Math Art Project ©2019 MATHguide Name: Period:

Introduction:

Go to <u>https://www.youtube.com/watch?v=GwTVV4crgeY</u> to receive an overview of this project, compliments of **MATHguide**.

Objective:

You are to create an original work of art.

Requirements:

Your drawing must include equations and inequalities. Some equations and inequalities must have restricted domains and ranges. These relations must be used.

- 1. Conic Sections: Ellipses, Circles, Hyperbolas, and Parabola
- 2. Linear, Quadratic, and/or Cubic Relations
- 3. Trigonometric, Logarithmic, and/or Exponential Functions
- 4. Absolute Value and/or Piecewise Functions

Your art must be animated using sliders. A minimum of two portions of your artwork must move.

Samples:

Go to https://www.desmos.com/art to find several static drawings.

Tips:

This is an ellipse that is filled in.

$$\frac{(x+1)^2}{0.05} + \frac{(y-6)^2}{2} \le 1$$

Use $\{-1 < x \le 4\}$ after a relation to limit its domain on the interval (-1,4].

Value:



