



Making & Exploring Conjectures
Expanding Teachers' & Students' "Habits of Mind"

A Three Session Workshop
for
Middle and Secondary School Math Teachers

January 7, 9, and 13, 2014
4:00 pm to 8:00 pm at the MIT Media Lab

The workshop, led by Judah L. Schwartz, MIT Professor of Engineering Science and Education (retired) will focus on the use of interactive and exploratory computer environments along with suggested explorations and challenges designed primarily to help teachers of middle and secondary mathematics expand their 'mathematical habits of mind'. The mathematical content of these challenges is drawn entirely from the material these teachers are asked to teach their students. The challenges are designed to present teachers with familiar content in unfamiliar guises. The intent is to help teachers to think more deeply and more flexibly about the mathematics they already know and teach, often too rigidly.

Increasingly, teachers need to think more nimbly and creatively about the subjects they teach in order to respond to the growing diversity of their students and greater accountability demands for conceptual understanding as well as manipulative skill. Using such visual interactive computer environments will challenge teachers to do that by broadening and deepening their understanding of the mathematics curriculum.

While these materials are intended primarily for use by teachers, many of these exploratory environments will also be useful as enrichment materials for teachers to use with their students, particularly those who tend to think visually.

Light suppers will be served • Limited to 12 participants • \$50 registration fee

To apply, email Emily Martin – egmartin@mit.edu - MIT Scheller Teacher Education Program **by Dec 20, 2013** with the following information:

- **Name**
- **School and subjects you teach**
- **Available to attend all 3 sessions?**
- **Short description of your math background, number of years you've been teaching & what, if any, mentoring responsibilities you have in your school or district**

You will be notified by email by December 23 if you have been accepted to participate in the workshop. Participants will be asked to submit a registration fee of \$50 before the first session to cover the cost of meals and materials.