Eight BC students attended and two of these students presented posters at this meeting of the Mathematical Association of America. The meeting of the Southern California/Nevada Section was held on Pi day, March 14, at California Lutheran University. The student poster session consisted of thirty-five projects presented by students from California State Universities, Two-year colleges, private schools and high schools.

The Mayan Number System

Have you ever wondered why or how the Mayans could have predicted the end of the world to be December 21, 2012? The Mayan civilization had a detailed numerical system for their time, and is credited as one of the first ancient civilizations to use the number zero. Their understanding of numbers was integrated into many aspects of their society. This project investigates both the Mayan calendar and their system for computations.

Faculty Advisor: Rebecca Head
Can We 3D Print Anything?

Can any three dimensional shape be constructed using additive manufacturing processes? Modern 3D printers use ‘slicers’ in order to convert 3-dimensional shapes into 2-dimensional slices that can be printed one on top of another. An important question can be gleaned from this understanding of converting 3-dimensional objects into the tool paths necessary for 3D printing. We explore this question using Fubini’s Theorem, which states that any n-dimensional object can be converted into n 1-dimensional slices. This means any real world object can be 3D printed; however, material constraints and the balance of objects will still provide challenges for students of additive manufacturing processes for years to come.

Faculty Advisor: Arnie Andrasian
Noah Kearns and David May constructed an icosahedron.

Bakersfield College Mathematics Students and Faculty took part in constructing a super-sized icosahedron.

Additional BC participants who are not pictured: Tom Greenwood, Becky Head, Jordy Dobbs, Katie Haycock, Luis Hernandez, Tamara Kozareva, Matt Thayer