

Internally 4-connected $\{cube, V_8\}$ -free graphs

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Abstract

A graph H is a minor of a graph G if H is obtained from G by a (possibly empty) sequence of vertex deletions, edge deletions, and edge contractions (where the order of the graph operations is irrelevant). Then G is called H -free if H is not a minor of G . A *cube* is an internally 4-connected planar graph with eight vertices and twelve edges corresponding to the skeleton of the cube in the platonic solid, and the Wagner graph V_8 is an internally 4-connected nonplanar graph obtained from a cube by introducing a twist. We discuss all internally 4-connected $\{cube, V_8\}$ -free graphs.