East Bay middle-school math teachers prep for class with mathematicians

Teachers + “Immersion” workshop @MSRI = New Oakland/East Bay Math Circle

BERKELEY, CA – A dozen middle-school math teachers from throughout the SF-East Bay region are gathered this week (Aug. 6-10) at the Mathematical Sciences Research Institute (MSRI, www.msri.org) to learn how to apply problem-solving methods that will engage their students. The expertise gained by the participants at “The Teacher’s Circle,” an intensive math workshop (see http://oebtc.mathcircles.org) that runs daily from 8 am to 8 pm, will be enhanced through mentoring sessions for the teachers during the academic year. This immersion-style workshop segues into the newly formed Oakland/East Bay Math Circle, which begins on September 10, 2007, and meets weekly. The new Circle, run by the Berkeley-based MSRI, brings together math-related activities for middle school students simultaneously with classes attended by their teachers for professional development. It is modeled on the highly successful SF Math Circle that was launched in 2005 by MSRI.

The Teacher’s Circle workshop is organized by Professor Tatiana Shubin, from San Jose State University; Joshua Zucker, a Palo Alto teacher at Castilleja School; and Tom Davis, a retired engineer. Participants range from a newly credentialed teacher—about to start teaching in the Oakland school district—to a teacher who works at the Woodside Learning Center, inside San Francisco’s Juvenile Hall. Topics covered in the workshop include: problem-solving strategies, number theory, Pascal’s triangle, combinatorics, geometry, and trigonometry.

Teacher’s circles are motivated by the principle that it is better to lead students to experience mathematical insights through problem solving and critical thinking. The skill set employs patience, an openness to recognize that a problem may take time to understand, and a curiosity to find an approach that ultimately works. Above all, the Teacher’s Circle allows mathematicians to share some of the joy they find in the subject by showing teachers, and through them their students, that problem solving equates with fun.

“Knowing what it is like to struggle with a new concept or problem and to feel the satisfaction that comes from a new understanding or finding a solution also gives a teacher a better perspective on how students experience learning mathematics,” said mathematician Robert L. Bryant, Director of MSRI. “In helping bring teachers and researchers together, MSRI’s goal is to enrich this chain of experience all the way from students to researchers.”

The new Oakland/East Bay Math Circle (http://oebmc.mathcircles.org) is directed by Brandy Wiegers, who is currently a graduate student in mathematics at UC Davis. The OEB Math Circle is co-sponsored by the Stephen D. Bechtel, Jr. Foundation, The Firedoll Foundation, Laney College, Oakland Unified School District and the Mathematical Sciences Research Institute.

PHOTOS – High-resolution photographs of the Teacher’s Circle workshop are available, by request.

The Mathematical Sciences Research Institute (MSRI) is one of the world’s premiere centers for research in the mathematical sciences, and has been advancing mathematical research through workshops and conferences since its founding as an independent institute in 1982. More than 1,700 mathematical scientists visit MSRI each year in Berkeley, CA, many for stays of up to one academic year. The Institute has been funded primarily by the National Science Foundation with additional support from other government agencies, private foundations, academic and corporate sponsors, and individual donors.

-- 3+3^3 --