

COUNTING FUZZY SUBGROUPS OF SYMMETRIC GROUPS S_2, S_3 AND ALTERNATING GROUP A_4

(Membilang Subkumpulan Kabur bagi Kumpulan Simetrik S_2, S_3
dan Kumpulan Selang Seli A_4)

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ABSTRACT

In this article we compute the number of fuzzy subgroups of symmetric groups S_2, S_3 and alternating group A_4 . First, we define an equivalence relation on the set of all fuzzy subgroups of a group G . We represent all of the subgroups of S_2, S_3 and A_4 . We use their poset diagrams to determine the number of their fuzzy subgroups.

Keywords: equivalence; fuzzy subgroup; permutation group

ABSTRAK

Dalam makalah ini akan dibilang subkumpulan kabur daripada kumpulan-kumpulan simetrik S_2, S_3 dan kumpulan selang seli A_4 . Pertamanya ditakrifkan hubungan kesetaraan pada set semua subkumpulan kabur daripada suatu kumpulan G . Semua subkumpulan daripada S_2, S_3 dan A_4 akan diwakilkan. Gambar rajah poset digunakan untuk menentukan bilangan subkumpulan kaburnya.

Kata kunci: kesetaraan; subkumpulan kabur; kumpulan permutasi

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