Erratum

The Mann Test for Divisible Difference Sets

[Graphs and Combinatorics 7, 209–217 (1991)]

K.T. Arasu¹, D. Jungnickel² and A. Pott²

¹ Department of Mathematics and Statistics, Wright State University, Dayton, Ohio, 45435, USA

² Department of Mathematics, University of Augsburg, 8900 Augsburg, Germany

In the paper mentioned above the authors have proved a Mann test for divisible difference sets. The proof is not quite correct but can be fixed partially: We have considered group ring elements in ZH modulo the ideal generated by p , M and H (where M is a subgroup of H). We claimed that an element D in this ideal can be written $D = p^j \cdot A + y \cdot M + z \cdot H$ for some integers y and z . But this is not correct since elements which are constant on cosets of M also belong to the ideal (p^j, M, H) , and we have to replace y in the formula above by $B \in ZH$. With this modification the proof of Theorem 2.1 (a) and (b) can be fixed easily. Equation (11) in the proof of Theorem 2.1 is definitely wrong (there are counterexamples!) and therefore statement (c) seems to be not correct.