81.49 defines the Steiner-Lehmus Theorem, which is not the case. And the generalisation proposed in the second paragraph bears no relation to the proposition in the first sentence of Note 81.49.

Yours sincerely,
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DEAR EDITOR,

The dark green cover of my copy of [1] shows up traces of desert dust deposited during nine years in the Sultanate of Oman, when I came closest to experiencing the 'desert island' of [2]. My having been in Oman at the time (1991) provides the only excuse for my ignorance, belatedly rectified by [3], of the death of Theodor Estermann.

During the year 1957-58 Dr. T. Estermann had two students on his undergraduate course in functions of a complex variable. I had little idea at that time of the significance of being one of those two. When, nearly a decade later, I bought Estermann's book [1], it was mainly for nostalgia's sake since I had given up hope of becoming a mathematician. His matter-of-fact Gemanic accent spoke to me again from every sentence in the book.

It must be difficult for readers who have never met Estermann to appreciate the author's personality. For example, one reads on page 61 of [1], 'Jordan's own supposed proof (of the Jordan curve theorem) is ... very inadequate and marred by serious misconception.' Such language might remind one of a certain type of political polemicist, but when uttered by Estermann it sounded more like an apology, addressed to us students by a mathematician, for the shortcomings of his co-workers. I feel that having been a less than adequate student I at least owe Estermann this 'very inadequate' tribute.

References
1. T. Estermann, *Complex numbers and functions*, The Athlone Press (1962), (1965 reprint).
2. Tony Crilly and Colin Fletcher, Desert Island Theorems, *Math. Gaz.* **82** (March 1998) pp. 2-7.
3. Man-Keung Siu, Estermann and Pythagoras, *Math. Gaz.* **82** (March 1998) pp. 92-93.

Yours sincerely,
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DEAR EDITOR,

Even if a gifted schoolboy submits an article, surely the editor's first responsibility is to the *Gazette* readers. The author of Note 81.39, 'The singularity of Fibonacci matrices', should have been congratulated on his clear writing and his mastery of expansion of determinants by minors. Then

he should have been told that expansion by minors is usually the worst possible way to evaluate determinants, and he should have been urged to continue his studies at least to be able to understand the following:

For $a = 3$, let $c_1, c_2, \ldots, c_n$ be the columns of the matrix F_n. Then $c_i + c_{i+1} = c_{i+2}$ for $i = 1, \ldots, n - 2$. Any one of these $n - 2$ linear dependence relations between the columns of F_n implies its singularity. What is more, by an easy induction, these relations imply that each of $c_3, \ldots, c_n$ is a linear combination of c_1 and c_2. Hence rank(F_n) = 2. Which initial conditions with the Fibonacci difference equation imply rank = 2 is a little exercise.

Yours sincerely,

HARLEY FLANDERS

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Editor's note:

I include articles in the *Gazette* if I think that they will surprise or, occasionally, provoke a proportion of readers. With such a variety of readers, it can be difficult to pitch an article at the right level. When I accepted Graham Fisher's article, it was because I felt it would surprise and interest some readers, especially in schools. I did not want to rewrite Graham's article to the extent that nothing of his approach remained, so I merely shortened it a little by cutting out several lines of intermediate working.

I am always pleased to receive articles from non-professional mathematicians such as students and schoolteachers. This is because I want to encourage the skills of reading and writing mathematics to develop in schools and universities.

DEAR EDITOR,

I share David Singmaster's concern about the 'decimalisation of time' – page 422 *et seq*. Astronomers use an unambiguous notation eg 9d 5h 23m 19s and there is no obvious reason why this should not be adopted in mathematics. It has the advantage that by no stretch of the imagination can it be confused with decimal notation.

Alternatively, when only hours or less are concerned why not use David's colon to separate off the hours and then use the standard angular notation of ' for minutes and " for seconds? After all, times and angles are not all that dissimilar.

Yours sincerely,

ALAN D. COX

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