

# A VERY CRUCIAL ASPECT OF Sequences and Series

$$\text{SERIES } \sum_{n=1}^{\infty} a_n$$

Partial Sum  
Sequence  $\{s_n\}$

Original Sequence  
 $\{a_n\}$

ie:  $a_1, a_1+a_2, a_1+a_2+a_3, \dots$

ie:  $a_1, a_2, a_3, \dots$

By definition, the convergence (or dgs) of the partial sum sequence  $\{s_n\}$  is the same as that of the series  $\sum_{n=1}^{\infty} a_n$

But **never** confuse the convergence of the orig. sequence  $\{a_n\}$  with that of the series  $\sum_{n=1}^{\infty} a_n$ .