Philip B. Yasskin* (yasskin@math.tamu.edu), Department of Mathematics, Texas A&M University, 3368 TAMU, College Station, TX 77843-3368. Texas A&M’s Summer Educational Enrichment Program for Middle School Students.

For the past 4 years, the Texas A&M Math Department has sponsored a Summer Educational Enrichment Program (SEE-Math) for middle school students entering the 6th, 7th or 8th grade under the direction of Dr. Yasskin. This year, the instruction was provided by 11 faculty with the help of 7 grad students, 9 undergrad students and 7 high school students. Averaging about 200 applicants each year, we have accepted 50-60 students based on their ability and interest in math and science as reported by their teachers. Each year, we have had about 50% females and about 30% minorities. An effort is made to accept a few students from each of the Brazos Valley schools.

The focus of this talk will be on the activities covered. Many of the activities are organized so that the students recognize patterns, make conjectures and either prove or disprove them. These include Platonic solids, Euler numbers, mirrors and symmetries, straw puzzles, Pythagorean theorem, map coloring, logic puzzles and state space. Other activities teach applicable computation, such as computer animations, geometric constructions, pigeon hole principle, Venn diagrams, cryptography, probability, and state space.

More information is available at http://www.math.tamu.edu/outreach/SEE-Math/ (Received September 27, 2005)