## GRAPHING ART PROJECT - Precalculus Final Project

For this project, you are to create a picture using the functions and relations that we studied this year. You can create an original picture, or copy a picture. See back for some example projects.

Use Desmos for this project (make sure you create an account w/your Google account and save your work!). See below for all the equations that must be included in your picture. Each equation will have a domain and/or range restriction as well.

You will be graded on using all the required equations, complexity and accuracy of image, and creativity.

Types of Equations that must be included:

1. Horizontal and Vertical Lines
2. Other lines
3. Parabolas
4. Circles
5. Ellipses or Hyperbolas
6. Sinusoidal Functions
7. Polar Equations

If you choose to work with a partner, divide your image in half and each will complete half of the graphing in Desmos. (You can choose a logical divide point for your image, just make sure each person is doing approximately the same amount of work.)

Grading Rubric: 30 points possible

| Category | Points |
| :--- | :--- |
| Graph and equations shared with teacher in Desmos | 5 points |
| All equations are provided and are mathematically correct | 5 points |
| Domain/Range Restrictions proved and mathematically correct | 5 points |
| Well-designed image - Does it look correct? | 5 points |
| Creativity/Uniqueness | 5 points |
| Complexity of Logo | 5 points |




