

# Re: limit of a sequence

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- *From:* A N Niel <[anniel@xxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:anniel@xxxxxxxxxxxxxxxxxxxxxxxxxxxx)>
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In article <468f80a8\$0\$36439\$4fafbaef@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>, Armando C. <[xxxxxxxxxxxx@xxxxxxxxxx](mailto:xxxxxxxxxxxx@xxxxxxxxxx)> wrote:

I've a doubt about the following sequence limit, I tried many times to solve it, but I couldn't work it out.

$$\lim_{n \rightarrow +\infty} \left( \frac{1}{n^2+n+1} + \frac{2}{n^2+n+2} + \dots + \frac{n}{n^2+n+n} \right)$$

My book says result is  $1/2$ , but frankly speaking I don't understand how it comes to it. If each term is infinitesimal how can sum be different from 0?

Thanks in advance.

The terms get small, but the number of terms gets large.

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