During the month of July, I was in Sewanee and assisting two Professors. I am a math major and last year graded papers for both Professor Drinen and Professor Rudd. They are both wonderful professors and I was so excited about an internship with them. Their goal was to create a new Math 100 level class that brought a different aspect of math to the table for students who were not considering math as a major. Math is historically thought of as boring and often uninteresting and we were exploring avenues to make it fun and intriguing - but still a learning experience. Unlike most professors, they approached the class with the idea that this would be a fun semester for the students to work on problem solving and how to approach a variety of mathematical issues. This would not be math that they would use in the future but instead the thought process that they will develop would be applicable in any major and field that they might pursue. This class will debut in the Spring of 2011.

My days were filled with doing math problems that came from many different sources. We began with my professors giving me multiple problems in the morning to solve. As time went by, they ran out of problems so I turned to a math book that the head of the department Professor Puckette recommended and to the internet for other similar ideas. The original problems that I was working with were Putnam Math problems, either from previous tests or practice tests. Some of these were even too difficult and complex for me to solve; those problems were eliminated. When we found a problem that interested both me and the professors, we would look for similar problems that would flow nicely into the curriculum. In this manner we created concepts to explore. We also looked into problems that addressed infinity, as these can span all different levels of math yet also require abstract thought. The idea of math in nature came to me from the textbook I was using as a resource. From there we included the Fibonacci sequence, the golden ratio, some history of math, and shapes which include the five perfect solids. The curriculum for the class developed in this manner.
It was important for the math department to have a student who could put into perspective concepts that were too difficult for "beginning" math students. Our objective was to spur an interest in math yet at the same time not be overwhelming. We also needed to be sure that the problems were challenging enough for the Sewanee curriculum. It was interesting looking at math again from a variety of learning levels.

I developed even more respect for my teachers after seeing how much time and effort goes into a class even before the class begins. Many people don't think of teachers as working during their summers, but I believe that one of the hardest aspects is that they use the summers to create, perfect, and prep for the multiple classes that they teach. The fun comes when they get to teach the students and interact while testing out the different teaching methods and different subjects that they have developed.

Although I do not plan to pursue a goal in teaching, it was wonderful to spend part of a summer creating a math course with amazing professors. With a math major, I have obviously taken math classes and have participated in the grading of math papers, so it was particularly interesting to complete the circle and contribute to creating a 100 Level math course. This was an opportunity that I would not have had without the financial support of Sewanee and personal support from Professor Drinen and Professor Rudd. I am eager to see how the class develops in the Spring and will remain in contact with the professors and lend any additional help that they might need in order to make the class a success!