

Re: derivatives and determinant

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- *From:* quasi <quasi@xxxxxxxx>
 - *Date:* Mon, 13 Mar 2006 03:28:29 -0500
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On Mon, 13 Mar 2006 02:40:55 EST, eugene <jane1806@xxxxxxxx> wrote:

Let $f(x)=(x-x_1)(x-x_2)\dots(x-x_n)$ where the numbers x_1, x_2, \dots, x_n pairwise distinct and $a_{ii}=f'(x_i)$, $a_{ij}=(f(x_i)-f(x_j))/(x_i-x_j)$.

What information we can say about such a matrix Can we say that $\det A=0$?

No.

For example, try it with $n=2$ and any choice of distinct numbers x_1, x_2 .

Did you even try an example?

Also, can you see that, in all cases, the matrix A must be a diagonal matrix?

quasi

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