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THE TURÁN NUMBER OF THE GRAPH $2P_5$

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Abstract

We give the Turán number $ex(n, 2P_5)$ for all positive integers n, improving one of the results of Bushaw and Kettle [*Turán numbers of multiple paths and equibipartite forests*, Combininatorics, Probability and Computing, 20 (2011) 837–853]. In particular we prove that $ex(n, 2P_5) = 3n-5$ for $n \geq 18$.

Keywords: forest, tree, Turán number.

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