

MANDATORY DECOMPOSITION OF COMPLETE GRAPHS INTO $\{C_4, S_5\}$

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Abstract

In this paper, C_4 and S_5 are used to represent star and cycle graphs with four edges respectively. We show that a necessary and sufficient condition for the existence of Mandatory decomposition of complete graphs K_n into $\{C_4, S_5\}$ and a necessary and sufficient condition for the existence of decomposition of complete graphs K_n into $\{C_4, S_5\}$.

Keywords and phrases: complete graphs K_n , complete bipartite graphs $K_{m,n}$, star S_k , cycle C_k .

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