962-97-1205 Glenn H. Stevens* (ghs@math.bu.edu), PROMYS, Department of Mathematics, Boston University, Boston, MA 02215. PROMYS for TEACHERS: Learning in the Spirit of Exploration.

PROMYS for TEACHERS offers high school mathematics teachers an intense experience of learning mathematics in the spirit of exploration, followed by a more leisurely discussion of the many methods teachers might use to bring this spirit to their own classrooms. For six weeks each summer since 1989, PROMYS has invited sixty highly talented high school mathematics students to Boston University to engage in intensive mathematical investigations within the field of Number Theory. In 1999, with funding from the National Science Foundation, PROMYS expanded these activities by inviting ten local high school teachers to experience the PROMYS program along with the students and in particular to work together with them on a selection of open-ended mathematical investigations. During the following academic year 1999-2000, the teachers attended five full-day workshops at the Education Development Center (EDC) in Newton to discuss and support exploration-based activities they may be using in their high school classrooms. The second cycle of PROMYS for TEACHERS began in the summer of 2000, when a total of 19 teachers came to the program. This report will describe some of the adventures—both the challenges and the successes—that we have experienced together with the teachers. (Received October 02, 2000)