

## HERRANGSIKKINGS VAN REEKSE

### (AANVULLENDE NOTA TOT STEWART §11.6)

'n *Herrangskikking* van die reeks  $\sum_{n=1}^{\infty} a_n$  is enige reeks wat verkry word deur elke  $a_n$  presies een keer te gebruik en slegs die orde van die terme te verander.

As  $\sum_{n=1}^{\infty} a_n$  absoluut konvergent met som  $s$  is, dan het enige herrangskikking van  $\sum_{n=1}^{\infty} a_n$  dieselfde som  $s$ .

As  $\sum_{n=1}^{\infty} a_n$  voorwaardelik konvergent is en  $r$  is enige reële getal, dan bestaan daar 'n herrangskikking van  $\sum_{n=1}^{\infty} a_n$  wat som  $r$  het!

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## REARRANGEMENTS OF SERIES

### (ADDITIONAL NOTE TO STEWART §11.6)

A *rearrangement* of the series  $\sum_{n=1}^{\infty} a_n$  is any series that is obtained by using each  $a_n$  exactly once and only changing the order of the terms.

If  $\sum_{n=1}^{\infty} a_n$  is absolutely convergent with sum  $s$ , then any rearrangement of  $\sum_{n=1}^{\infty} a_n$  has the same sum  $s$ .

If  $\sum_{n=1}^{\infty} a_n$  is conditionally convergent and  $r$  is any real number, then there exists a rearrangement of  $\sum_{n=1}^{\infty} a_n$  which has  $r$  as its sum!

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