

## Calculicious

Jeff Robin, Art, High Tech High Andrew Gloag, Math, High Tech High

Calculicious was a cross-curricular project between art teacher Jeff Robin and math teacher Andrew Gloag. The students designed art pieces that reflected various calculus concepts that they learned in class. Their paintings, along with their critiques of each other's work, were published in a full-color book available at http://www.blurb.com/bookstore/detail/675796.

## Student Reflection

The Marquardt Decagon Mask is a facial map based on the Golden Ratio [1.618 (phi) to 1]. The ratio has been found to determine human attractiveness based on the placement and proportion of facial characteristics. Initially, the mask alone was the sole element of my acrylic painting design. However, after a meeting with Jeff and some edits, the direct application of the mask to a human face seemed to be a better exercise of the mathematical concept itself. After finding a nice portrait of a profoundly handsome actor named Marty Feldman, I decided to apply the mask to his face in my painting.

Outlining and painting small spaces carefully proved to be difficult but important because those fine details composed parts of Marty's face as a whole. I had to remain very aware of lines and borders to keep the face legible. Next, I created the actual Decagon Mask with red yarn to show both consistencies and inconsistencies.

—Ana Vargas, 12th grade

## **Student Critiques**

Your painting was really different from the majority of peoples' in that you drew a distinct person as opposed to shapes, and you used string to display your math as opposed to painting it on. You might want to explain how you made these decisions. Just out of my own curiosity and to show contrast, you could mention someone whose face does fit the decagon mask.

—Emily Burns, 12th grade

I agree that Marty Feldman is profoundly attractive. I don't think you do him justice...I offer the same advice that you offered me: What did you struggle with? I know the math gave you a hard time, and I think you should explain that in your text. Everything seems effortless, and I think people might like it more if they heard about your struggles.

-Kristen Colley, 12th grade

To learn more about this project and others visit the HTH Digital Commons and Jeff Robin's digital portfolio at

http://www.hightechhigh.org/dc/ and http://staff.hightechhigh.org/~jrobin/

