

Re: Peano's space-filling curve

Source: <http://sci.tech-archive.net/Archive/sci.math/2004-06/1258.html>

From: Robin Chapman (*rjc_at_ivorynospatower.freearve.co.uk*)

Date: 06/07/04

Date: Mon, 07 Jun 2004 18:53:04 +0100

John Morgan wrote:

>

> *Here I read that f is continuous and onto. Elsewhere a poster tells me that f cannot be all three of '1 to 1', continuous and onto. So f is not '1 to 1'? Re-arrange the following words to make a well-known phrase, or saying.*

> *"together., Get, act, your,"*

Here are the facts:

- (i) there is a bijection $f : [0,1] \rightarrow [0,1]^2$,
- (ii) there is a continuous surjection $g : [0,1] \rightarrow [0,1]^2$,
- (iii) there is no continuous bijection $h : [0,1] \rightarrow [0,1]^2$.

> *John*

Any relation to Piers?

--

Robin Chapman, www.maths.ex.ac.uk/~rjc/rjc.html

"Lacan, Jacques, 79, 91-92; mistakes his penis for a square root, 88-9"

Francis Wheen, [_How Mumbo-Jumbo Conquered the World_](#)