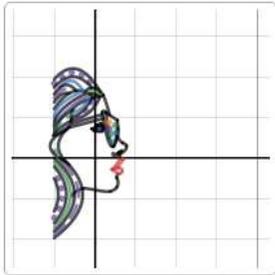# Conic Sections and Other Awesome Functions and Art
Alg II (3) - Mr. Dull

Ever since the Desmos graphing calculator hit the scene, people have been using it for more than crunching numbers and graphing parabolas. From doodles to intricate portraits, it's also become an artist's sketchpad.
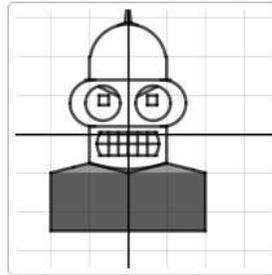
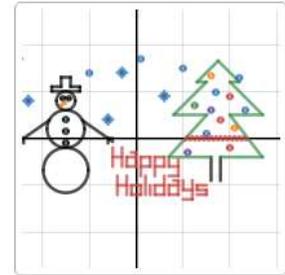Like such:

Staff Picks: Creative Art >
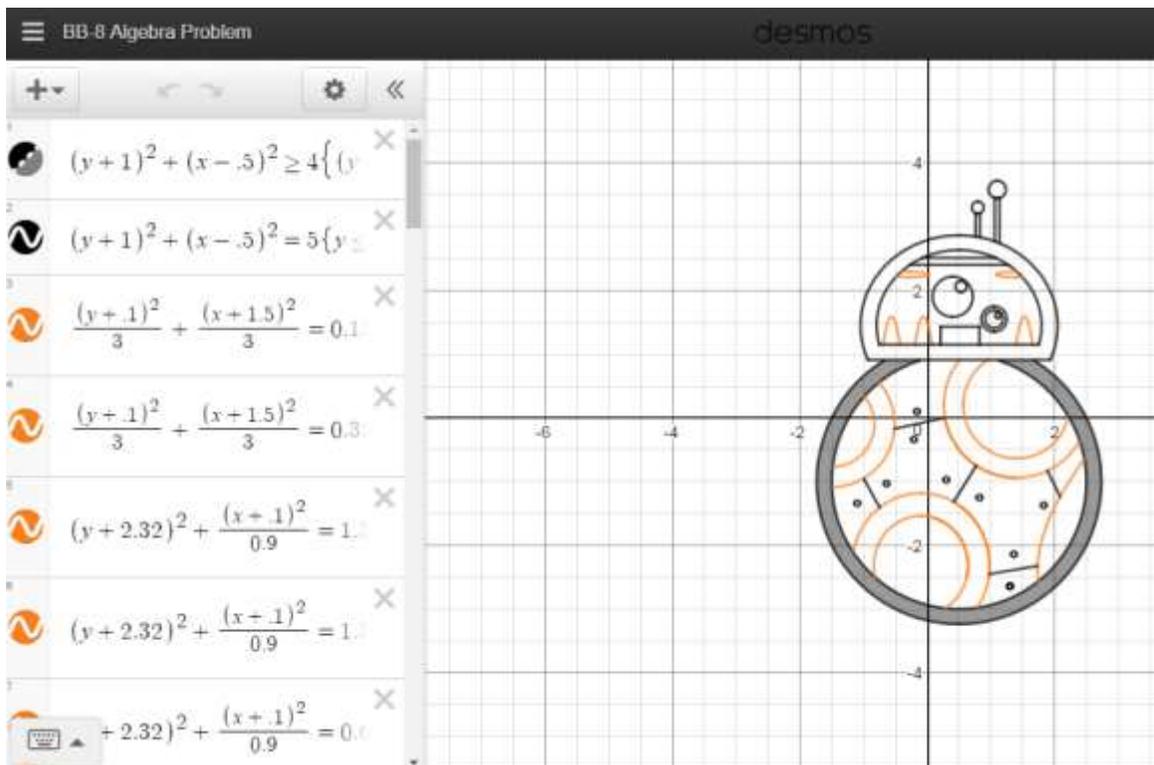

Project
by Anh Hoang

The Office
by Austin Crabtree

Benderama
by Liam Corbin

P2 anissa tinjaca holidays
by Anissa Tinjaca

Each of these works is a "piecewise function", which is made up of several function equations with the domain restricted. You can see some of the equations down the left-hand sidebar of the BB-8 sketch below:

Your assignment is to create a picture using piecewise functions. You will plan it out first on graph paper, figure the functions and domains needed to create the image, show me your planning work, then (and only then) take to Desmos to create your work of art.

What can I draw, you ask? Be as creative as you want. Draw what you would draw by hand on a piece of paper. Think of what objects you can create that have parts that look like parabolas, or circles, or straight lines. Try to duplicate a cartoon character or company logo. Your option.

The planning work will be done partly in class and partly on your own. I must sign off on your design before you begin to work in Desmos, however. We will have a work day in class on Thursday May 4, and we'll have a computer cart in class on Friday, May 5 so that you may input your design. Then you will export it, save it as a PDF and upload the image in Canvas.

You may use as many functions as you need to complete your drawing, but you must use a minimum of 4 linear functions, 4 quadratic functions, 2 circles, 2 ellipses, 1 absolute value function and 1 hyperbola.

This assignment will stand as your quiz grade for Unit 16. It will be scored as follows:

Paper sketch of planned drawing	10 pts
Includes all 14 required functions	5 pts
Math to determine function rule and domain	10 pts
Consistent effort during in-class work time	10 pts
Final Desmos product	10 pts
Total Points	45 pts

The project is due at the end of class on Friday May 5.