

# Episode 259 - Nothing Comes From Nothing

Post by “Pacatus” of December 23, 2024 at 4:19 PM

## [Quote from Cassius](#)

At risk of getting drawn in too far when I should be doing other things (which I suspect is the real objection), what are "issues 1 and 2 in Section 2".....?

On a quick look-back, I think it is here:

“For example, when someone proves that the number  $\sqrt{2}$  is irrational, i.e., that it is not a fraction, this particular piece of knowledge, as well as the methods that produced it, lead to two important conclusions, one general and one specific: **(1)** Mathematics does not in principle depend on sensory experience. **(2)** Incommensurability gives support to the idea of infinite divisibility of line segments.”

[My brain is becoming creamed corn at this point. 😬 Never great even at the maths that I had to know and apply in economics. 😭]

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Note: I used the example of  $\pi$  rather than the  $\sqrt{2}$ . Both are irrational numbers (as is  $e$ ). The reason I latched onto  $\pi$  is that I think it is useful to be able to estimate the circumference of a circle, even if there is no "perfect" circle.