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*Clique numbers of graphs.* (In English)

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Author's abstract: "For each natural number  $n$ , let  $G(n)$  be the set of all numbers  $c$  such that there exists a graph of order  $n$  and with exactly  $c$  cliques, where the empty set is also considered to be a clique. The authors verify the asymptotic approximation  $|G(n)| = o(2^n \cdot n^{-2/5})$  and show that every integer between  $n + 1$  and  $2^{n-6n^{5/6}}$  belongs to  $G(n)$ . They then conclude that  $\lim_{n \rightarrow \infty} \frac{|G(n)|}{2^n} = 0$ , while  $\lim_{n \rightarrow \infty} \frac{|G(n)|}{a^n} = \infty$  for all  $a$  with  $0 < a < 2$ ."

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Classification:

05C35 Extremal problems (graph theory)

05C99 Graph theory

Keywords:

cliques; asymptotic approximation