## Review Form 1.7

| | |
|---|---|
| Journal Name: | **Journal of Advances in Mathematics and Computer Science** |
| Manuscript Number: | **Ms_JAMCS_97374** |
| Title of the Manuscript: | **ROTATION WITHOUT IMAGINARY NUMBERS, TRANSCENDENTAL FUNCTIONS, OR INFINITE SUMS** |
| Type of the Article | **Original 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 )

## Review Form 1.7

**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)* |
|---|---|---|
| **Compulsory** REVISION comments<br><br>**1. Is the manuscript important for scientific community?**<br>(Please write few sentences on this manuscript)<br><br>2. **Is the title of the article suitable?**<br>(If not please suggest an alternative title)<br><br>**3. Is the abstract of the article comprehensive?**<br><br>4. **Are subsections and structure of the manuscript appropriate?**<br><br>5. **Do you think the manuscript is scientifically correct?**<br><br>6. **Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.**<br><br>**(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)** | **1. Due to the doubts that cause the provisions of the reviewed work, it is not possible to assess its importance for science as a whole. The work is written very briefly and it is difficult to understand the goal that the author sets himself. Firstly, the very idea of doing without complex numbers in the description of transformations of the plane (and indeed of any multidimensional space) is not new. Initially, in general, all transformations of the plane are described as "matrix", that is, linear. If the transformation is non-linear, then its description is extremely difficult. Therefore, it makes sense to describe only linear transformations in general.**<br>**2.**The title of the article raises some doubts. The fact is that, as follows from the work, there is an attempt not only to replace (or return to linear transformations) complex numbers with linear transformations in the description of rotations, but also to "rationalize" transcendental functions. The possibility of the latter is generally questionable. For transcendence is a property which is in some sense the opposite of rationality. Rather, the name of the article could be, for example: "Description of rotations (of a plane)".<br>3. According to the abstract, it is generally difficult to tell about the goals of the peer-reviewed work. the summary, rather, raises more questions than understanding the problem at hand.<br>4. The division into sections more or less corresponds to the structure and style of presentation.<br>5. The scientific correctness of the peer-reviewed work is questionable. Since from the very beginning in paragraphs 2.1 - 2.3 it is not clear how and why distances are calculated. The above formula is correct if these statements are considered true, but where the formula for finding the value of the angle (formula (1)) is obtained is not clear. In the integral considered earlier, the integrand is not clearly indicated (there are no brackets), but it is not clear what is calculated by this integral. As for formula (2), in the considered situation r=1 and it is trivial if formula (1) is true. The validity of formula (1) is doubtful, because there is a feeling that the author is trying to replace a sharg (a circle on a plane in the Euclidean metric) with a square with vertices at points <1.0>, <0.1>, <-1.0>, <0,-1>, which is a ball on the plane in the first norm --- the sum of the modules of the coordinates. This does not take into account the recalculation of the points of intersection of the line passing through the origin at a given angle with the corresponding ball. In other words, the trigonometric functions of an angle are defined differently in terms of a ball in the first norm.<br>The calculations in point 5 seem to be some kind of game. For the ratio of a number to its modulus is always either 1 or -1, and all transformations give nothing. | |
| **Minor** REVISION comments<br>**1. Is language/English quality of the article suitable for scholarly communications?** | I am not an expert in English. | |
| **Optional/General** comments | Before considering the issue of publishing a work, the task should be clearly formulated. Since transcendence cannot be turned into rationality under any change of norm, one should decide what meaning is put into trigonometric functions: whether they are defined classically in terms of the Euclidean circle, or the circle in the first norm is involved in their definition. Then there must be a transcendental recalculation of coordinates. If this is not done, then the situation presented in the work will most likely give a solution to the squaring of the circle. | |

**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)* |
|---|---|---|
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in details)* | |

## Review Form 1.7

**Reviewer Details:**

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