## **Puzzle 1: The Traces**



Here are some mysterious equations.

**A:** 
$$2(z^2 - y)(x + 1) = 1$$

**B:** 
$$y(y+2x^2-1) = z(y+1)$$

C: 
$$(2y-1)^2(2y+1)^2 + z = x$$

**D:** 
$$(y - 2x + z^3 - 7)(y - x^2) = 0$$

E: 
$$yz(2y-1)(2y+1) = x$$

And here are some helpful axes.



Please decode the following message.

Cx1	Bz0	Az1	Bx0	Cz0	Dz2
Dy7	Cx0	By1	Ez2	Ey0	Ax0

The first thing you should know about the Secret Multivariable Puzzle Challenge is that you won't be able to find all of the puzzles just yet. As of Monday, March 28th, **The Traces** is the only available puzzle. More puzzles will be hidden in various places throughout the quarter as we cover more material. If you solve the puzzle, great! You'll find out what to do with the answer later.

Also, just to get this out of the way: you may work as a team with other Math 126 students.