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Residually-complete graphs. (In English)

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If G is a graph such that the deletion from G of the points in saech closed neighborhood results in the complete graph K_n, then we say that G is K_n-residual. Simularly, if the removal of m consecutive closed neighborhoods yields K_n, then G is called m-K_n-residual. We determine the minimum order of the m-K_n-residual graphs for all m and n. It is further shown that for $n \geq 2$, $K_{n+1} \times K_2$ is a connection K_2- residual graph of minimum order and that, for $n \geq 5$, it is the only such graph. For $n = 3$ and $n = 4$ there i one other such graph and for $n = 2$, C_5 is the only such graph.

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05C99 Graph theory
05C35 Extremal problems (graph theory)

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