

Honors Geometry POW #3: Golden Spiral - PHI Doodles

DUE Monday February 3rd, 2020 at the start of class.

We just finished investigating the Golden Rectangle and its connection to the irrational number Phi and the Fibonacci Sequence. This POW asks you to apply this knowledge in an artistic and creative way. It is your turn to submit something "divine." Whatever you choose, you will be graded on creativity and the ability to detect the golden rectangle/spiral in your piece. **You must accurately construct a golden rectangle/spiral to use in your art work. I recommend tracing the spiral through to the other side of the paper then making your art on the clean side and keeping all the constructions for your spiral on the back.**

Some Options (not limited to the following):

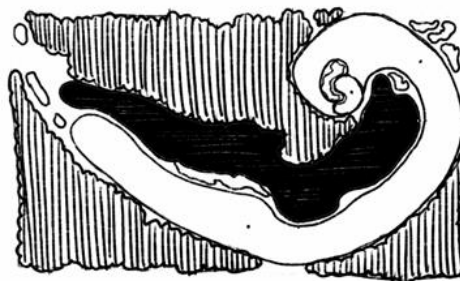
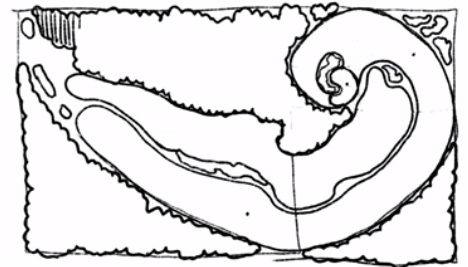
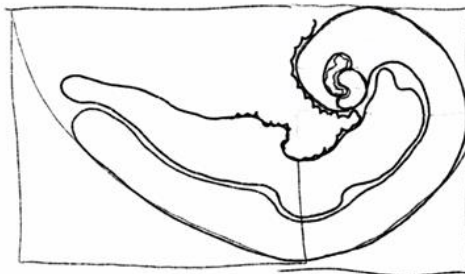
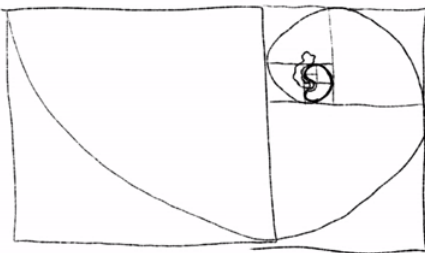
- Phi Doodles (example below)
- An original work of art
- My Personal Flag in the Golden Rectangle
- My "Bucket List" in the Golden Rectangle.
- A piece that is welded or woodworked
- A design created in ceramics.
- Get creative! This is open to a lot of different ideas.

Your write-up is to answer the following questions. Please do not explain your constructions

- 1. Explain your "divine creation" and how it was inspired by the golden rectangle/spiral**
- 2. Measure the length and width of your rectangle. Divide the length by the width. Explain what this number means and how you can use it to explain the accuracy of your golden spiral.**

Your Artwork should take up approximately a 8.5 x 11 inch paper. It will be presented in the classroom.

This POW is worth 15 points.



"GOLDEN" Doodle
D
MMXII

Grading Rubric

LATE = NO CREDIT

Artwork: 11 points

	0 - 1	2	3
Includes the construction of a spiral (it can be on the back with the spiral traced to the front of the paper)	The spiral was not constructed (0 points)	The spiral is accurately constructed from an accurate rectangle	
Design fills an 8.5" x 11" paper	Design is much smaller than an 8.5" x 11" paper or is incomplete	Design partially fills an 8.5" x 11" paper	Design fills an 8.5" x 11" paper
Artwork is neat, colored (black/white theme is ok)	Artwork is sloppy, and shows minimal effort	Artwork is adequate	Artwork is detailed, neat, and colored appropriately
Design complexity	Design is basic	Design is neat and nice to look at but does not have a lot of complexity	Design is complex, interesting, and pleasing to look at

Write up: 4 points

	0	1	2
Explanation of divine creation	Does not the relationship between the art and the spiral or rectangle	Partially explains how the golden rectangle/spiral inspired this artwork	Fully explains how the golden rectangle/spiral inspired this artwork
Explanation of the length and width of your rectangle	Does not explain the relationship between the length and width of the rectangle.	Partially explains the relationship between the length and width of the rectangle.	Fully explains the relationship between the length and width of the rectangle and how it can be used to comment on the accuracy of your construction.