

An Informal Introduction to the

[Course](#) > [Infinite Cardinalities](#) > [The Real Numbers](#) > Theorem

Audit Access Expires Sep 9, 2020

You lose all access to this course, including your progress, on Sep 9, 2020.

Upgrade by Jul 5, 2020 to get unlimited access to the course as long as it exists on the site. [Upgrade now](#)

An Informal Introduction to the Theorem

We have seen that there are just as many natural numbers as rational numbers. Is this because there is a bijection between any two infinite sets? Amazingly, the answer is 'no'. Some infinities are bigger than others! In this section, we will prove that there are more real numbers than there are natural numbers.

If you'd like to start out with an informal introduction to the material, check out the video below. It was produced by Damien Rochford and Gaurav Vazirani as part of [Wi-Phi](#), a project which works with the Khan Academy to make philosophy more accessible to non-philosophers.

Video Introduction: Some Infinities are Bigger than Others

Philosophy: Sizes of Infinity Part 2: Getting Real



Subtitles by the Amara.org community



6:50 / 6:50



2.0x



HD



Transcripts

[Download SubRip \(.srt\) file](#)

[Download Text \(.txt\) file](#)