Criterion E: Evaluation

Meeting the Criteria for Success:

1. Application readily provides all four images drawn using a Fourier transform method as well as showing the corresponding Fourier series epicycles and vectors that create the image.
2. Application contains a brief description of how Fourier series uses a Fourier transform method to create the images. The description could've been more well thought out and demonstrative.

Improvements in Future:

I found more trouble than I was expecting with transferring the methods from Processing to Javax Swing cleanly to match the theme of the other GUIs so it ended up being one of the applications I described that lacks a user-friendly interface. I want to also include different demonstrations of the basic Fourier series to create a better understanding for the user on how the Fourier transform method works to create the image, rather than just seeing Fourier series epicycles that move around a ton without completely understanding why.

This application was very useful for developing my skills in Javax Swing but I also learned so much information about Fourier series and Fourier transforms and enjoyed the spectacle of how math can be used to draw images. It's mesmerizing to just watch the epicycles move around to draw complex images based only on x and y coordinates. If I were to simplify my demonstration of Fourier series and have a more user-interactive experience that allows them to see the magic behind the math, this would be something I, and students, would want to use in the classroom.