subseries

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- *From*: "MR" <marcinrak@xxxxxxxxx>
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Hey everyone

does a subseries by defintion have to preserve order of the original series.

That is, if my original series sums the sequence {1,2,3,4,5,....} can by definition a sub seires sum over the sequence {3,2,4,....} or must it preserve the order?

The reason I ask, is the following definition of subseries in my calc book:

Let f be a function whose domain is N and whose range is an infinite subset of N, and assume that f is 1−to−1 on N. Let Sigma(a(n)) and Sigma (b(n)) be two series s.t.

b(n)=a(f(n)) if n is in N

Then Sigma(b(n)) is said to be a subseries of Sigma(a(n))

As far as I can tell, this definition doesn't imply anything about the order?

thanks
mr

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