

Review Form 1.7

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_102498
Title of the Manuscript:	Simple criteria for $\sqrt[n]{x}$ ($n \in \mathbb{N}$, $n \geq 2$, $x \in \mathbb{R}$) being a rational or an irrational number
Type of the Article	Short Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljamcs.com/index.php/JAMCS/editorial-policy>)

PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>1. Interest in this article is difficult to describe. For here one very particular problem is being solved. A more general result is the number (set) of rational solutions of an integer polynomial. Or, an even more general problem, --- the number of rational points on an algebraic curve. This problem has now been successfully solved. By the way, the proof of Fermat's Last Theorem automatically follows from it. On the other hand, the question of whether some real number is rational is interesting in itself. This is also a particular problem about the algebraicity of a real number. some questions of this kind are currently unanswered. Therefore, the article under review deserves attention. 2.3. The title and annotation adequately correspond to the content of the article. 4. There are some doubts about the structure of the work. It would be easier to reduce the problem to the question of whether a certain number is an exact power of a rational number. For an irrational number, the negative answer is obvious, but for a positive rational number, the solution practically lies on the surface and is obtained by factoring (canonical factorization) of the numerator and denominator. The case of a negative number is reduced to a positive one. In principle, this is what was done in the article, but, in the opinion of the reviewer, it would be better to have less "side" information. And it should immediately be clarified that we are talking about the so-called "arithmetic" root of a number, that is, the number y, of the same sign as x, the nth power of which is equal to x. 5. All results of the article have a proof. 6. As for the references and their completeness, it does not seem to matter.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>I think that the reviewed work deserves attention, despite the fact that the result itself is quite simple.</p>	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

[Review Form 1.7](#)

Reviewer Details:

Name:	Yuri Nikitich Lovyagin
Department, University & Country	Saint Peterburg University, Russia