

25th Anniversary Conference Issue!!!

Registration Form Inside!!!

News from the South C's

Volume XIX, Number 1

Spring 2010

Inside this issue:

From the President's Desk	1
CMC ³ -South Annual Spring Conference	2-5
Basic Skills Initiative at Fullerton College	6
For the Students of CMC ³ -South	7
We Have Problems	8-9
Wolfram Alpha	9
Bits and Bytes	10
Mike Hardie	11
CMC ³ Job Openings	12
CMC ³ -South Board Members and Committee Chairs	13

Upcoming Events:

- CMC³-South Twenty-fifth Annual Conference
March 5-6, 2010, Anaheim, CA.
- CMC³ 14th Annual Recreational Mathematics Conference, April 30-May 1, 2010, South Lake Tahoe, CA

From the President's Desk

Greetings,

This is CMC3-south's 25th anniversary conference weekend, March 5 – 6, 2010 and we have many great surprises in store for you. On Friday afternoon there will be several workshops for you to attend so check the website. On Friday evening we will have wine and cheese and a buffet dinner followed by cake to celebrate the 25th anniversary of our math organization. Our keynote speaker for the evening, Dan Kalman, has been carefully selected for our celebration. Finally, we will have a drawing from those in attendance for a 2011 conference registration plus a one night stay at the Doubletree.

Patty George has an exciting array of speakers for you to select from on Saturday, March 6th. Our Saturday keynote speaker, Curtis Bennett will take you on a mathematical journey immediately following lunch. You will not want to miss our anniversary celebration on Saturday. Tammi Marshall has gathered together exhibitors that will please you with new texts as well as other mathematical fancies. Be sure to stay the entire day and be present for all the door prizes awarded at the end of the day. The board is donating a special door prize for our anniversary celebration.

I do have a request for all our conference attendees. I know this is a time of tight budgets and few travel dollars but our CMC3-south conference is reasonably priced and looks good on your summary of math activities for the year. Make a New Year's resolution of attending at least one math conference during the year 2010 and attend our conference in March. Now if you are planning to stay overnight, please stay at the Doubletree! If you reserve a room through CMC3-south, then you save on the parking fee as well as keep the conference fees down for the following year. We appreciate all our attendees who do make their room reservations at the Doubletree.

I hope to see many of you at our conference. Remember, we are the least expensive math conference in the area! I hope all of you relaxed and had fun during the holiday break. Best wishes for the New Year and have a wonderful spring semester.

Carol Murphy
CMC3-south President

A Call for Speakers!

On March 5th and 6th of 2010, the California Mathematics Council of Community Colleges – South will be celebrating its 25th birthday!



The CMC³ – South will hold the 25th Annual Spring Conference at the Doubletree Hotel in Anaheim, California on March 5th and 6th .

If you are interested in speaking at the conference, please contact Patty George at pgeorgecmc3s@sbcglobal.net . You can also call her at (562)860-2451 X2670 for more information.

Interested in presiding for one of the talks? If you are, please contact Sherri Wilson at swilson@craftonhills.edu.

25th Anniversary Conference!!!

CMC³-South
Twenty-fifth Annual Conference
March 5-6, 2010

Doubletree Hotel Anaheim/Orange County

Please visit our website, www.cmc3s.org, for up-to-date information about the conference.

The conference site is the **Doubletree Hotel Anaheim/Orange County**. Rates from \$114/Night.

Hotel reservations can be made on-line or by phone.

The URL for reservations is:

<http://doubletree.hilton.com/en/dt/groups/personalized/SNACCDT-CMC-20100304/index.jhtml>

To make a reservation by phone, call the hotel directly at 714-634-4500 or use the Central Reservations System at 1-800-HILTONS. **Be sure to mention California Mathematics Council Community Colleges -- South.**

Friday Evening Keynote Presentation by

Dr. Dan Kalman

Professor of Mathematics
American University, Washington, DC

Provincial Polynomia: Uncommon Excursions for the Seasoned Visitor



This talk is for long time friends of Polynomia, who have wandered its pathways many times. I will guide the audience to some out of the way destinations that are easily accessible from the most well traveled and familiar thoroughfares of the realm. Such destinations show that Polynomia still has much to surprise, delight, and intrigue even the most seasoned visitors. The itinerary includes Horner evaluation, Lill's method, the curly-root function, and Marden's Theorem.

The Saturday Program

On Saturday the conference begins at 8:00 a.m. with registration and a continental breakfast. The breakout sessions begin at 9:00 a.m. and address a spectrum of topics of interest to community college mathematics instructors. Commercial exhibits and software demonstrations are available throughout the day in the publisher's area. The last breakout sessions end at 3:30 p.m., followed by a post-conference social event with refreshments and valuable door prizes.

Lunch will be held from 11:45 AM – 1:45 PM

Luncheon Keynote Speaker

Dr. Curtis Bennett
Professor of Mathematics
Chair, Department of Mathematics

Loyola Marymount University

**CMC³-South Twenty-Fifth Annual Conference
March 5-6, 2009**

Advance Registration must be postmarked by February 22, 2009

Last: _____ First: _____ M.I. _____

College/Affiliation: _____

Mailing Address: Street: _____

City: _____ State: _____ Zip: _____

Preferred Phone: (____) _____ work home cell

Email: _____

Please use a separate form for each registrant. Copy this form freely.

Friday:

The Friday evening reception/entertainment is free.

Please **note here** the number in your party who plan to attend the Friday Evening reception/entertainment: _____

Saturday:

Registration and Membership:

Attending the conference, annual membership is included:

Advance Registration, postmarked no later than
February 22, 2010 **\$ 90**

Lunch included:
Vegetarian _____ Non-Vegetarian _____

Late **on-site registration** (lunch only if available): **\$120**

Not attending the conference, annual membership: **\$ 20**

I wish to make a tax deductible contribution
to CMC³-South: \$ _____

Total amount included: \$ _____

Make check payable to **CMC³-South**

Return advance registration to:

**Mark Greenhalgh
Fullerton College
321 E. Chapman Ave.
Fullerton, CA, 92832**

Basic Skills Initiative at Fullerton College

A series of student success initiatives funded by the state's BSI are currently in operation at Fullerton College. Over the past two years, the mathematics division has implemented new pedagogy, created new support structures, expanded its technology, and enhanced its tutoring programs to support its basic skills students. Here are three highlights.

1. The Math Lab Annex

We took an existing space and created a tutoring area designed exclusively for students in our Basic Mathematics, and Pre-Algebra classes. The lab consists of areas conducive for group study activities, computer tutorials, and one-on-one tutoring. This is a smaller, more comfortable, and less intimidating setting than our traditional Math Lab which serves over 5,000 student per semester. The Annex is adjacent to a small classroom where we schedule many of the Basic Math and Pre-Algebra classes, giving an instructor the opportunity to move from the traditional classroom setting into a study hall environment to provide the most appropriate type of instruction. The Annex is staffed by faculty, Instructional Aides, and students drawn from upper division math classes, or our prospective teacher program. Tutors receive training in basic skills pedagogy, and tutoring skills. They meet regularly with faculty and our instructional assistants to debrief, and students are regularly surveyed on the types and quality of tutoring being provided to them.

2. Technology and Manipulatives

We purchased manipulative kits and other materials to enhance instruction in our basic skills courses. A portable demo station (laptop, projector, document reader, and cart) was purchased to provide faculty with flexibility as they develop and present instructional material electronically to their basic skills students. The portability is appreciated by instructors teaching in classrooms not yet equipped with permanent demo stations. We also invested in a Student Response System (aka "clickers") allowing faculty immediate feedback in their classes. Faculty have been trained on how best to use this new technology.

3. Professional Development

The Division participated in the college's Adjunct Training Program. This year long program provided newer adjunct faculty with instruction and resources in how to meet the needs of basic skills students. Workshops were led by permanent faculty with a background in working with basic skills students, as well as outside experts. Adjuncts were given the opportunity to incorporate the ideas presented into their classes and then debrief regarding the successes and/or challenges.

For more information about these initiatives, please email mgreenhalgh@fullcoll.edu.

For the Students of CMC³-South

Bob Crise, Crafton Hills College

If you would like to bring students to CMC3-South Twenty Fifth Annual Spring conference, March 5-6, 2010, CMC³-South has ten student waivers (two per college) available to the first ten students who apply by filling out the application below or emailing Bob Crise at rcrise@craftonhills.edu. Colleges may bring more than two students to the conference, but the students will be required to pay \$45.00 to cover the cost of lunch on the sixth of March.

CMC3-South's Student Registration Waiver for the Twenty Forth Annual Conference (Please print all information legibly!)	
Student's Name	
Student's College	Name of the math instructor responsible for the student at the conference:
Math instructor's email address:	
Please return this form to: Robert D. Crise, Jr. Associate Professor of Mathematics Crafton Hills College 11711 Sand Canyon Road Yucaipa, CA 92399-1799	

Attention!!

For this year's Twenty-Fifth Spring Conference, being held March 5-6, 2010, we are including a Student Poster Session. If you have interested students willing to participate, please contact me for more information via e-mail at rcrise@craftonhills.edu, at (909) 389-3382, or by regular mail to the above address.

We Have Problems

By Manuel López, Cerritos College

This Summer, I had the good fortune to spend two glorious weeks in a beautiful cabin in Mt. Shasta. With no pressing concerns in mind, I spent many hours reading, and though I made it a point to expand my horizons by selecting reading materials that had nothing to do with my job, it was not long before I found myself under the spell of Raymond Smullyan. In his book, **The Riddle of Scheherazade And Other Amazing Puzzles**, I reconnected with some of the conundrums with which I fell in love as a teenager, and I came across many new and challenging riddles that kept me up several nights. As a result of this experience, I determined to try something new this semester with my prealgebra classes. Since one of my objectives in this course is to develop my students' problem-solving skills, why not use riddles as a way to achieve this? I introduced this idea to my students in the form of a Problem of the Week (POW). With my objective in mind, I made the decision that the problems I selected would require no more than arithmetic and some clever thinking. Consider the following problem, which was my POW #2:

Remember, the point of these problems is for you to develop your ability to think logically and to explain your thinking in writing. Spend some time thinking about the assigned problem on your own, but if you need to, you may discuss it with anyone you'd like, as long as you write your own solution and explanation. I want to know how you arrived at your solution.

This week we consider another riddle posed by princess Scheherazade to the Arabian King.

One night a thief broke into Abdul's jewelry. He found a pile of diamonds. He decided to take half of the diamonds, but as he was about to leave, he decided to take one more diamond. Later that night, a second thief broke into Abdul's jewelry and found the diamonds that were left behind by the first thief. The second thief decided to take half of the diamonds he found, and then he took an extra diamond. Then, a third thief broke in and took half of the remaining diamonds plus one more diamond. Later a fourth thief took half of the remaining diamonds plus one more diamond. Finally, a fifth thief broke in, but he was unable to take any diamonds because they were all gone. The question is, your majesty, how many diamonds were in the original pile?

My students are instructed to write the solution and explanation first and then to write a few sentences explaining the process they went through to reach their solution. I ask them to mention any ideas they tried that did not work out and to identify what we call "AHA!" moments. I must confess that during the first three weeks of this activity, I have received a large number of disappointing papers with solutions that are completely unreasonable; papers that reveal a lack of effort and thought. However, I have also been rewarded with some excellent papers that suggest that these assignments may serve their purpose.

For the example given above, several of my students attempted, unsuccessfully, to write an algebraic equation. Several students mentioned they figured out that the number of diamonds in the original pile had to be even, and they solved the puzzle by guessing

Continued from page 8

Continued from page 8

and checking. Most of the students who got the right answer indicated that they had solved the problem by working backwards. My favorite solution, though, came from a woman who had been thinking about the problem for days and was frustrated by her lack of progress. Her “AHA!” moment came on Saturday afternoon while walking in the mall. A surveillance camera caught her attention for no particular reason and suddenly she knew how to solve the problem. “I just imagined that I had a tape of the robbery and I rewound the tape. I saw exactly what each thief took. I couldn’t believe how easy the problem was.”

So far this semester, the problems of the week have allowed me to discuss with my students several techniques in problem solving: working backwards, guess and check, using a model, and drawing a picture. They have also provided an opportunity for my students to become more aware of their own thinking processes, and to develop their ability to explain these processes in writing.

I find my teaching experience more rewarding when I’m able to share with my students topics that may not be in the course outline, but that I find interesting and relevant. In a previous column, I wrote about how I infuse my interest in the history of mathematics into my classes. Now, I’m sharing with my students my love a riddles... What’s your passion?

Wolfram|Alpha: Check it out!

By: Bruce Yoshiwara, Los Angeles Pierce College

If you haven't yet played with Wolfram|Alpha (www.wolframalpha.com), please do. You need to know something about what's out there because your students will.

Some compare W|A with Google, but they are different animals. Although you can search with either of them (or both together using Goofram.com), Google helps you to find resources on the Web, whereas W|A helps you to carry out specific calculations, including symbolic and graphical manipulations.

There are suggested examples on the W|A site, but if you want a community college math instructor's first impressions, go to Maria Andersen's blog at <http://teachingcollegemath.com/?p=1019>. The Wall Street Journal' article can be found at <http://tinyurl.com/lpsrdo>, and the MAA president's at <http://tinyurl.com/m24wtz>.

Or check out Robert Talbert's video: <http://www.youtube.com/watch?v=vyfzhfuz58>.

Have fun!

BITS AND BYTES

by Sister Rita M Basta, BVM

BITS or BYTES are welcome for next Newsletter. Please email: rita.basta@csun.edu

As the academic year is about to begin you may want to review some recent math web sites for your class-room use, look over some new online resources and calendar in the dates for great conferences in Southern California.

NUMEROPEDIA - Project of a Stanford & U.C. Berkeley Alumni group

The Special Encyclopedia of Numbers for Everyone.

[Exploring A Number A Day!](#)

<http://numeropedia.googlepages.com>

From: Alan Selby, Ph. D. Montreal, Quebec

Appetizers and Lessons for Math and Reason (1000 webpages and 80 webvideos)

The (completely free) site www.wolframalpha.com does every type of computation imaginable, including every symbolic manipulation we would ask of our students. You can get data information not only in math but also in physics, chemistry, finance, geography, etc. Check it out!

Be sure to review: <http://mathdl.maa.org/mathDL>. If you were able to attend our Fall Conference at Santa Monica College you may have seen Bruce Yoshiwara's presentation on the site. If not, take a look at this MAA Mathematical Sciences Digital Library.

Start saving your money to attend the local annual conferences that will be in our locale for the academic year:

1. California Math Council-South (CMC) in Palm Springs on November 6-7, 2009. For information: www.cmc-math.org
 2. Association of Mathematics Teacher Educators (AMTE) 14th annual conference in Irvine on January 28-30. For information: www.amte.org
- National Council of Teachers of Mathematics (NCTM) 2010 annual meeting and exposition in San Diego on April 21-24, 2010. For information: www.nctm.org

Khan Academy, a not-for-profit organization posts videos on youtube covering everything from basic arithmetic to calculus. Their video library is on their home page www.khanacademy.org. Just click and start learning.

Don't forget to look at www.illuminations.nctm.org for resources, interactive tools, etc. These are organized by grade and standard.

Job openings

People needed to work with a dedicated group of
CMC3-south board members

CMC3-south board has three open positions:

Member-at-Large South and Member-at-Large Central

Members-at-large have the following duties:

1. Attend all board meetings (3 per year)
2. Attend and assist at the CMC3-south fall and spring conferences
3. Write an article about one of the campuses in your area for the two online newsletters

Be the liaison to the college contacts in your assigned geographic area

Coordinator for spring conference Friday activities

Duties are:

1. Coordinate and publicize Friday afternoon workshops
2. Work with the board to recruit a speaker for Friday evening
3. Coordinate financial support from publishers for refreshments for Friday evening

Publicize Friday evening program on conference materials

If you are interested in getting more involved with CMC3-south contact the president, Carol Murphy, at cmurphy@sdccd.edu.

CMC³-SOUTH 2009-2010 BOARD MEMBERS and COMMITTEE CHAIRS

- **President:** Carol Murphy, San Diego Miramar College
- **President Elect / Spring Conference Chair:** Patty George, Cerritos College
- **Past President:** Rich Zucker, Irvine Valley College
- **Secretary:** Miriam Castroconde, Irvine Valley College
- **Treasurer / Registration:** Mark Greenhalgh, Fullerton College
- **Member at Large, North Region:** Sister Rita Basta, C.S.U. Northridge
- **Member at Large, Central Region:** Vacant
- **Member at Large, South Region:** Vacant
- **AMATYC & MAA Representative:** Bruce Yoshiwara, Los Angeles Pierce College
- **CMC Representative:** Rich Zucker, Irvine Valley College
- **Newsletter Editor:** J. Paul Swatzel, Citrus College
- **Student Liaison:** Bob Crise, Crafton Hills College
- **Spring Conference Site Chair:** Art Nitta, Mt. San Antonio College
- **Spring Conference Exhibitors Chair:** Tammi Marshall, Cuyamaca College
- **Spring Conference Presiders Chair:** Sherri Wilson, Crafton Hills College
- **Contacts Coordinator:** Rod Elsdon, Chaffey College
- **Webmaster:** Richard Zucker, Irvine Valley College