

# Integrity of grids

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The integrity of a graph  $G = (V, E)$  is defined as the smallest sum  $|S| + m(G - S)$ , where  $S$  is a subset of the set  $V$ , and  $m(H)$  denotes the order of the largest component of the graph  $H$ .

Benko, Ernst, and Lanphier provided and proved an asymptotic bounds for planar graphs in terms of the order of the graph. We prove asymptotic results concerning two-dimensional grid-graphs.

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