

Re: David Ullrich and World Wide Wade

Source: <http://sci.tech-archive.net/Archive/sci.math/2004-10/5853.html>

From: David C. Ullrich (ullrich_at_math.okstate.edu)

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On Wed, 20 Oct 2004 08:19:36 -0500, David C. Ullrich
<ullrich@math.okstate.edu> wrote:

Two PS's:

>[...]
>
>*The hint was mis-stated, by the way... With the correct
>version of the hint one can give a proof of the
>next inequality that's a little simpler than in the
>pdf (it's the direct proof I mentioned to Wade):
>At points where $u < 0$, $2A - u > -u = |u|$. On the
>other hand, at points where $u \geq 0$ we have $u \leq A$,
>so $2A - u \geq 2A - A = A \geq u = |u|$.
>
>So in any case $2A - u \geq |u|$, so that
>
> $|2A - F| = \sqrt{(2A - u)^2 + v^2} \geq \sqrt{u^2 + v^2}$.
>
>_If_ we define $g = F/(2A - F)$ then this shows that $|g| \leq 1$
>as required.*

Note that otoh if $g = F/(2A + F)$ then it's not just
that there's problems with the proof of the main
inequality, in fact simple examples show that $|g|$
is simply *_not_* ≤ 1 . (Didn't mention this until
you showed us the proof because I didn't know
that the proof in the pdf used the "fact" that $|g| \leq 1$...)

Also: when you mention this to the guy make certain
to give proper credit to Wade and me...

>>*Thanks for the previous help,*
>>*Isaac*
>>
>
>
>*****

sci.math: Re: David Ullrich and World Wide Wade

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>*David C. Ullrich*

David C. Ullrich