

Zbl 209.28001

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Some extremal problems in graph theory (In English)

Combinat. Theory Appl., Colloquia Math. Soc. Janos Bolyai 4, 377-390 (1970).

[For the entire collection see Zbl 205.00201.]

The authors prove several results on extremal graphs and state several unsolved problems. Here we only state one theorem. Let C be the graph of 8 vertices and 12 edges determined by the vertices and edges of a cube. The authors prove that every graph of n vertices and $c_1 n^{8/5}$ edges contains C as a subgraph. It is an unsolved problem if this theorem is best possible. In other words we do not know if there is a graph of n vertices and $c_2 n^{8/5}$ edges which does not contain C as a subgraph.

Classification:

05C35 Extremal problems (graph theory)