February 4, 2015

Math 34001

Essay 3

Mathematics is a logical and defined process that searches for underlying patterns in everyday life. This everyday life is a multifaceted 'thing' that is not easily defined, much like the term mathematics. Math is everything from children learning to count, balancing budgets, to determining the formulas to space travel to meet other aliens such as you. Humans do math with and without realizing it. Our musculoskeletal systems does math that keeps us upright and able to play games. We consciously study mathematics using vast libraries of prior knowledge to develop a deeper understanding of what we see. So as you can see my newfound friend math is both tangible and intangible at the same time.

As such an intelligent being to have landed here you can surmise that mathematicians are as varied as the definition. The professional mathematician performs a lot of research to develop theorems and their proofs. Then there are those professionals who apply the theorems to the patterns in life to predict what will happen next. We have people who analyze these patterns to determine everything from how a baseball player will perform to which stocks to buy. But everyone is a mathematician to a certain extent just by definition. People constantly make mental calculations, and that qualifies them to belong to the realm of the mathematician.

Mathematics is a constantly growing subject and hence ever changing. Now more than ever in our human history we have the ability to connect to others across the world in minutes. This allows us to find many more and perhaps better solutions to current and past problems. Although some approaches may fall to the wayside they are still there. We change how we do mathematics while we learn new ways. As long as the human species is around math will continue to grow and change.

This constant evolution leads us to Ulam's dilemma. We have so many new ideas that there is no way to evaluate them as they come to light. Some of these ideas link theories in different branches of mathematics. No human has the capability to follow all of this at once and

deem ideas credible. There are just too many branches of math to be proficient in all of them. But because we can reach the rest of the world in minutes we don't have to be. Of course, everyone will continue to have their areas that they specialize in. However, we can get pertinent information about all other areas from the internet. We can find specialists at other universities and look into their work and ideas. And every approach no matter how varied is valuable to mathematics as a whole.