DIMENSION OF A LOBSTER

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k-labelling of a graph is a labelling of vertices of the graph by k-tuples of non-negative integers in such a way that two vertices of G are adjacent if and only if their label k-tuples differ in each coordinate. The dimension of a graph G is the least k such that G has a k-labelling.

The dimension of a path and that of a cycle of length n (for most n) was obtained by Lovász et al, and Katre and Yahyaei obtained results for dimension of a caterpillar. In the present paper we obtain the dimension of a lobster or close bounds for it in various cases.

Keywords: Dimension of a graph, Product dimension, Lobster, Graph labelling, Path, Cycle.