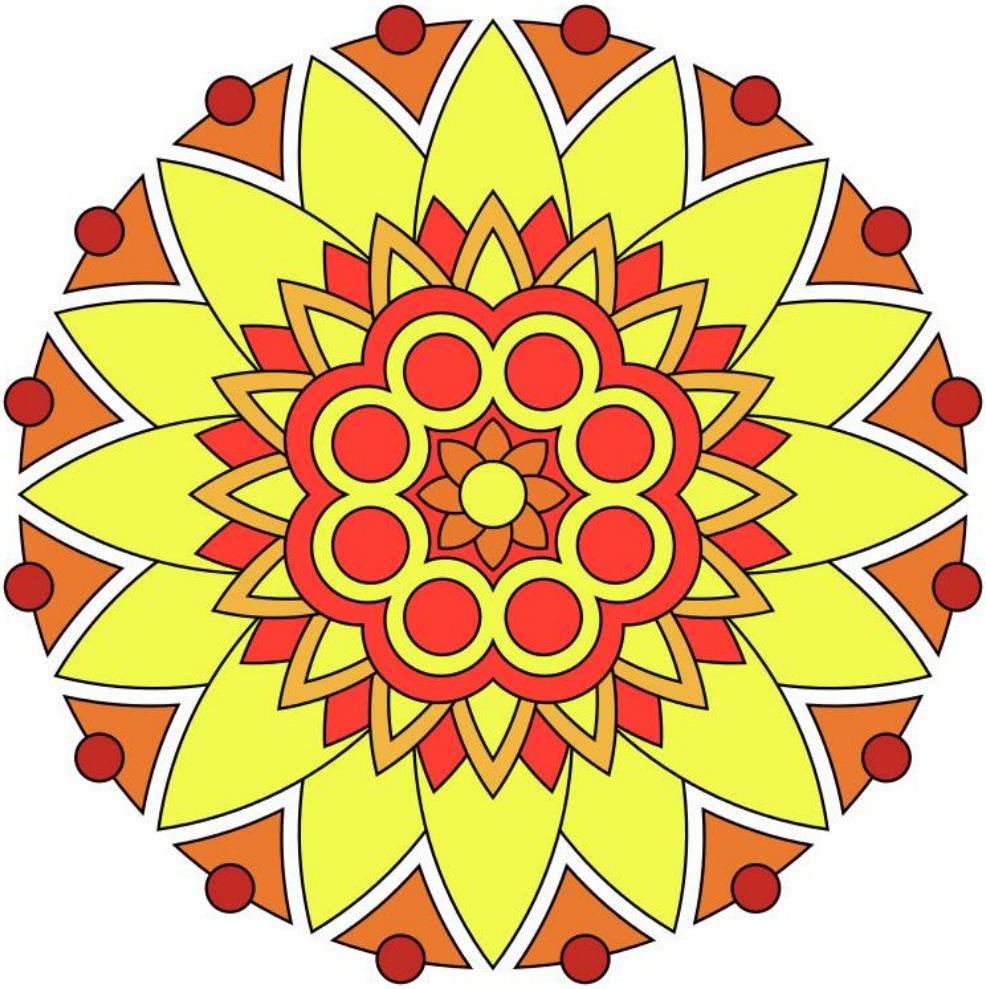
Sanchez, Don Lean B. **May 13, 2021**
BSIT - 1

Output #1

1. "My Mandala"



Reflection:

When I work on my Output 1, I was amazed at what powerful and centering experience creating a mandala was for me although I'm not good with art. In the creation process of the mandala the materials and environment are extremely

important pieces to the process. In the creation of my own mandala, at first, I found it very difficult to clear my mind and relax in my room but after that I got used to it, I found my relaxation and clear my mind while doing my digital mandala and it was fun. Color is an integral part of the mandala because it expresses my innermost thought, feelings, intuition and physical sensations.

Art is the form of life, Particularly, while doing my Mandala I have experienced and learned few important lessons, Mandala is for everyone, Meditation, Mandala helps to overcome stress and anxiety. They may be simple but getting engage in drawing in the paper or in digital drawing mandala is like meditating and finding internal peace, Creating Mandalas are super fun, and Mandala requires patience. Mandala is not only about solving numerical and other problems, but also about demonstrating the ability to be imaginative in the development of shapes and patterns.

2. A Reflection on
Documentary on Decoding the Secret Patterns of Nature – Fibonacci Sequence and the Golden Ratio & Pi.
Link : https://www.youtube.com/watch?v=lXyCRP871VI
Places You Won't Believe The Golden Ratio & Fibonacci Sequence Appears
Link : https://www.youtube.com/watch?v=RqqErDSLtwE

1. **What new ideas about mathematics did you learn?**

- We discovered and understood the different patterns that are present in our world and its connectivity on what we call, mathematics. According to the two videos I've watched, mathematical is all around us, including in the most unlikely locations, because of the forms, designs, structural elements, graphs, and so forth. Any ideas from Mathematicians may not be valid or appropriate

because Math is full of Guesswork. Mathematics allows people to grow more easily and discover interesting things we did not realize existed. By studying, humans can do whatever they want and find new things that will change our world. Our world is full of mystery at times, you will be fascinated by the wonders that nature provides; even objects that cannot be seen by the naked eye have their own significance. The video basically tells the story of life through numbers. Patterns are everywhere around us. That can be seen in the patterns of a tiger or a zebra, sunflower seeds, seashells, the direction of the sun, and even in our own bodies. Patterns are also used by me as an architecture student to generate new construction ideas. This only demonstrates how our universe is linked and based on mathematics.

2. **What is it about mathematics that might have changed your thoughts about it?**

- Mathematics is the science that studies the logic of form, number, and structure. Mathematics is present in everything that we do. It is the foundation for everything in our everyday lives, including portable devices, past and present architecture, art, money, technology, and even sports. accordingly, every thinking of ours has always changed in reality. While watching the video clips that I just watched, I realized that we have been born with mathematics and it is always implemented in our universe because we live in the world full of technology, which is Mathematics. First, I didn't even realize that Math is all around us, I assumed that we learn Mathematics so which we can be smart and avoid being deceived on the use of income, markets, and everything, but it could also apply to our life, technologies and all.

3. What is most useful about mathematics for humankind?

- Math enables us to improve our problem-solving abilities. Analytical reasoning is the capacity to think objectively about our surroundings. Our capacity to think objectively about a situation is referred to as reasoning. Analytical and reasoning abilities are essential because they enable us to solve problems and seek solutions. Math helped us in counting numbers from one to infinity and far beyond. It supported us in learning how to add, subtract, multiply, and divide. Knowing all of those mathematical processes allowed us to solve a wide range of numerical problems. Engineers were able to create, Architects were able to construct, Scientists were able to experiment, Doctors were able to conduct operations, Chemists were able to formulate chemicals, Chefs were able to prepare, and Carpenters were able to calculate because they understood all of those mathematical processes. There is no ranking as to what is most useful because without one of those benefits from knowing Math, the word we live in today would be different, everywhere there is Mathematics.

A Reflection on Fractals

Link: https://www.youtube.com/watch?v=56gzV0od6DU

Mandelbrot Fractal Zoom

https://www.youtube.com/watch?v=Ujvy-DEA-UM

1. What new ideas about mathematics did you learn?

- A Fractal is a pattern that never ends. Fractals are infinitely complex patterns that are self-similar at various scales. They are generated by repeatedly repeating a basic process in an ongoing feedback loop. Fractals help us study and understand important scientific concepts, such as the way bacteria grow, patterns in freezing water (snowflakes) and brain waves. The Mandelbrot set is generated by iteration, which means to repeat a process over and over again. In mathematics this process is most often the application of a mathematical function. Fractals are common in nature and are found nearly everywhere, Branches of trees, animal circulatory systems, snowflakes, lightning and electricity, plants and leaves, geographic landscape and river systems, clouds, and crystals are some of the most common examples of Fractals in nature.