In geometry, the peano curve is the first example of space-filling curve to be discovered, by Giuseppe Peano in 1890.[1] Peano's curve is a surjective, continuous function from the unit interval onto the unit square, however it is not injective. Peano was motivated by a earlier result of Georg Cantor that these two sets have the same cardinality. Because of this example, some authors use the phrase "Peano curve" to refer more generally to any space-filling curve.

magnification. There are a lot of natural phenomena that can be defined & predicted using fractals. Some these shapes include clouds, vegetables, colour patterns, lightnings and snowflakes.

And speaking of imaging. One of the most important use of fractals is with regards to image compressing. A pretty controversial process, it takes an image & expressed it into a iterated system of function this image is displayed quickly and is expressed in detail in any magnification all in all studying fractals is both a complicated yet interesting branch of mathematic study. And yet despite all its intricacies, it still proves to be a useful tool.