



On longest cut-through paths in plane graphs

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Abstract. A path P in a 4-regular plane graph G is called a cut-through path if no two consecutive edges of P are consecutive in the local rotation of edges around the common vertex. We investigate longest cut-through paths in 4-regular plane graphs of several families, providing the lower and the upper bounds on their lengths, as well as discussing the extension of the cut-through property for nonregular graphs.

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