

Review on
«On Graphs From Algebraic Structures Using Arithmetic Functions»

The text is devoted to the study of graphs that are built by groups. The authors introduce their new concepts, then study their properties. There are three main complaints about the text.

1. The text contains many spelling errors, this immediately spoils the overall impression of the text, since the reviewer and the editors should not be engaged in proofreading a manuscript that is sent for publication to a journal. Here is a list of some errors: "its shown that" (page 2), "there exist a non-negative integer" (pages 4,5), "there exist a unique Arithmetic" (page 4), "the space have 9 elements" (page 7), "This new constructions is" (page 17).

2. In Definition 5, the authors fix an integer for each element of G , that is, they define a function from the group to integers, but in Remark 8, the authors change this function depending on the element of the group. Thus, either the definition or the remark is incorrect. Similarly, in Theorem 20 the function on the group G_2 is not given arbitrarily as in the definition, but the values are given according to the isomorphism with G_1 , after which it is proved that isomorphic objects are obtained. Thus, it is unclear what the authors mean, it seems that they change the definition depending on the situation in a way convenient for themselves.

3. The text contains a large number of statements that are called theorems, but they all have simple proofs and unclear motivation. The stated goal that such structures are useful for algebraic graph theory is not justified.

To sum up, I do not recommend this text for publication.