Re: cube root of a given number

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On 16 Jul, 06:13, Gottfried Helms <he...@xxxxxxxxxxxxx> wrote:

> Am 15.07.2007 05:30 schrieb arithmeticae:
>
>> If you really like to analyze the most simple high−order root−solving algorithms then you should take a look at:
>>
>> http://mipagina.cantv.net/arithmetic/rmdef.htm
>>
>> It is striking to realize that these new extremely simple artihmetical algorithms do not appear in any text on numbers since Babylonian times up to now.
>
> Yes, I'd second that. It surprises me, that this method is not more widely discussed. It is −at least− an amazing approach in his simpliness and in its line of proceeding, even if it should not be efficient.
>
> Hope, it will make its way into some books, at least as an annotation, or in journals/books which are dedicated to recreational and surprising mathematics.

I don't think the claim that these methods are in any way
new stands up to scrutiny.
The idea of Farey dissections is clearly not new.
It is mentioned in Hardy and Wright for example.
Hurwitz wrote a paper "Ueber die Irrationalzahlen"
in the 1890s which describes a "mediant" method based on Farey
fractions that produces best rational approximations.
Monkmeyer and Mahler have examined generalizations
of Farey fractions, essentially a higher order
"mediant" method, intended to produce best rational

simultaneous approximations to a set of irrationals.
Can Morin find best rational approximations
to cubrt(2), cubrt(4) with his methods ?
He has not been able to do so in the past.

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