### **Questions?**

Check out our website, <u>http://www.mathteacherscircle.org</u>, or contact us at <u>circles@aimath.org</u>.

### **Quotes from past participants:**

"When I was taught basic arithmetic, geometry, and algebra, I was never taught the underlying math inherent to these ideas. My understanding has been enhanced, and therefore my teaching has improved."

"The collaborative effort of solving a complex problem has been a new experience for me. In the past, I saw math as a skill to be mastered individually, and that still does dominate my teaching. However, I have found that math 'comes alive' when it is shared and used to reach a common goal."

"I have made new friends and stretched my brain. I have explored in depth some of the concepts that I teach. The networking with other professionals in the field of math is something that I value that would not have happened in any other venue."

"The problem-solving approach is beneficial for everyone in my classroom. It makes us all think of methods and run ideas past each other, and it encourages even the timid students to venture out with a possible suggestion for a solution."

"I try to introduce topics with Math Teachers' Circle style problems whenever I can. It's the best way of achieving my goal of getting the kids to think logically."

"I truly believe in the joy of math, of problem solving, and comfort in risk-taking. The Math Teachers' Circle provided me with content and professional and peer support to further promote this teaching philosophy."

"I teach using concepts and connections to prior knowledge more than I did previously. I am asking why, instead of just asking how. The students also have more time to work together. I feel that all my positive changes have evolved from becoming a Math Teachers' Circle's participant."

# **INSIDE:** How to make a positive change in math education.



IM Math Teachers' Circle merican Institute of Mathematics 0 Portage Ave 10 Alto, CA 94306-2244

# Mathematics Math Teachers' Circle Immersion Workshop

The American Institute of



Providing an inspirational experience and practical resources for middle school mathematics teachers



July 6-10, 2009

Sponsored by the American Institute of Mathematics, the National Science Foundation, and the National Security Administration, in conjunction with San Jose and San Francisco State Universities









## Math Teachers' Circle: Where Mathematics and Teachers Meet

#### Why should I be interested?

Many teachers, like their students, enjoy discovering great mathematics. The goal of the

American Institute of Mathematics (AIM) Math Teachers' Circle Immersion Workshop is to immerse a group of educators in engaging topics and equip them with an effective problem-solving approach to teaching mathematics. Those who take part will receive room and board for the week as well as further support and resources in the form of monthly follow-up sessions spread throughout the school year. Teachers will also be eligible for

continuing education credit, professional development units, or college course credit.

#### More about the AIM MTC

The AIM MTC has been meeting since 2006 and was the circle that launched the national Math Teachers' Circle Network. Like the other Math Teachers' Circles around the country, the primary purpose of the AIM MTC is to engage middle school math teachers in mathematical problemsolving so that they become involved in an ongoing dialogue about math with students, colleagues, and professional mathematicians. The program also provides guidance, materials, and resources to middle school math teachers that enable them to promote open-ended problem-solving as a way of learning, thinking about, and practicing mathematics in their classrooms. To find out more about this growing movement for middle school math teachers around the country, please visit

#### http://www.mathteacherscircle.org.

Teachers who are accepted for the AIM MTC first attend an all-expenses-paid workshop where they get to know middle school math teachers and mathematicians from around the Bay Area and spend a week doing math in a supportive, enjoyable atmosphere. The teachers then become members of the AIM MTC, a group that meets monthly during the

school year to work on problem solving and talk about teaching.

### More about the AIM Math Teachers' Circle Immersion Workshop

The AIM Math Teachers' Circle Immersion Workshop is a five-day residential summer program for middle school math teachers in the Bay Area. During the workshop, teachers are immersed in doing math throughout the morning

and afternoon. Experienced session leaders engage teachers with a problem-solving approach that was originally developed in Eastern European Math Circles for students and has been successful throughout the world. Throughout the week, teachers gain hands-on experience with problem-solving techniques and work on open-ended problems in several content areas. In addition to math sessions, there will also be discussions

of ways to incorporate a problemsolving approach to math education into the middle school classroom.

This workshop will take place at the American Institute of Mathematics in downtown Palo Alto. Participants will be housed in nearby lodging free of charge. We ask that all participants remain on site, even those within commuting distance, since collegial interaction and evening activities form an important part of the workshop.

### More about the monthly meetings

An important component of the Math Teachers' Circle program consists of seven follow-up events that occur once a month throughout the school year. Teachers gather at the American Institute of Mathematics one Thursday evening a month to enjoy dinner, participate in a math session, and discuss experiences in their classes over the previous few weeks. These follow-up sessions provide support for teachers who are working to incorporate a new, interactive, problem-solving style of teaching into their class. The monthly meetings will include the teachers who attend the 2009 Immersion Workshop as well as those who attended earlier workshops.

### How to apply

We strongly encourage all middle school math teachers with a desire to learn more about problem solving and how it can be applied in the classroom to apply for the AIM Math Teachers' Circle Immersion Workshop.

#### In order to apply, go to

http://www.mathteacherscircle.org, click on "Upcoming Workshops" and scroll down to the AIM Math Teachers' Circle Immersion Workshop, then follow the directions.

> Approximately twenty-seven participants will be selected, based as much on their willingness to consider this new style of teaching as on their current implementation of problem solving, so we urge all interested teachers to apply, regardless of mathematical background.

Participants are asked to commit to attending

the monthly Thursday evening follow-up sessions as often as possible. In particular, those teachers receiving professional development units or college course credit must attend.



