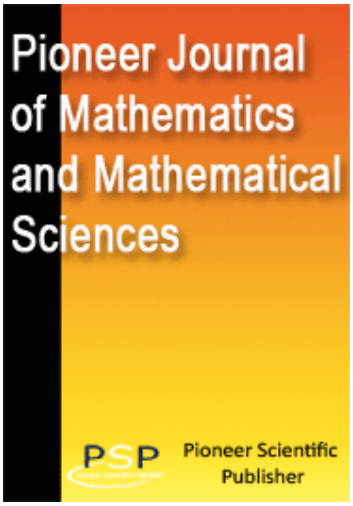
Pioneer Journal of Mathematics and Mathematical Sciences
Volume 37, Issues 1-2, Pages 1-7 (January & March 2023)
ISSN: 2230-9829



LES NOMBRES GRAPHIQUES ET LE PROBLÈME $N = NP$

M. Sghiar

Received March 15, 2018

Abstract

I will prove the existence of a function f_n with values in $\mathbb{N}$ on any Graph $G/\{X_1, ..., X_n\}$ with cardinal n, such that either $f_n(X_1)$ is equal to 0 or it is the sum of all hamiltonian cycles. The number of the operations to be performed to calculate $f_n(X_1)$ is of the order $O(n^3)$ and that it follows that we have $P = NP$.

Keywords and phrases: graph, Hamilton cycles, $P = NP$, the knapsack problem, the travelling salesman problem, *TSP*, *KP*.