

# Re: Infinite series question

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- *From:* Peter Pein <[petsie@xxxxxxxxxxx](mailto:petsie@xxxxxxxxxxx)>
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jane schrieb:

Suppose,  $x_i$  in  $\mathbb{R}$ ,  $0 < x_i < 1$ ,  $\sum_i x_i = \infty$ , and

$A_n = \sum_{\{i \leq i \leq n\}} x_i$ , so that  $A_n \rightarrow \infty$ .

$B_n = \sum_{\{1 \leq i \leq n\}} x_i \exp[-A_n * x_i]$ .

Are there any known results under which conditions on  $(x_i)$ , we have that  $B_n \rightarrow 0$  as  $n \rightarrow \infty$  ?

Thanks.

Hi jane,

maybe I overlooked something, but:

$B_n \geq x_1 \exp[-x_1^2]$  for all  $n$  and therefore no such sequence  $x_i$  exists.

Peter

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