

Re: how to list all of the real numbers

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- *From:* Virgil <virgil@xxxxxxxxxxx>
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In article <1186879071.686632.138040@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>, "Ross A. Finlayson" <raf@xxxxxxxxxxxxxxxx> wrote:

There exist counterexamples in standard real analysis showing a least positive real.

Only in the Bourbaki sense of positive. There are no examples in standard analysis showing a least strictly positive real in any sense.

I agree that infinitesimals are possible, but unfortunately most mathematicians will only consider standard theories.

Most mathematicians will consider systems of infinitesimals possible, but unless their own work makes such infinitesimals useful, they are not liable to spend much energy or time on them.

To expect them to do so is like commanding all heart surgeons to become proficient in brain surgery, or civil engineers to become proficient in microprocessor architecture.

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