

Re: A question about constructible roots

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On 17 Sep., 02:14, Kent Holing <K...@xxxxxxxxxxxxxx> wrote:

Can something similar be said about the irreducible quintic, sextic, etc.?
Kent Holing

My proof relied on 2-transitivity of the Galois group, while in general you have only simple transitivity. I got 2-transitivity from the fact that most subgroups of S_4 could be neglected because they had a tower of subgroups of index 2 in each step. This is not possible for bigger n . Also, it was easy to show that no two sums x_i+x_j could be equal, simply because there are so few summands in $-a = x_1+x_2+x_3+x_4$; this will at least become more difficult for higher degrees.

hagman

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