



The Math Colloquium
Department of Mathematics
San José State University



Joanne Rossi Becker
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*Middle School Students' Strategies for
Generalizing Patterns in Algebra*

DECEMBER 2, 2009, MH320

Abstract: We will discuss a study by Dr. Ferdie Rivera and the speaker that followed students in grades 6–8. Students participated in a teaching experiment about generalizing patterns in algebra that were presented numerically and visually. Questions considered include: What abilities do students have that influence the way in which they express and justify generalizations in algebra? How, and to what extent, are they capable of extending finite samples to a larger context? How do they justify their generalizations? How capable are they in developing multiple representations of the same pattern and ways to assess them for equivalence? Video clips of student interviews will be shared.

Background: No knowledge is needed beyond calculus.

About the speaker: Joanne Rossi Becker received her Ph.D. in mathematics education from the University of Maryland. She is a professor of mathematics at SJSU with a specialty in mathematics education. Her research interests include gender and mathematics, teacher development, and generalization in beginning algebra.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>