

Attend the 40th National Convention in Washington, DC

Mu Alpha Theta Newsletter

🍁 Fall 2009 🍁

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Welcome back to another school year and participation in Mu Alpha Theta. Fall is an exciting time for exchanging summer stories with colleagues and students and for welcoming new students to participate in our organization. This summer's convention in Knoxville was wonderful. The weather was very accommodating, the city and surrounding area were beautiful, and the students were amazing - as always. Congratulations to all the participants. I particularly liked the chalk talks for their creativity, educational message and entertainment value.

Congratulations to **Buchholz High School** in Gainesville, FL for its impressive **Sweepstakes** win at the National competition. I would also like to congratulate **Matthew Claussen** from **Hoover High School** for winning the **2009 Kalin Award**, the most prestigious student award given. **Jenny Negin** from **Stoneman Douglas** was honored with the **Huneke Award** and **Lisa Weaver** from **Miami Springs High School** was awarded the **Sister Scholastica Award**. As anyone who has attended a summer convention will tell you, these events are always a lot of fun.

The **2010 National Convention** will be held just outside **Washington, D.C.** from **July 25th through July 30th**. With support from a grant from the **Mu Alpha Theta Educational Foundation**, registration before April 1st has been reduced to **\$625**. If your school is new to the summer conventions, Mu Alpha Theta does award some Convention Grants, now worth \$3,000. See the national website: www.mualphatheta.org for more details on the convention and the grants.

This is the second year of the Mu Alpha Theta Math Presentation Contest which awards prizes to mathematical student presentations. Slideshows, animations and movies are all appropriate for submission. You can find the details online.

Students interested in becoming a mathematics teacher are encouraged to apply for the **Andre Award**. One \$2,500 award is given to a current high school senior and one is given to a college student, who was a former member in high school or is currently a member of a Two-Year College chapter.

Mu Alpha Theta offers two other free math contests during the year. The **Log 1 Contest**, www.log1.wamath.net, offers chapters three rounds of topic tests at the Mu, Alpha, and Theta levels. The **Rocket City Math League**, <http://www.rocketcitymath.org/>, is open to everyone and has a team contest as well as three rounds for individuals. Both contests will have registration open by October 1st.

Along with this newsletter, you will receive some constitutional amendments to the National Mu Alpha Theta Constitution. **Please make sure to vote for or against the two Motions. Just email your vote to matheta@ou.edu.** Each chapter gets one vote. The first motion includes wording changes and some policy/procedure changes. **The second motion deals with redistricting Regions III and IV.**

In the spring, you will be asked to vote for candidates for the offices of **President-Elect, Secretary-Treasurer, and for the Governors of Region III and IV**. Therefore, the vote this fall will directly impact who can run for the Governor of these two regions. **If you wish to nominate someone for any of these positions please contact Grace Mutz, maokid1@msn.com.**

Finally, I would like to challenge all chapters to collaborate with other chapters or high schools in their area. We can share ideas for meetings or have joint meetings or events. Consider taking meeting notes to share: practice tests with detailed solutions, math presentations, or online presentations or videos. Also, working with your feeder Middle or Junior High Schools is an important contribution to your community. Consider inviting them to start a chapter of **Chi Alpha Mu**, <http://www.chialphamu.org/>, the recently re-activated Junior High School Math Club organization.

Tom Tosch

NATIONAL OFFICE UPDATES FROM KAY WEISS

The National Office is usually staffed from 9:30 am – 6:00 pm central time, Monday through Friday. The office will be closed on most major National holidays and during the winter break from December 24 – January 4. We do not take a spring break, since this is usually our busiest time of the year. If you have orders needed before January 4, please make sure to get them to the office before December 23, so we can mail them before we close for the holidays.

During the year, orders entered by email or through the online system are usually mailed within 24 hours after they arrive. Orders sent by regular post or fax are handled as time permits, but are usually sent within 48 hours of arrival in the office. If you are mailing an order, please realize that the United States postal service has slowed delivery of first class mail. An envelope mailed by first class can take up to a week to arrive and a first class order mailed from the office can take a week to arrive back to you. Please keep this in mind when submitting orders. Orders over 13 ounces will be mailed by Priority Mail or Fed Ex Ground at no extra charge for arrival that averages three days. For \$15, we will send orders by Two-Day Fed Ex delivery, for \$25 we will overnight an order. Fed Ex orders must be in the office by 4:30 pm so they are available for pick up that day.

My assistant, Tara Nixon, has left Mu Alpha Theta for a full-time job doing advertising design work. We will miss her and hope to have a replacement hired soon. Our student employee, Veronica Diaz, will be helping out again this fall. As many of you know, we try to always have someone at the National Office to address your needs as quickly as possible.

It is important to remember that starting in September, 2010, the one-time registration fee for each new member will be \$10 per student. Some schools may want to update their rosters before the end of June to take advantage of the lower cost for students. We hope to hold other charges steady this year, however.

Newsletters and other important information are sent to sponsors by a mass email program. While each is sent individually, many school security systems will reject the email as junk mail. If you have not received the newsletter by email, set up your school email to accept email from the following email address from Mu Alpha Theta: **Set your email to ACCEPT email from: maomailer@ou.edu**

We are always looking for new ways that Mu Alpha Theta and the Educational Foundation can support our sponsors, members and chapters. If you have an idea, please let us know. If you ever have any questions, comments or suggestions, just call us or email. I am here to help in any way I can.

Free Texas Instrument Calculators

Mu Alpha Theta has purchased some TI 84 Plus and Nspire calculators, without CAS, to give away! We have a large waiting list from requests last year for calculators that will be sent out first. **If you emailed last year and I said we would send some to you, you do not need to make another request. You are already on the list.**

We will provide up to four calculators to a school to give away as prizes at competitions you are running. Sponsors may also give calculators as prizes to their own outstanding students as a reward or auction them off to raise money for their club. **Preference will be given to schools that have never received free calculators in the past.**

If you want some, just email Kay Weiss with your request today at matheta@ou.edu!

DO NOT EMAIL OUR MAILER ADDRESS.

Sponsors,

Please copy the Fall Newsletter for your students or post where they can read it. There is a flyer attached advertising the Actuarial Foundation Project Offer. Please copy and post! We are counting on you to help us advertise our award, grant, and scholarship opportunities for your students.

Thanks,

Kay Weiss

FREE COPIES OF MATHEMATICA

Wolfram Research is offering Mu Alpha Theta members and sponsors a copy of this powerful computer algebra system. Email matheta@ou.edu for details.



SPONSORS



Thank You to our Retiring Sponsors

The following teachers have retired as Mu Alpha Theta Sponsors during the past school year.

Our thanks to these dedicated teachers:

DeSoto High School, DeSoto, TX: Donna Lantrip 5 yrs.
 Noble High School , Noble, OK: Ann Gilje
 Everglades High School, Miramar, FL: Jeremy Pennington 5 years
 Fayetteville High School , Fayetteville, AR: Jean Pharr
 West Ouachita High School, West Monroe, LA: Wanda Davis
 Oxford High School, Oxford, AL: Anita Phillips
 Mt. Pleasant High School, Mt. Pleasant, NC: Jonnifer Sellars
 Central High School, Knoxville, TN: Jacqueline Smiddy
 Lamar High School, Meridian, MS: Ann Culpepper
 Southwood High School, Shreveport, LA: Shawn Bray
 Pearl River High School, Pearl River, LA: Clara Thornton
 Newtown High School, Elmhurst, NY: Anne Gaipa
 Thomas A. Edison High School, Alexandria, VA: Nathan Heslink
 Clarkstown High School North , New City , NY: Joanne Vido 15 yrs
 Tuscola High School, Waynesville, NC: Charles Howard after 20 years
 Chester County High School, Henderson, TN: Judith Rogers after 27 years
 White Station High School, Memphis, TN: Theresa Jennings after 28 years of as a sponsor.
 Northwest Rankin High School, Flowood, MS: Pat Luscomb after 33 years
 Yonkers High School, Yonkers, NY: Anthony Marazita after 37 years of teaching.
 Pioneer Christian Academy, Whites Creek, TN: Joy Christofferson after 51 years of teaching.

Ashland High School, Ashland, OR: Bea Carlson 3 years
 Shaw High School, Columbus, GA: Miriam Lang
 Wheaton North High School, Wheaton, IL: Linda Blanco
 St. Mary's High School, Rutherford, NJ: Dr. Bob Berckes
 Hickory High School, Chesapeake, VA: Marcia Riggs
 Herndon High School, Herndon, VA: Cathy Bobzien
 Brighton High School, Brighton, TN: Bonnie Wicker
 St. Petersburg High School , St. Petersburg , FL: Louise Reeves
 J. J. Kelly High School, Wise, VA: Charlene Shortt
 Alfred Bonnabel High School, Kenner, LA: Catherine Cooke
 Illinois Math & Science Academy, Aurora, IL: Kristie Moore
 Bob Jones High School, Madison, AL: Linda Whiteley
 Zionsville Community High School, Zionsville, IN: Sarah Essick
 Port Chester High School, Port Chester, NY: Bob Zollner
 Albemarle High School, Charlottesville, VA: Sherry Snyder
 Edmond North High School, Edmond, OK: Laura Disbrow

Passed Away: Richard Sasser, Delgado Community College in September, 2009.

GOVERNING COUNCIL NEWS

Each year the Governing Council of Mu Alpha Theta meets during the National Convention and in Norman, OK at the National Office in January. The Governing Council is the Board of Directors of Mu Alpha Theta, our Educational Foundation, and Chi Alpha Mu, the National Junior Mathematics Club. It is composed of a President, Past-President or President-Elect, a Secretary-Treasurer, four Regional Governors, four Representatives from the national mathematics organizations NCTM, MAA, SIAM, and AMATYC, and the Executive Director of our organization, Kay Weiss. Members of the Governing Council are responsible for all financial and organizational decisions for these organizations. At the summer meeting, the following decisions were made:

- There was an approved motion to earmark all Mu Alpha Theta interest income to be spent on scholarships or grants for members.
- All officers and the Governors on the Council will have \$1,000 to reimburse expenses to attend meetings and do chapter outreach.
- Mu Alpha Theta will continue to present an award at Regional Science Fairs and present up to three \$1,000 awards to the best math projects at the International Science Fair in San Jose, CA in 2010.
- Up to \$1,600 will be presented as prizes for the Math Presentation Contest this year.
- Constitutional updates and a Regional realignment for Regions 3 and 4 will go to a vote of the chapters in the fall.
- Convention Grants will be given for \$3,000 when awarded to chapters that have never attended the National Convention.
- The Educational Foundation will spent no more than \$1,000 to purchase three video cameras and tri-pods to record Chalk Talk finals.
- The Educational Foundation will provide funding to reduce the registration fee for the 2010 National Convention to \$625 per person from \$700.
- Mu Alpha Theta and the Educational Foundation will again give 12 \$4,000 scholarships and the \$5,000 Rhein Scholarship.

STUDENTS

MU ALPHA THETA SCHOLARSHIPS

Mu Alpha Theta and our Educational Foundation will again offer up to twelve \$4,000 Scholarships and the \$5,000 Mary Rhein Memorial Scholarship to outstanding graduating High School seniors or graduating Two-Year College Full members. We are looking for students that have served their active Mu Alpha Theta chapter or other mathematics students, in a special way. The 2010 application is now available on our website at www.mualphatheta.org > Scholarships. All applications must be postmarked by **March 1, 2010**.

INTERESTED IN TEACHING MATHEMATICS SOMEDAY?

Our Educational Foundation provides \$2,500 to support one Mu Alpha Theta high school senior and one former member who is a college student, if they are planning to become a mathematics teacher. If teaching is in your future, see the Andree Award application online at our website.



Mu Alpha Theta is excited to offer its members, in partnership with the National Science and Technology Education Partnership, NSTEP, an updated and expanded community service opportunity commencing on October 5, 2009. Last year, chapters across the country chose to participate in **Study Buddy** as their community service option of choice.

Study Buddy is a cutting edge web based online peer-to-peer tutoring program designed to address low math scores of underperforming middle and high school students. This homework assistance program utilizes the latest interactive, collaborative technology to bring students from different locations across the country together for online math homework help. Study Buddy relies solely on volunteers like you to help struggling students.

Convenience – Volunteering from your computer after school or at home, in the evening and/or on the weekend, the ability to schedule yourself in half hour segments and having the flexibility to choose when you wish to help makes Study Buddy an easy volunteer option.

Students -As a Mu Alpha Theta member, you will be paired with students who are struggling and may not otherwise have access to a tutor due to economic and/or geographic reasons. Your participation will be tracked by software and will serve as community service credit hours. In an exciting change this year you will be able to access your community service hours at any time in your own tutor log book, which saves tutoring sessions and records your time automatically. In addition, you can grant access to your book to the college admissions offices of your choice so that they may use your tutoring experience as a factor in their admissions procedure.

Teachers - We encourage you to enroll your Mu Alpha Theta members in Study Buddy and can do so with minimal effort! Detailed reports of tutor activity will enable you to monitor your students' participation in the program.

NSTEP welcomes inquiries from both teachers and students. Please email them directly at studybuddy@nstep-online.org with questions about how you can integrate Study Buddy into your classroom or Mu Alpha Theta chapter! For additional information, please visit our home page at <http://www.studybuddyhelp.org>. Tutor registration is already underway!



The National Convention

On Sunday July 19th, over 500 mathletes descended upon Knoxville, Tennessee eager for a week of competitions, mathematical pursuits, and fun. Under the watchful gaze of the Sunsphere, students and sponsors began to explore the impressive amenities of downtown Knoxville. Following a hearty dinner, the opening session, and a convention wide scavenger hunt, competitors quickly found their beds and rested for Monday's full day of competitions.

For the next four days, the students displayed impressive mathematical prowess competing in countless areas. However, the convention proved that artistic and creative abilities also abound at the national convention. As always, the scrapbooks submitted were of an impressive caliber. In addition, the poster theme, "Taking it to the Streets," inspired creations based on everything from Sesame Street to drag racing.

On Wednesday, after an early topic test, students and sponsors boarded buses for the trek to Dollywood. There, all participants enjoyed a day full of water rides, roller coasters, and generally math-free adventure. Waves of orange Mu Alpha Theta shirts took over the park looking for the most exhilarating ride or the yummiest food.

After a final day of competitions and awards ceremonies, students diligently packed their bags trying to fit in each and every trophy. Many donning their orange shirts again, the mathletes gradually left Knoxville, Tennessee, leaving a successful math competition in their wake. Thanks go out to the hosts, the National Office, and all the other organizers who contributed to the convention's success.

From the National Student Delegate President:

Hello All,

I would like to take this opportunity to briefly introduce myself and my fellow national officers for the 2009-2010 year. I am Eric Willett from Saint Edward's School in Vero Beach, Florida. In addition to my position as President, I represent Region III. Alex Tir, from Riverside Academy in Reserve, Louisiana, is the delegation Vice-President and represents Region II. The 2009-2010 Secretary, Justin Matthew, attends Clarkstown High School South in West Nyack, NY and Region IV. Stacey Luong will be this year's Parliamentarian. Stacey is from Mount Rainier High School in Des Moines, Washington and is the Region I Representative.

During the 2009 convention in Knoxville, student delegates met daily to continue the past year's business and set goals for this upcoming year. Among our principal goals this year are increasing communication among student delegates and expanding participation in Mu Alpha Theta nationwide. As such, committees are being formed to tackle these problems. If you are interested, please contact me at eric.s.willett@gmail.com or through Facebook. In particular, student delegates are encouraged to contact me if they are interested in contributing throughout the year.

Of course, we are also deeply excited about the **2010 convention in Washington, DC**, and we are committed to helping make it a great competition. Any students with ideas regarding the national convention experience are encouraged to contact me or their Region's representative. I hope to see you all in Washington, DC next July!

Eric Willett

Summer Grants Impact Student Learning

Each year, Mu Alpha Theta offers student grants of up to \$2000 to work on a mathematical research project or attend summer mathematics courses not available at their high school or Two-Year College. This past year over \$13,000 was awarded to eight students. **David A. Weinberg**, from Spruce Creek High School in Port Orange, FL, attended the **Ross Mathematics Program** at Ohio State University. **Stephanie T. Yu**, from James E. Taylor High School in Katy, TX, attended **Math Camp** at Stanford University. **Victoria Shizhen Png and Daniel Zhou** from the Bergen County Academies in Hackensack, NJ, attended **Awesome Math** in Dallas, TX. **Kevin R. Sunga**, from Pittsburg High School in Pittsburg, CA, attended the **COSMOS Program** at UC, Santa Cruz. **Jocelyn M. Tang**, from Palos Verdes Peninsula High School in Rolling Hills Estates, CA, attended Boston University's **PROMYS**. **Kaitlyn A. Bailey**, from Carl Sandburg High School in Orland Park, IL, and **Keenan A. O. Sunderwirth**, from Catonsville High School in Catonsville, MD, attended **MIT Woman's Technology Program**. **Interested in applying?** The application is online and money will be available beginning in January.



Inorganic chemical reactions lab at the Cosmos Program

The Rocket City Math League is a free international math contest open to all middle, high school, and two-year college students enrolled in Pre-Algebra through Calculus and above math courses. It is administered by the students at **Grissom High School** in Huntsville, AL. Participants are placed into one of five divisions based on the level of math courses in which they are enrolled. Each division will be given three 12 question tests lasting 45 minutes. An Inter-School Team Test will also be available in November. Register at www.rocketcitymath.org.

Tests are administered during any one day within the testing period, as determined by the sponsor. Contest materials will be sent to each school and the team sponsor will make copies and administer the tests. Testing dates for the 2009-2010 competition are Round One: **January 18 – 29, 2010**, Round Two: **February 15 – 26, 2010**, and Round Three: **March 15 – 26, 2010**.

The top 25 students in each division will win a trophy and the top 10 schools in each division win a plaque. Mu Alpha Theta will provide other prizes, as well, including copies Mathematica to Calculus and above students and TI Graphing Calculators.

The Log 1 Contest is an excellent opportunity for schools to participate in a mathematics competition similar to the National Convention contests. Active Chapters compete against other schools from across the country and the world, while staying right at their home school.

The 2009-2010 Mu Alpha Log 1 Contest will again be run by the **Mount Rainier High School Math Team** in Des Moines, WA.

The contest will consist of three rounds. The first round will consist of two Topic Tests covering the topics of **“Logs/Exponents”** or **“Probability”**. Each Topic Test will consist of fifteen open-answer problems to be solved without a calculator in thirty minutes.

The second round of the contest will include two Topic Tests including either **“Geometry”** or **“Sequences/Series”**.

The third round will be a 15-problem, 30-minute, individual test of general mathematics knowledge. Problems, to be solved without a calculator, will range from easy to difficult, to provide confidence and challenges to all students.

The top ten individuals in each division in each region will receive a plaque and the next fifteen will receive a certificate. The top ten schools in each region will receive plaques.

Again this year, the Mu Alpha Theta Educational Foundation will offer a Convention Grant to the top school in each region. Each \$3,000 Grant includes enough funds to pay registration for at least three people and reimbursed transportation costs.

To register your school or for further information, see <http://log1.wamath.net>.



Mu Alpha Theta Science Fair Award Winners

Remember to tell your feeder Middle Schools about **Chi Alpha Mu, the National Junior Mathematics Club!**

In May, 2009, Dr. Terry Herdman, Mu Alpha Theta's SIAM Representative, and Dr. Tom Tosch, our then President-Elect, acted as our judges at the International Science and Engineering Fair in Reno, NV. After narrowing down the projects that they felt were qualified for the Mu Alpha Theta Award, they interviewed candidates and questioned them on their work. Three \$1,000 awards were presented to three projects.

Michael Yan of Hamilton High School in Chandler, AZ won for his project: "Performance Improvement in Online Analytical Processing." **Matthew Henry Stoffregen of Woodland Hills High School Pittsburgh, PA** won for his project: "An Analysis of Erdos' Conjecture." "Survival Analysis of Gene Expression Data Using a Hybrid Dimension" won and was a group project by **Sameer Kirtikumar Deshpande of Texas Academy of Mathematics and Science in Denton, TX**; **Jeffrey Chan of William P. Clements High School in Sugar Land, TX**; and **Alicia Zhang of the Liberal Arts and Science Academy High School in Austin, TX**. Mu Alpha Theta will continue to support both Regional Science Fairs and the International Science Fair again next year.



Miami Springs High School Awards Showcase?

The Warwick Valley High School Chapter of Mu Alpha Theta, in Warwick, NY, held their third annual competition, which is their own version of "Family Feud". This year, they invited teachers from our Elementary, Middle School, and Administrators to come play as well. The night was well attended and we had a ton of fun! Ray Mark, Sponsor

2009 – 2010 Math Presentation Contest

Mu Alpha Theta will again run a Math Presentation Contest. If you are interested in making an electronic math presentation or a video of you presenting a math topic, please download the 2009-2010 [Math Presentation Contest](#) rules and submission form.

Presentations must be submitted electronically by attaching to an email or uploading online where they can be viewed. Submissions must be 5 to 10 minutes in length and include voice over. Cash prizes will be between \$100 and \$1,000 depending on the quality of the work and each participant will win a copy of Mathematica, the computer algebra system software. If you have any questions, email the National Office at matheta@ou.edu.

PROJECT MATH MINDS

ARE YOU UP FOR THE CHALLENGE OF ACTUARIAL WORK?

In its third year, the Project Math Minds scholarship opportunity is again available. The Project highlights the high level math skills used by the actuarial profession. ('Actuaries' are consistently rated as one of the top math based careers in America.)

Up to three scholarships ranging between \$1,000 and \$5,000 will be awarded!

PROJECT DESCRIPTION

Purpose & Goal:

The purpose of the Project Math Minds assignment is to introduce the student to common insurance concepts through the use of practical examples. This example in the assignment revolves around the National Catastrophe Fund.

The National Catastrophe Fund* (known as the NCF or the "Nat Cat Fund") needs enough money to cover the losses that it expects to have in the next calendar year. The primary goal of this Project Math Minds project is to develop an estimate of the potential losses that the Nat Cat Fund will bear in the next year.

Student Role:

The student will act as the actuary who determines the estimate of total losses in the coming year for the NCF. The actuary is to prepare a formal report for the director of the NCF, presenting his/her final estimate of the liability with all supporting work and documentation included.

Background Information:

The NCF currently provides government funds to reimburse homeowner losses for the following 3 catastrophes: Hurricanes, Wildfires, and Blizzards. A large portion of homes are already insured through many private companies (State Farm, All State, etc.); the Nat Cat Fund exists to reimburse these insurers for up to 10% of their total losses for any of the 3 events.

The NCF therefore determines its estimate of annual losses to be 10% of the expected homeowner losses from these 3 events.

Your Assignment:

The student is to complete an estimate of the total losses that can be expected to incur in the next year for the Nat Cat Fund. A single source of data, outlining historical experience of losses from these 3 events is to be used as the basis for all results.

The report should include the following:

- Executive summary of results
- Statement of problem
- Data
- Methodology
- Analysis
- Conclusions
- Recommendations

The report can also include an appendix of tables to illustrate any work, if necessary.

Note: The student should note that there is no one right answer to the Project Math Minds assignment. Demonstration of actuarial concepts and thought are at the center of this assignment.

DO YOUR RESEARCH HERE

Use the data found in the excel spreadsheet named Project Data Source. The link is located on the same Web Page as this PDF or go to:

http://www.actuarialfoundation.org/programs/youth/math_minds.shtml

PROJECT SCORING GUIDELINES

I. Creative Ability - 10 points

Does the solution presented satisfy the given problem? Is the solution more than a straight-forward answer to the problem? Does the solution involve some sophistication in its justification?

II. Use of Mathematics - 15 points

a) Does the project use more than just arithmetic and basic statistics (like mean, median, mode)? Does the student use statistical regression appropriately to analyze trends?

b) Are mathematical conclusions displayed using computer graphics for better visualization?

c) If mathematical proof is involved, are steps clear, concise, and lead directly from prior statements?

d) If simulation or approximation methods are used, are they appropriate to the problem? Is there an analysis of possible errors involved in using these methods?

III. Actuarial Thought - 30 points

- a) Was there a procedural plan for obtaining a solution? What mathematics was involved in this solution?
- b) Were the variables clearly recognized and defined? Is there evidence that the student understands the variables/terminology being used?
- c) Does the finalist recognize the data's limitations?
- d) Does the finalist understand the project's ties to related research?
- e) Does the finalist have an idea of what further research is needed?
- f) Did the finalist cite scientific literature?

IV. Thoroughness - 15 points

How completely was the problem covered?

V. Skill - 5 points

Was the project completed under adult supervision, or did the student work mainly alone?

VI. Clarity - 25 points

- a) How clearly does the finalist discuss his/her project and explain the purpose, procedure, and conclusions? Is there real understanding of the project?
- b) Does the written material reflect that understanding?
- c) Are important phases of the project presented in an orderly manner?
- d) How clearly is the data presented?
- e) How clearly are the results presented?
- f) How well does the project *display* explain the project?

DUE DATES

Your *Project Math Minds* research project need to be postmarked by March 15, 2010. Winners will be announced by April 15, 2010.

SUBMISSIONS

Your essay should be limited to approximately twenty typed, double-spaced pages (one inch margins). Please number your pages and include your last name and school on each page in the header or footer. Do not fold your submission. There is no limit on the supporting graphics; however, each graphic must be referenced in the essay as to how it supports the recommendation.

Submit your completed project to:

mathminds@actfnd.org

OR

The Actuarial Foundation
Project Math Minds
475 N. Martingale Rd., Ste. 600
Schaumburg, IL 60173-2226

???QUESTIONS???

Actuaries, aka Cranium Coaches, are available to guide you and answer any questions you may have as you develop your project. Email all questions to mathminds@actfnd.org. Allow 1 week to receive a response.

*The use of the project name, National Catastrophe Fund, is for project use only and not to be confused with any other project, group or organization of similar name or program.