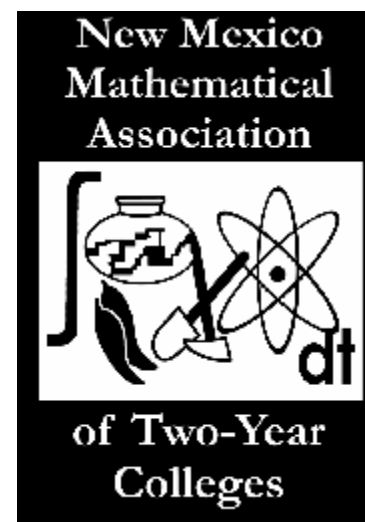
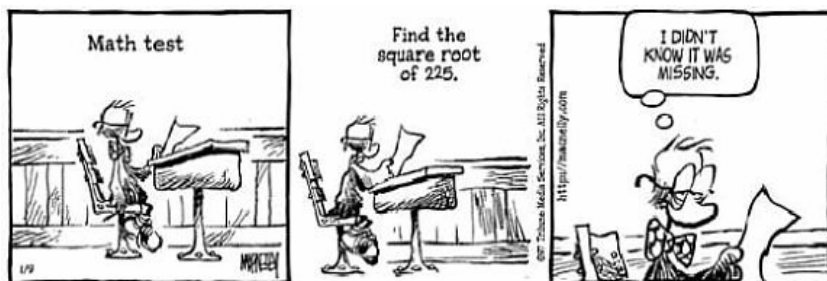




Ivette Chuca  
NMMATYC Newsletter Editor  
EPCC  
PO Box 20500



# NMMATYC News



<http://www.charlottemathtutor.com/htmlfile/cartoons.html>

November 4, 2005

Volume 17

Issue 1

# 2004-2006 NMMATYC Board

President	Ellen Schneider Doña Ana Branch CC	(505) 527-7632 <a href="mailto:elschnei@nmsu.edu">elschnei@nmsu.edu</a>
President-Elect	Gordon DeSpain Santa Juan College	(505) 566-3769 <a href="mailto:despaing@sanjuancollege">despaing@sanjuancollege</a>
Past-President	Rockford Burris NMSU-Alamogordo	(505) 439-3772 <a href="mailto:burris@nmsua.nmsu.edu">burris@nmsua.nmsu.edu</a>
Secretary	Robert Miller NMSU-Alamogordo	
Treasurer	Mary Ellen Gallegos Santa Fe CC	(505) 428-1335 <a href="mailto:mgallegos@santa-fe.cc.nm.us">mgallegos@santa-fe.cc.nm.us</a>
Newsletter Editor	Ivette Chuca El Paso CC	(915) 831-2482 <a href="mailto:yvettech@epcc.edu">yvettech@epcc.edu</a>
Nominating Committee Chair	Mary Caffey Clovis CC	(505) 769-4747 <a href="mailto:mary.caffey@clovis.edu">mary.caffey@clovis.edu</a>
Membership Committee Chair	Marlene Chavez-Toivanen NMSU Grants	(505) 287-6652 <a href="mailto:mchavez@nmsu.edu">mchavez@nmsu.edu</a>
AMATYC Delegate	Joanne Peeples El Paso CC	(915) 831-5047 <a href="mailto:joanep@epcc.edu">joanep@epcc.edu</a>
Articulation Liaison	Seth Abrahamson San Juan College	(505) 566-3326 <a href="mailto:abrahamsons@sanjuancollege.edu">abrahamsons@sanjuancollege.edu</a>
2005 Conference Chair	Janet Delgado NMSU-Alamogordo	(505) 439-3791 <a href="mailto:janet@nmsua.nmsu.edu">janet@nmsua.nmsu.edu</a>
2006 Conference Chair	Rene Sierra DABCC	(505) 527-7658 <a href="mailto:rsierra@nmsu.edu">rsierra@nmsu.edu</a>



## NMMATYC News

### Volume 16

### Issue 1



#### Inside this issue

President's Message	3
Have you ever had one of those days?	6
Research Informs Practice	8
NMMATYC Faculty Development Award	9
NMMATYC David LoveLock Teaching Excellence Award	10
Michelle Jimenez Memorial Scholarship	11
Call For Nominations	12
Count Her In	13
You can make your own Calculator	15

## President's Message Ellen Schneider

Greetings! I hope you are enjoying the fall season. If you are like most people I have asked, you are probably much busier than usual. So sit back, relax and enjoy reading this newsletter. You will want to make sure you catch all the important news from NMMATYC.

### Michelle Jimenez Memorial Scholarship

I am pleased to announce that the Michelle Jimenez Memorial Scholarship has been increased from \$600 to \$1200. (Thanks to Betty Carpenter, Michelle's mother, who has pledged the additional funds.) Please encourage your students to apply! Most students will not know about the award unless you advertise it at your school. This is a wonderful opportunity for a student to receive financial assistance while getting an education. The number of applications decreased last year, so help us get the word out.

### 2006 Faculty Professional Development Award - NEW

NMMATYC has a new award to help provide financial support for members to participate in faculty professional development activities. Funding for this award is possible thanks to an anonymous donation made to the NMMATYC Mathematics Hall of Fame in 1999. Recipients of the award will earn up to \$300 to cover expenses to attend a conference, workshop or other professional development activity in 2006. Application materials are included in this newsletter. The deadline to apply is January 31, 2006.

### 17th Annual NMMATYC Conference

This year's conference will be at the DABCC East Mesa Campus in Las Cruces May 19-20 with a pre-conference workshop on May 18.

## President's Message

### Continued...

ELLEN SCHNEIDER

The theme of the conference is *Mathematics: mild, medium or HOT!* I am pleased to announce that Anne Dudley will be the keynote speaker. Anne has been an active member of both AMATYC and ArizMATYC. Anne has been an active member of both AMATYC and ArizMATYC. Those of you who have met Anne know what a dynamic personality she has. Anne is very knowledgeable about curriculum, pedagogy and the AMATYC Standards, so I know her keynote address will be very informative. I hope all of you make plans to attend the conference.

### Membership Dues

As discussed at the Business Meeting in May, the Executive Board has decided to raise membership dues from \$5/year to \$10/year. The new rates will go into effect January 1, 2006. People who join or renew their membership by December 31 will be eligible to win one of three free NMMATYC T-shirts. Please encourage your colleagues who are not members to join. Membership dues help support many worthwhile activities and initiatives throughout the region, such as the Student Math League, the Michelle Jimenez Memorial Scholarship, the David Lovelock Teaching Excellence Award and the NMMATYC Mathematics Hall of Fame.

### Southwest Regional AMATYC Conference

Keep your fingers crossed! The Southwest AMATYC Affiliates (New Mexico, Texas, Oklahoma and Arizona) have submitted a proposal to AMATYC to hold a southwest regional conference. If approved, the conference will be June 16-17, 2007 (not this June!) in San Antonio, Texas. I'll be sure to let all members know once the conference gets final approval.

### 2005 AMATYC Conference

This year's AMATYC Conference will be November 10-13 in San Diego. It should be a great conference. As is tradition, all NMMATYC members and their guests will be invited to attend the NMMATYC dinner social Saturday night (the dinner is Dutch treat). Look for details and a sign-up sheet on the message board at the conference.



## President's Message

### Continued...

ELLEN SCHNEIDER



### Election of Officers

This spring, NMMATYC will hold elections for Secretary, Treasurer and President-elect. If you are looking for a leadership role in a worthwhile organization, then please consider running for an office. You may self-nominate or nominate someone else (with that person's approval). I have been a member of the NMMATYC Executive Board for the past seven years, so I can vouch that this is a great organization.

If you have any questions about the above items or anything else related to NMMATYC, do not hesitate to contact me. I hope to see you in San Diego in November and Las Cruces in May!

## Have You Ever Had One of Those Days

Joe Haley

### Have You Ever Had One of Those Days?

At the start of the spring semester, I received a call just before the classes started. One of our instructors had an emergency. Her son had broken his leg. She was in Albuquerque and wasn't going to be able to teach her first class. I agreed to sub for her. This class would be after a full day of my regular classes.

The first complication occurred in the fact I had to attend a meeting for the local Alamogordo Public Library Board. The meetings usually ending at the same time the class was to start. Ouch. The class was to be in a different building than the two I usually teach classes. I made a mad dash for the staff parking lot next to the building only to find there was not a square inch of space left. I headed to the next level and quickly grabbed the nearest slot. I came running down a set of stairs and entered the lobby area to find a room full of people. I found that they were waiting for me. I had heard that the classroom number was 109. We walked the complete round of the classrooms and didn't find any classroom with the number 109. Not only, we found all rooms were locked. The classrooms shared space with the IMAX theatre and offices. There were a couple of IMAX staff members in their office. They told me they had no keys for any of the classrooms. I borrowed their phone and called down to the Division Office in the building down the hill.

The secretary was not in at the time and someone else answered the phone. They didn't know where to get a key to unlock any of the classrooms. I went back to the students and suggested they find a place to get comfortable and we would go ahead and get started. There were people stacked everywhere. We could at least get some of the basic tasks of handing out syllabi, information cards, and the usual beginning details.

A friend of mine is the projectionist for the IMAX theatre. He finished his shift and came through our "classroom". He cracked up and went out laughing when he heard me going full steam with a crowded room. Shortly after he left, our secretary came in bringing another student. The student had gotten lost and had gone to the wrong building. The secretary saw the situation and quickly left and we kept working. Shortly, campus security came in to help us out. He could not find the room 109 either. I had worked in that building a few years before so I knew one room would work as a classroom. I asked him to let us in to that room. As he was letting us in, he told me I had better have a key the next time we met that class. I told him I was just a fill in. We went on into the room and finished the class. As the students left, I started gathering things up and realize there was another complication. I was the last person in the building and had no way to lock things up. I had no access to a phone to let anyone know. I finally gathered up and left, hoping things would work out ok. I found out the next day that the campus security guy had gone to the division office and complained that there was a class in the other building without a teacher.



**Research Informs Practice**  
**Dr. Sharon Yu-Shattuck**  
[sharony@epcc.edu](mailto:sharony@epcc.edu)

As we all know, students doing homework is important for their learning, and is the crucial effort for their achievements. How does the effort of doing homework quantitatively relate to students achievements? Statistics can answer this question.

At the beginning semester of this fall of 2005, I computed the correlation of the homework percentage and students achievements for my nine previous semester classes with a total  $n = 315$ . Seven of these correlations are above 0.9, one is 0.898, and the lowest one is 0.75. As we know, correlation,  $r$ , is between  $-1$  and  $1$ , if  $r$  is between  $0.8$  and  $1$  (and  $-0.8$  and  $-1$ ), it is considered strongly correlated. I also computed the average of these nine correlations. It is 0.91473. This shows that the homework percentage and achievement is definitely strongly correlated.

Further, I did hypothesis testing to test whether the homework percentage and students achievement is significant linear correlated. The result p-value yield is less than 0.001, ( $p < 0.001$ ) with degree of freedom  $n-2$ . This shows that the homework percentage and students achievement is indeed significant linear correlated. If P-value is 0.001, it means that the prediction is true for 999 cases out of 1000. If p-value is 0.0001, it means that the prediction is true for 9999 cases out of 10000. My p-value is less than 0.001. It indicates the significance statistical result in my study.

This quantitative measurement actually confirmed our assumption. It is indeed true that more efforts on homework lead to better achievement. This study is my continuing effort on analyzing the factors that affect students' achievement. I always inform students with my results. This statistic analysis gives me positive feedback on my effort of encouraging students doing homework by assigning and collecting students homework.

Assigning homework seems normal practice because instructors suppose to give students homework. However, it is not normal practice that some instructors do not have policy of collecting students' homework. Not encouraging students effort policy will definitely lower students achievement. I believe that instructor's encouragement is important for students achievement as statistics gave us. I know that grading students' homework is lot of work for instructors. I really do not like it, but it is worth it when I see students' achievement is going up.

**2006 NMMATYC Faculty Professional Development Award**

**Purpose:** To provide financial support for NMMATYC members to participate in faculty professional development activities. Funding for this award is possible thanks to an anonymous donation made to the NMMATYC Mathematics Hall of Fame in 1999.

**Eligibility:** Any current NMMATYC member (excluding NMMATYC board members) who teaches mathematics either full- or part-time is eligible to apply for this award.

**Award:** Up to \$300 to cover expenses to attend a regional or national conference, workshop or other professional development activity in 2006. The number of awards granted in 2006 will depend on the amount of money requested from the applicants. NMMATYC will either award one single award for \$300 or several smaller awards whose combined values equal \$300.

**Deadline:** Application materials must be received by January 31, 2006. Winner(s) will be notified by March 1, 2006.

**Application Process:** Send completed application form and personal statement to Ellen Schneider, NMMATYC President. The address is provided on the application form.

**Stipulation:** Recipients of this award must agree to write an article for the NMMATYC newsletter after they have attended the professional development activity. The article should include a summary of what the recipient learned at the professional development activity and what impact this activity has had on the recipient's professional growth.

For additional information, contact Ellen Schneider, NMMATYC President, at 505-527-7631 or [elschnei@nmsu.edu](mailto:elschnei@nmsu.edu).





## The NMMATYC David Lovelock Teaching Excellence Award

NMMATYC established the David Lovelock Teaching Excellence Award in 1998 to honor educators who have made outstanding contributions to mathematics at the two-year college level. The award is presented in even numbered years at the annual conference.

The award is named for Professor David Lovelock from the University of Arizona. During his thirty years at the University of Arizona, Dr. Lovelock made significant contributions to the development and improvement of mathematics instruction. He was instrumental in introducing educational software into the mathematics curriculum. He is the creator of the *Are You Ready?* Software series and author/co-author of the Arizona Mathematical Software programs. He also helped design the first computer classrooms at the University of Arizona and helped make them state-of-the-art facilities. Dr. Lovelock retired in 2004.

During his tenure at the University of Arizona, Dr. Lovelock presented several workshops in New Mexico and for NMMATYC. He also helped various mathematics instructors within the state apply for grants. In appreciation for his contributions to mathematics instruction in our state, NMMATYC named a teaching excellence award in his honor.

Past recipients of the award include Peter Steinbach (TVI, 1998), Bette Berry (NMSU-A, 1998), Eleanor Barber (EPCC, 2000), Sinnathamby Pankayatselvan (DABCC, 2002), and Roberta Himebrook (NMSU-A, 2004).

Nominations for the 2006 award will be taken until March 3, 2006. The qualifications and nomination form are available at [www.nmmatyc.org](http://www.nmmatyc.org).



## Michelle Jimenez Memorial Scholarship

Each year, the Michelle Jimenez Memorial Scholarship is awarded to a deserving student at the NMMATYC conference. The scholarship is jointly funded by the family of Michelle Jimenez and NMMATYC.

This year, several changes have been made to the scholarship. The amount of the award has been raised to \$1200 to attract more applicants. Business Calculus has been added to the list of courses a student might use to fulfill the math requirement of the scholarship. Also, the recipient of the scholarship will write a short article for the Newsletter detailing how the money was used to further their education.

To apply for the scholarship, a student must have completed a minimum of 12 credit hours of which six credit hours must be from a New Mexico or El Paso two-year college. The applicant must have at least a 3.2 GPA overall and a 3.5 GPA in all math courses. At least two of the following courses must have been completed prior to applying for the scholarship: Trigonometry/Pre-calculus, Statistics, or Business Calculus/Calculus.

The recipient is always invited to attend the annual NMMATYC conference to receive the award. This year's conference will be held in Las Cruces on May 19<sup>th</sup> and 20<sup>th</sup>.

A flyer suitable for posting in offices and classrooms as well as the application form is available at the NMMATYC website at [www.nmmatyc.org](http://www.nmmatyc.org). The deadline for the 2006-2007 scholarship is April 7, 2006.

## Call for Nominations!

### 2006-2008 NMMATYC Officers

Nominations are currently being taken for President-elect, Secretary and Treasurer of NMMATYC for 2006–2008. According to the NMMATYC Constitution, the duties of the officers are:

**The President-elect** shall perform all duties of the President when the President is unable to do so, shall audit the Treasurer's records annually, and shall assume the presidency at the end of the President's two-year term of office.

**The Secretary** shall keep all records and minutes of meetings of the Association and of the Executive Board and shall be responsible for preserving the annual reports and historical records of the Association.

**The Treasurer** shall collect all dues and other income of the Association, shall pay all routine bills as provided by the annual budget and such other bills as approved by the Executive Board and the President, and shall keep all financial records and make a financial report at each meeting. A copy of these reports shall be filed as a part of the permanent records of the Association.

Nominations or a self-nomination may be submitted to Mary Caffey, Chair, NMMATYC Nominating Committee at [mary.caffey@clovis.edu](mailto:mary.caffey@clovis.edu) or at Clovis Community College, 417 Schepps Blvd., Clovis, NM 88101. Nominations will be taken until January 27, 2006.



## Count Her In!

Joanne Peeples



At the conference last May, in Alamogordo, Melinda Camarillo and I talked about a play we have worked on, about women mathematicians. The play was initially funded through an MAA Tensor Grant which was awarded to Hamide Dogan (a professor at UTEP) and me in the summer of 2004. We worked with high school and college women – who were the “researchers” and actors, and three graduate students (Melinda was one of the graduate students) to put a play together that depicted the lives of seven women mathematicians, as seen through the eyes of the students in a drama class. We “twisted the arm” of Sherry Lowell-Lewis, an adjunct drama teacher at EPCC, to write and direct the play. The play was performed at the MAA SW-Section meeting in April of 2005, at the Transmountain Campus of EPCC in April of 2005, and at MathFest in Albuquerque in August of 2005. Our current plans are to have a performance of the play at the NMMATYC conference in Spring 2006.

The mathematicians depicted in the play are Hypatia, Emilie du Chatelet, Sofya Kovalevskaya, Winifred Edgerton Merrill, Emmy Noether, Paris Pismis, and Sarah Flannery.

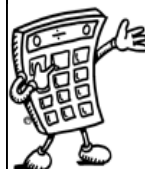
The goal is to eventually have the play published, in a format so that other high schools, community colleges, and summer math camps can either perform the play, or use it as a model and create a similar play.

Several people at the 2005 conference expressed interest in finding books about women mathematicians, and I said I would compile a list – please note this list is by no means complete, and of course reflects my personal bias. These are all books I have in my personal library, and enjoy. I would welcome additions to the list. I have put \*\* beside four of the titles – I think these would be good to look at first. Enjoy!

## Books About Women in Mathematics

Case, Bettye Anne and Leggett, Anne M	Complexities, Women in Mathematics
Dzielska, Maria	Hypatia of Alexandria
Grinstein, Louise and Campbell, Paul J.	Women of Mathematics, A Biobibliographic Sourcebook
Henrion, Claudia	Women in Mathematics, The Addition of Difference
** Kenschaft, Patricia Clark	Change is Possible
**Morrow, Charlene and Perl, Teri	Notable Women in Mathematics, A biographical Dictionary
Murray, Margaret A.M.	Women Becoming Mathematicians, Creating a Professional Identity in Post-World War II America
Musielak, Dora	Sophie's Diary: A Historical Fiction
Nolan, Deborah	Women in Mathematics, Scaling the Heights
** Osen, Lynn M.	Women in Mathematics
Parker, Marla	She Does Math! Real-Life Problems from Women on the Job
** Perl, Teri	Math Equals; Biographies of Women Mathematicians + Related Activities
Perl, Teri	Women and Numbers, Lives of Women Mathematicians plus Discovery Activities
Reid, Constance	Julia, A Life in Mathematics
Sarah Flannery	In Code, A young Woman's Mathematical Journey
Stein, Dorothy	Ada, Life and a Legacy
Stillman, Beatrice (Translator)	Sofya Kovalevskaya, A Russian Childhood
Wertheim, Margaret	Pythagoras' Trousers, God, Physics, and the Gender Wars

## You Can Make Your Own Calculator!



*By Dr. Joanne Peeples*

*El Paso Community College*

Below is a picture of a student calculating using her set of Napier's Bones. At the end of this article is a template so you can make your own set of bones, from paper (or you can cut them out and glue them on tongue depressors).



### A Short Historical Note:

John Napier (1550 – 1617), the 8<sup>th</sup> Baron of Merchiston, is probably best known for his invention of logarithms. Very little is known about his life – other than what can be found in his publications. Around 1600 Napier was working on his new discovery, logarithms, and in doing so Napier had to make many calculations. About the same time there were many people working on mechanical devices that would make multiplication and division easier (and more accurate) – including John Napier



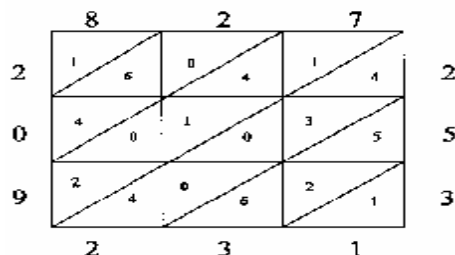
It is thought by some that Napier invented his Rods (or Bones as they are often called) to improve his accuracy when making his many calculations. These rods were often made of ivory or bone – hence the name Bones. A thin book was published by Napier in 1617 called *Rabdologia* (which can be translated as Rod reckoning) to explain the use of his Bones, as well as several other mechanical aids to computation.

Napier's Bones were widely used for about 100 years, with several people trying to modify (improve?) them. The Bones were still used as late as the mid-twentieth century in England to teach school children to multiply. Napier also had special bones for finding square roots and cube roots of numbers.

### Where did Napier get his idea for Bones?

Some people advocate that he adapted a technique which the Arabs must have invented about the 13<sup>th</sup> century called *multiplication per gelosia* ("by jealousy"). At the end of the Middle Ages Europe "discovered" it, so it is reasonable to believe that Napier knew of this method of multiplication. It uses a grid similar to the wooden or metal lattices through which jealous wives and/or husbands could see without being seen – thus being able to spy on their partner.

**Multiplication per gelosia**  
(“by jealousy”)



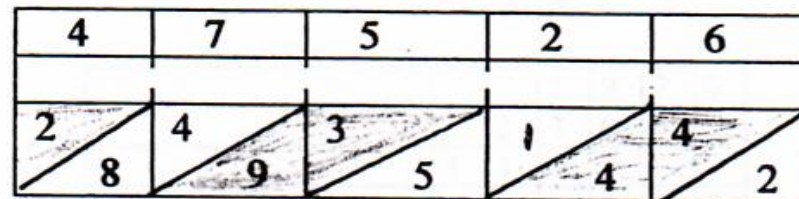
*It seems more likely to me that Napier just saw the pattern in a multiplication chart. You might want to copy the template given after the description of division, and cut it into vertical strips with the numbers 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9 at the top (the strip on the left is just to help you count your rows). Then you can follow the steps for multiplication and division, as you are reading.*

How do you multiply and divide, using Napier's Bones?

### Multiplying by a single digit number:

To multiply 47,526 by 7, first find the bones labeled 4, 7, 5, 2, and 6, and lay them side by side to make the number 47526. Then count down to row 7:

By adding the numbers in the parallelograms (the first and last numbers are in triangles), you can “read off” the answer.



The ones-digit is (in the triangle to the right) 2.

The tens-digit is (in the first parallelogram) is  $4 + 4 = 8$ .

The one hundreds-digit (in the second parallelogram) is  $5 + 1 = 6$ .

The one thousands-digit (in the third parallelogram) is  $9 + 3 = 12$ , so write down the 2 and carry the 1.

The ten-thousand digit (in the fourth parallelogram) is  $8 + 4 +$  the 1 that was carried = 13, so write down the 3 and carry the 1.

The last digit (in the triangle on the left) is 2, add the 1 that is carried and you have 3.

Your number is: 332,682.

**Multiplying by a number with more than one digit:**

To multiply 615 by 365 you will need some paper. First set up 615 on your bones. Then on you paper write 365 with a line under it. Then multiply 615 by 5, then by 6, and finally by 3, writing your results as follows:

			3	0	7	5
		3	6	9	0	
	1	8	4	5		
-	-	-	-	-	-	-
Adding	2	2	4	4	7	5

And your answer is 224,475.

**Division:**

To divide 589,475 by 365 complete the following steps:

Step A) Write 589,475 on you paper and set up 365 on your bones. Among all the multiples of 365 that are less than, but closest to 589 is 1 (1 x 365 = 365, 2 x 365 = 730 which is too big). So 365 should be written under the 589 and subtracted from 589. The difference, 224, is to be written above the 589. And finally the number 1 is written as part of the quotient.

Step 2	2	2	4						
	5	8	9	4	7	5	(	1	Step 3
Step 1	3	6	5						

Step B) On the  
sixth row of your bones you will find 2190, which is 6 times 365, and is closest but less than 2244

(the last 4 in 2244 was taken from 589475, as we do in normal long division - and I have italicized it in the diagram below). So write 2190 at the bottom, and the difference between 2244 and 2190 at the top --as indicated in the diagram.

Step 5			5	4						
	2	2	4	4						
	5	8	9	4	7	5	(	1	6	Step 6
	3	6	5							
Step 4	2	1	9	0						

Step C) Repeat step B, this time looking for the largest multiple of 365 that is less than 547. See diagram.

Step			1	8	2						
			5	4	7						
	2	2	4								
	5	8	9	4	7	5	(	1	6	1	Step
	3	6	5								
	2	1	9	0							
Step			3	6	5						

Step D) Repeat step B again, this time looking for the largest multiple of 365 that is less than (or equal to) 1825. See diagram.

Step 11						0								
			1	8	2	5								
			5	4										
	2	2	4											
	5	8	9	4	7	5	(	1	6	1	5	Step 12		
	3	6	5											
	2	1	9	0										
			3	6	5									
Step 10			1	8	2	5								

Your quotient is 1615.

After some practice, division becomes quite easy as long as you keep your columns nice and straight. Also, your subtraction skills will improve.

*References:*

Ifrah, Georges, *The Universal History of Numbers*, Published by John Wiley and Sons, Inc. 2000

Napier, John, *Rabdology*, translated by William Frank Richardson. Volume 15 in the Charles Babbage Institute Reprint Series for the **History of Computing**. Published by the Massachusetts Institute of Technology and Tomash Publishers, 1990.

Below is a template for your Napier's Bones. Copy the template below and cut into vertical strips. There is one "bone" for each digit. If you want to multiply numbers with repeated digits, just make several copies of this tem-

**NAPIER'S BONES**

X	0	1	2	3	4	5	6	7	8	9
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	1	1	1	1	1
3	0	0	0	0	1	1	1	2	2	2
4	0	0	0	1	1	2	2	2	3	3
5	0	0	1	1	2	2	3	3	4	4
6	0	0	1	1	2	3	3	4	4	5
7	0	0	1	2	2	3	4	4	5	6
8	0	0	1	2	3	4	4	5	6	7
9	0	0	1	2	3	4	5	6	7	8



New Mexico  
Mathematical Association  
Of  
Two-Year Colleges



**\$1200.00 Award for the 2006-2007 Academic Year**

**Student must have:**

- Completed a Minimum of 12 Credit Hours  
(6 hours must be from a New Mexico or El Paso 2-year college)
- Maintained an Overall GPA of 3.2
- Completed at Least Two of the Following Courses:  
Trigonometry/ Pre-calculus  
Statistics  
Calculus/Business Calculus
- Maintained a 3.5 Cumulative GPA in All Math Courses

**Requirements:**

- Completed Application
- Personal Statement  
(Describe why you feel you should receive a scholarship from a math organization and how receiving it will help you to achieve your goals. This statement must be typed.)
- Two (2) Letters of Recommendation  
(at least one from a math instructor)
- Official Academic Transcript
- The scholarship recipient is required to write a short article explaining how the award was used. The article will be published in the NMMATYC newsletter.

Required Materials Must Be Received by **April 7, 2006**

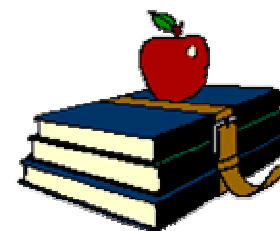
Download the application form at <http://nm.matyc.org>

**ROBERTA L. H. HIMEBROOK**

NMMATYC Mathematics Hall of Fame for Teaching Excellence

I wish to express my gratitude for being inducted into the NMMATYC Mathematics Hall of Fame for Teaching Excellence. I consider it a great honor and appreciate the fact that other math instructor's can further their education with the scholarship that has been set up in honor of the Halls inductees. NMMATYC and the fellowship with other teachers in the state have assisted me in my teaching. Through my association here and in AMATYC I have found new ways to expand my teaching over the years. In looking back, it has been serving the students, finding ways to lead them to learning the things they need to know through my professional membership and my own personal faith in the Lord, that have made me able to do what I have in the classroom since 1967. It has been a joy and privilege, and again thank you for the honor. Keep learning from each other, enjoy each other and serve our students.

ROBERTA L. H. HIMEBROOK, 25 May 20





# NMMATYC ANNUAL CONFERENCE PHOTOS

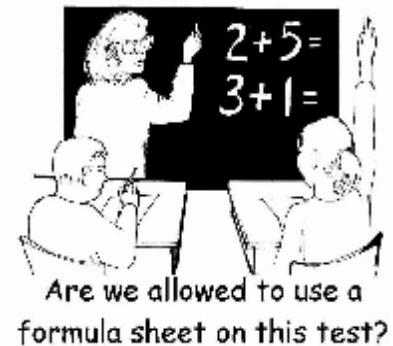
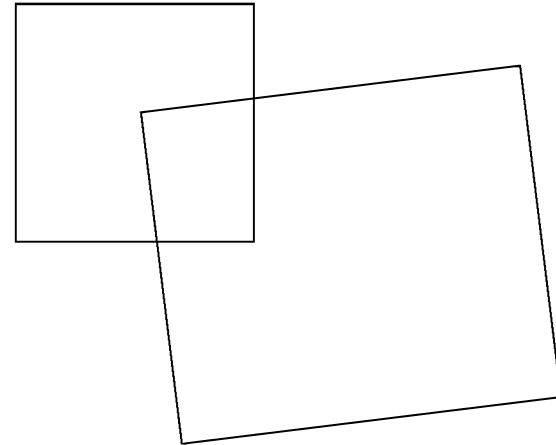


## Fun Page

### PROBLEM

The side of the small square is one meter and the side of the large square one and a half meters.

One vertex of the large square is at the center of the small square. The side of the large square cuts two sides of the small square into one-third parts and two-thirds parts. What is the area where the squares overlap





# Math Humor

Q: What do you get if you divide the circumference of a jack-o-lantern by its diameter?

A: **A Pumpkin-Pi!**

Q: Why do you rarely find mathematicians spending time at the beach?

A: **They have sine and cos to get a tan and don't need the sun!**

Q: Do you already know the latest stats joke?

A: **Probably ...**



<http://www.pims.math.ca/pi/cartoons.html>

## Help Get the Word Out!

**We need students to apply for the \$600  
Michelle Jimenez Memorial Scholarship**

*The announcement for the 2006-2007 Michelle Jimenez Memorial Scholarship is attached to this newsletter. Please help get the word out to your students about this scholarship!! Please post this announcement in your office, on your door, in classrooms, etc.*

### Upcoming Conferences

AMATYC Conference	November 10-13	San Diego
NMMATYC Conference	May 19-20	Las Cruces