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On the Vertex In-Degrees of Certain Jaco-Type Graphs

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Abstract. The concepts of linear Jaco graphs and Jaco-type graphs have been introduced as certain types of directed graphs with specifically defined adjacency conditions. The distinct difference between a pure Jaco graph and a Jaco-type graph is that for a pure Jaco graph, the total vertex degree $d(v)$ is well-defined, while for a Jaco-type graph the vertex out-degree $d^+(v)$ is well-defined. Hence, in the case of pure Jaco graphs a challenge is to determine $d^-(v)$ and $d^+(v)$ respectively and for Jaco-type graphs a challenge is to determine $d^-(v)$. In this paper, the vertex in-degrees for Fibonaccian and modular Jaco-type graphs are determined.