Program

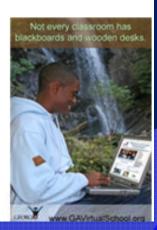


Welcome to GA Virtual School

Providing Options and Opportunities

- Registration for Summer 2008 and Fall 2008 Spring 2009 is currently available to all students.
- Click here for important session dates and deadlines.
- Registration for GA DOE Credit Recovery Courses is now open.*
- Office of Technology Services offers Middle School Technology Literacy Assessment.*
- GA DOE Middle School Math Remediation Resource now available.*

^{**}These programs are available only to public school students.



What's 'In the Works'?

More Teacher Editions

Professional Learning online courses

What's missing?

What additional resources would you like to see?

Afternoon Break

Sharing, Collaborating and Team Building

- Set up systems for regular collaboration
- Implement tasks in your classes
- Begin to move to a standards-based classroom
- Encourage other teachers to try tasks
- Reflect and revise tasks

Nuggets for Team Building

- Think of ways to include the resistant and quiet
- Plan ways to share leadership and responsibility
- Keep tone positive "can do" attitudes
- Consider how and when teachers can collaborate
- Encourage the creation of policies and procedures that foster collaboration among teachers

SHARE YOUR PLAN

Thank You!!!!

We touch the future;
We teach.

