$$n = (1 + a_n)^n > \binom{n}{k} a_n^k \quad \text{(ignoring all other terms of the binomial expansion)}$$

$$= \prod_{i=0}^{k-1} \frac{n - i}{1 + i} a_n^k$$

$$> \frac{\left(\frac{n}{2}\right)^k}{k^k} a_n^k$$

and so $a_n < \dfrac{2k}{n^{(k-1)/k}}$.

Thus $a_n^p < (2k)^p / n^{p(k-1)/k}$ and $\sum a_n^p$ converges by comparison with $\sum 1 / n^{p(k-1)/k}$ which is convergent because $p(k - 1)/k > 1$.

Keep up the fine editorial work!

Yours sincerely,

NICK LORD

Tonbridge School, Tonbridge TN9 1JP

DEAR EDITOR,

The *magic rectangles* discussed in a recent Note [1] by Marián Trenkler have a longer history than indicated there. Harmuth, in 1881, published two papers [2, 3], establishing necessary and sufficient conditions for the existence of magic rectangles in just this sense, that is, an arrangement of the integers 1, 2, … mn into an m by n rectangle where columns have the same sum, as do rows (the natural generalisation of magic squares).

Magic rectangles also have a more current interest than might be gathered from [1]. For example, as with magic squares, they have found some favour in statistics; see [4] for a digest of the statistical uses of magic squares, and [5] for some statistical work involving magic rectangles. Indeed, magic rectangles appeared in this *Gazette* in [6], in 1968, with an application of this sort in mind. The construction of magic rectangles continues to attract attention in research journals, as [7, 8, 9] attest.

Yours sincerely,

D. G. ROGERS

Halewood Cottage, The Green, Croxley Green WD3 3HT

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Notices

On pp. 123-124 of this issue, you will see an obituary to Wilfred H. Cockcroft, a notable mathematician and figure in the mathematical community. Sadly, we have recently received notice a number of other deaths that we feel it appropriate to record.

The Association has lost three of its past Presidents in the recent past. Sir William McCrea (President from 1973–74), Bertha Jeffreys (President from 1969-70) and, on January 31st 2000, Mary Bradburn (President from 1994-95). Each of these contributed to the centenary issue of the *Gazette* (March 1996) and readers will find brief biographical notes in that issue. There will be obituaries published in the *Gazette* in due course.

In addition, the *Gazette* itself has lost three overseas contributors. Folke Eriksson of Chalmers and Gotheburg University, Sweden, who wrote and refereed articles over several years, died in August 1999. Andrejs Dunkels of Luleå University of Technology, Sweden, who is the author of Note 84.06 in this issue, died in December 1998. Finally, we have lost an extremely regular and long-serving contributor with the passing in February 2000 of Dr. S. Parameswaran. His first *Gazette* article appeared in May 1946 and he has recently provoked considerable interest in S·P numbers.

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