

Re: Finite extension of a finite field

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- *From:* sanchopancho80@xxxxxx
 - *Date:* Fri, 15 Aug 2008 08:57:48 -0700 (PDT)
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On 15 Aug., 17:49, Angus Rodgers <twir...@xxxxxxxxxxxx> wrote:

On Fri, 15 Aug 2008 08:44:00 -0700 (PDT), sanchopancho80@xxxxxx wrote:

I've seen somebody writing $F_p[a^{(1/p)}]$ with a in the finite field F_p . What does this mean? More precisely: What does $a^{(1/p)}$ mean?

Just guessing: it means $F_p[b]$, where b is a root of $x^p - a$ in an extension field.

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Angus Rodgers
(twirlip@ eats spam; reply to angusrod@)
Contains mild peril

I have thought that too at first, but why are the results isomorphic for different roots? The polynomial $x^p - a$ doesn't have to be irreducible.

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