

Wahpe Woyaka pi

(Talking Leaf)

South Dakota Council Teachers of Mathematics Newsletter

Presidential Ponderings

How many times have you had this conversation?

You: *Your child is having difficulty in math/algebra/long division/geometry/etc.*

Parent: *That doesn't surprise me. I was always terrible at math. I hated math. It was my worst subject...etc.*

I'll wager that every math teacher, elementary and secondary, has experienced this. What makes it OK for someone to make that statement about mathematics? And why is it so pervasive? Adults would never dream of making that kind of statement about reading. Yet many feel perfectly comfortable admitting lack of math skills, and even hatred of mathematics. When parents look upon math with fear and loathing, it presents a tough sell for teachers. How can we win parents over? How can we convince them to honor and encourage their children's mathematical efforts in spite of their own math aversion?

As part of my summer reading, I've just finished a controversial and thought-provoking book titled *Math Power: How to Help Your Child Love Math, Even if You Don't* by Patricia Clark Kenschaft. (Addison-Wesley 1997) Although primarily addressed to parents, *Math Power* provides insights for teachers as well. The author turns a critical eye on math teaching in America and provides realistic guidance for parents (and teachers) who desire a good math education for their students.

The first few chapters of the book explore what math is, what real mathematical ability is, and how math ability develops. Ms. Kenschaft writes for parents who want their children to be mathematically successful and happy and who are willing to learn math themselves along with their children. She believes that people were meant to enjoy mathematics and that much of today's teaching has too little to do with real mathematics; schools focus too much on algorithms and worksheets and too little on problem solving and true understanding.

It is a sad fact that many Americans have not had good math experiences. *Math Power* addresses why so many adults, including many teachers, have missed both the power and the fun of mathematical thinking. The author describes ways for adults to create an intellectual climate that will better support all children. Some chapters include: Fun and Games with Preschoolers; Primary-Grade Success; Math Topics Your School May Not Teach But You Can; What Your Child Should Know; The Fifth Grade Crisis; How Drill and Kill Cripples U.S. Math Education; What Every Parent Should Know About Testing and Grading; and Getting Along With Your Child's Teachers.

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- *SDCTM/SDSTA Joint Conference February 5-7, 2009*
- *PAEMST Applications due May 1, 2009*



Presidential Ponderings *continued*

“.. when I hear the dreaded “I was never good at math” from parents, I have some new insights.”

Although I disagree with some of Kenschaft’s conclusions, she provides an insightful look at the state of mathematics education in America’s elementary schools. Some of her indictments of math teaching methods and teacher preparation are harsh. She is especially critical of “drill and kill” worksheets and over-emphasis on standardized test preparation. Her conclusions are certain to be controversial. I have been forced to re-examine some of my beliefs and practices. But when I hear the dreaded “I was never good at math” from parents, I have some new insights. I will suggest that they read *Math Power*.

As I write this column, summer is fast drawing to a close. I love the long twilight evenings and the summer smells. Most of all I love having the luxury of time-- time to read and reflect, time to pursue a hobby, and time for professional growth. But I also look forward to fall’s cool evenings, the fragrance of burning leaves, and the new challenges another school term always brings. I hope your summer break provided a well-deserved time of rest and renewal and that you are refreshed and ready for another exciting school year!

Cindy Kroon
SDCTM President



Teachers: Looking for classroom-tested ideas for math and science?

- National Speakers
- Grade-level Sessions in Math
- Grade-level Sessions in Science
- Demonstrations
- Regional and SD Speakers
- Sharing Sessions

17th Annual SDCTM/SDSTA Joint Professional Development Conference

February 5-7, 2009



All indoors at the newly remodeled
Huron Events Center in Huron, SD

Visit www.sdctm.org or www.sdsta.org for complete program and hotel information.
Speaker Proposal and Advance Registration forms are also available on the websites.





Nominations for 2009 PAEMST

Know a Great 7-12 Math Teacher? Nominate him or her to receive the Presidential Teaching Award!

We're looking for outstanding 7-12 math teachers for the 2009 Presidential Awards for Excellence in Mathematics and Science Teaching. The awards are sponsored by the White House and administered by the National Science Foundation.

Every year up to 108 National Awardees each receive a \$10,000 award, a paid trip for two to Washington, DC to attend a week-long series of networking opportunities and recognition events, and a special citation signed by the President of the United States.

The program is now accepting nominations of 7-12 teachers for the nation's highest honor for mathematics and science teachers. Anyone can nominate a teacher. Teachers should submit completed application materials by May 1, 2009. **For more information, including nomination and application forms, please visit www.nsf.gov/pa or www.sdctm.org and click on the awards link.**

ARML Invites South Dakota to Compete

The American Regions Math League, known as ARML, is the contest that students tend to love above and beyond all the other math contests. The problems are interesting and challenging, the contest involves a lot of teamwork in various settings, and students and faculty get to meet quite a number of talented and likeminded peers.

ARML takes place once a year on the first Friday and Saturday after Memorial Day, at four different sites in the United States; Penn State, the University of Iowa, the University of Nevada at Las Vegas, and the University of Georgia (2008). South Dakota would compete at the University of Iowa.

ARML is designed to create communities. It brings together talented students from a region, it gives them the opportunity to get to know each other, it gives them the opportunity to share mathematics and problem-solving techniques, and they have the fun of a trip to the site. Often such students are relatively isolated at their own school and ARML enables these students to form friendships and the same holds true of the faculty. ARML requires a lot of organization, it requires local support, and the contest is more costly than a math contest by mail. But, judging by the faculty who return year after year with their teams, and judging by the enthusiasm of the students, this is a contest that means a lot to people.

There is a group of 10 or so problem writers who develop each year's contest. I've served as the head author since 1995. I write problems for a number of other contests, but ARML is the most challenging and exciting to write for. Last year's problems (and solutions!) can be accessed at www.arml.com. Additional information including team scores, coaches' information, awards, and costs for the 2008 ARML is available on the web site. For further information, please contact the President at jbsully@verizon.net.

In conclusion, ARML hopes that several South Dakota coaches will decide to form an ARML team for 2009.

Don Barry, ARML Head Author
Phillips Academy
Andover, MA

J. Bryan Sullivan, President
Hudson HS, Hudson, MA
Retired

Nominate an outstanding secondary teacher for 2009 PAEMST.

For further information, please contact the President at jbsully@verizon.net.



For a complete listing of MET grants, scholarships and awards, please visit:

<http://www.nctm.org/met.aspx>

Grant Opportunities

Professional Support Within Reach

Welcome to a new school year and with it, new opportunities for progress and enrichment. NCTM's Mathematics Education Trust (MET) encourages you to apply for MET funds to help you meet your professional goals: attend conferences and seminars, conduct research or school in-service training in mathematics, develop classroom activities, create lessons and materials, take graduate courses and participate in professional development activities. Your success is our success! The application deadline for most MET grants, scholarships, and awards is **November 14, 2008**.

For a complete listing of MET grants, scholarships and awards, please visit: <http://www.nctm.org/met.aspx>

Read Proposal Abstracts for 2008-2009 MET Grants, Scholarships, and Awards

Best Buy Awards for Interactive te@ch Programs

Organization: Best Buy

Eligibility: K-12 schools

Value: Awards range from \$1,000-\$5,000

Deadline: October 12, 2008

The Best Buy te@ch program rewards schools for successful interactive programs they have launched with available technology. Focus on kids using technology to learn a standards-based curriculum, rather than on teaching students to use technology or educators using technology that children aren't able to use hands-on.

Contact: http://www.bestbuyinc.com/community_relations/teach_awards.htm

FREE Stuff for Teachers

Did you Know...

You can get TI educator support materials absolutely free when you recommend a TI graphing calculator on your syllabus? Learn more about TI's Syllabus Support Offer and send in your syllabus.

http://education.ti.com/educationportal/sites/US/nonProductSingle/syllabus_support.html

Share the Wealth!

South Dakota Teachers have so much to offer one another! Please share an activity that "works" for you with SDCTM members!

Email submissions to: smcquade2@sfcss.org

2009 SPEAKER / PRESENTER PROPOSAL FORM

Joint Conference of South Dakota Council of Teachers of Mathematics (SDCTM)
and South Dakota Science Teachers Association (SDSTA)
Huron South Dakota February 5-7, 2009.

OFFICE USE ONLY:

Session No. _____
Day _____
Time _____
Location _____
Repeat Session _____

Submission of this form constitutes acceptance unless otherwise notified.

All South Dakota speakers must also register for the conference. Use the registration form at www.sdctm.org.

(First Name) (Middle initial) (Last Name)

(First Name) (Middle initial) (Last Name)

(Name of School/Affiliation)

(Name of School/Affiliation)

Preferred Address: (circle one) work home

A-V equipment request:
(Only requested equipment will be provided.)

- _____ Overhead projector
- _____ LCD projector
- _____ TV
- _____ DVD player
- _____ VCR player

(Address)

One screen will be provided for each room.
Speakers are expected to bring their own computer and software.

(City) (State) (Zip Code)

The conference does not guarantee compatibility of electronic components.

(Work Phone) (Home Phone)

(Email)

Title of presentation: _____

Description (max. 50 words): _____

Circle grade level: **K-2** **3-5** **6-8** **9-12+**

Length of presentation: _____ one hour _____ two hours

Day of presentation: _____ Friday _____ Saturday _____ Either day _____ Both days

Speakers are requested to provide handouts for 30 on a first come, first served basis.

Please return this form by **October 31, 2008** to:

Jean Gomer
Box 96 email jean.gomer@k12.sd.us
White, SD 57276 fax (605) 629-3701

I agree to comply with the guidelines in the "Minimum Safety Guidelines for NSTA Presenters and Workshop Leaders:" during my presentation. NSTA Minimum Safety Guidelines are located online at <http://www.nsta.org/coru/safety.html>

Modified
02/11/08
CK

Signature _____ Date _____

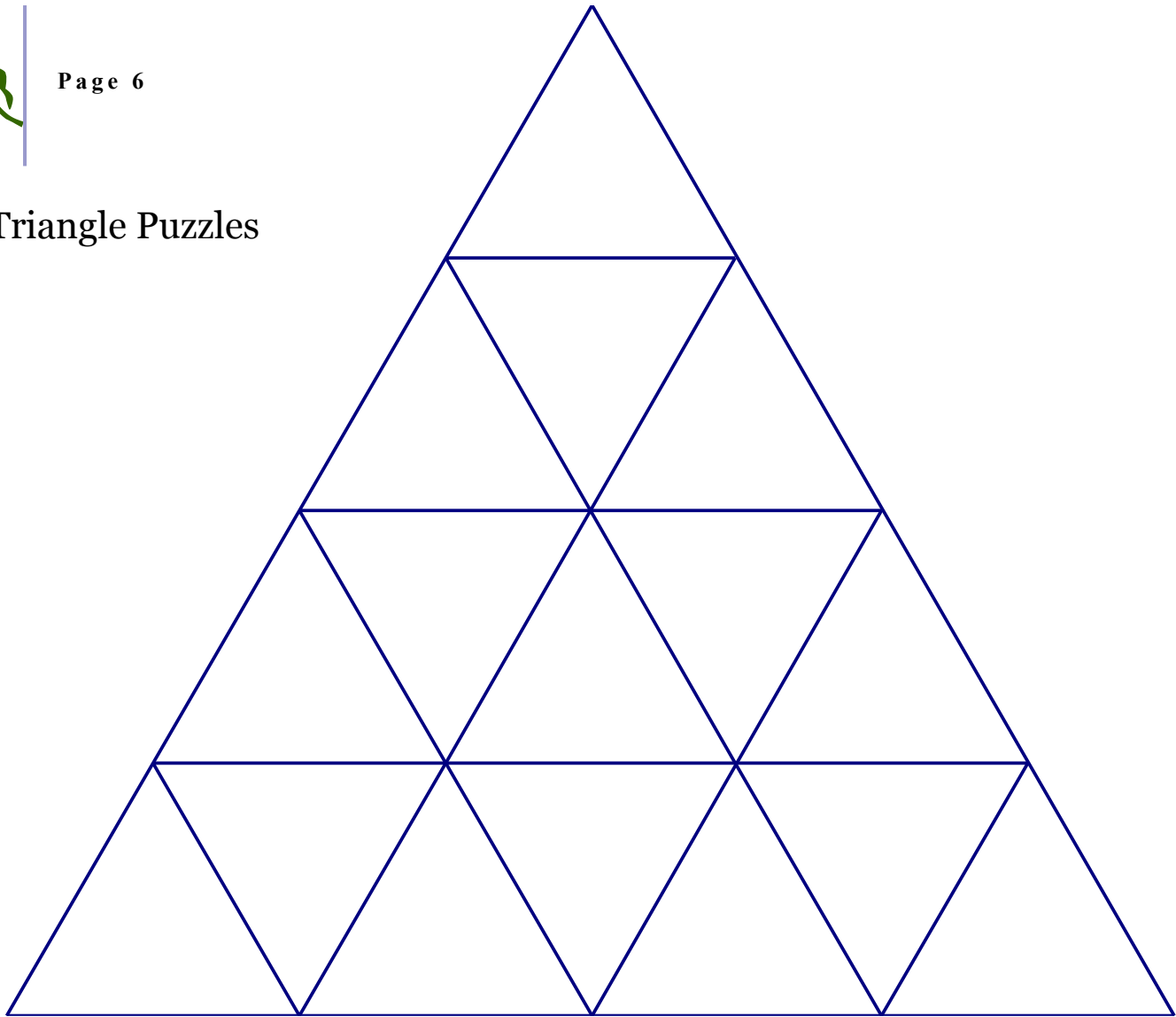
Contact SDCTM with any special needs requests as defined by ADA by emailing Jean Gomer at jean.gomer@k12.sd.us before October 31, 2008

All South Dakota speakers must also register for the conference: Use the form at www.sdctm.org

Conference program information and booklets will be available for download from www.sdctm.org.



Triangle Puzzles



I have had great success with triangle puzzles. They can be used to practice a skill or for a review at all levels! To use the puzzle, write “matching” facts on either side of a side shared by two triangles. When you have all 18 “common” sides completed, cut out the puzzle.

Ideas for puzzles:

- * Multiplication Facts
- * Equivalent Fractions
- * Trinomials & their factors
- * Algebraic equations & solutions
- * Names of shapes & area formulas
- * Names of shapes & # of sides
- * Trig ratios of radian angle measures

Helpful Hints:

- * Complete a puzzle and copy on paper of 5 (6) different colors....you now have a classroom set that can be easily sorted at the end of the class hour.
- * Require students to show their work/solutions.
- * Trim all edges so that no black lines are visible.
- * Trim each side of each triangle so that that the puzzle cannot be put together by matching the cuts.
- * Put problems without solutions on the outside edges for a more challenging puzzle.

I have found these puzzles to be something that requires a little bit of prep time, but they can be used over and over again. I like to use “easier” ones as a quick review...only taking a part of the class and more challenging ones as the main activity for the day.



Print a copy of this form. Mail with check payable to SDCTM to:

Diana McCann
41876 Apple Tree Road
Springfield, SD 57062

Name _____

School Name _____

Subjects or Grades Taught _____

Addresses

Home _____

School _____

Mailing Address: _____ Home _____ School

Home Phone _____

School Phone _____

Fax Number _____

E-mail _____

Membership categories (Check only one)

- _____ Elementary School \$5.00
- _____ Middle School / Junior High \$20.00
- _____ High School \$20.00
- _____ Post Secondary \$20.00
- _____ Retired \$5.00
- _____ Student \$5.00



SDCTM Newsletter
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www.sdctm.org

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