

Space Filling Curves

The goal of the presentation is to discuss Space Filling Curves. Your presentation should include at least

- A discussion of what space filling curves are.
- An example of a space filling curve.
- A discussion of a bijection is and how it relates to sizes of sets.
- A discussion of how space filling curves show that there are the same number of points inside a square as on its side.

In addition you should include at least one thing not on the above list

At the end of your presentation the class will be asked one of the following questions.

- What is a volume filling curve?
- If there is a bijection between two sets A , B does A have more elements than B , does B have more elements than A or do they have the same amount?
- Who discovered the first space filling curve?

A good starting point for your research is

http://en.wikipedia.org/wiki/Space_filling_curves

If you have any questions regarding the presentation feel free to e-mail your TA or Dr. Ackerman