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*Cliques in random graphs.* (In English)

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The paper concerns random graphs. A random graph is defined here as a graph whose vertex set is the set of all positive integers and in which each edge occurs with the probability  $p$  (this probability is the same for all pairs of vertices). A random variable  $X_n$  is defined as the maximal size of a clique in such a random graph; various results concerning  $X_n$  are proved. Further the existence of infinite cliques in a random graph and the number of colours necessary for colouring a random graph by means of the so-called greedy algorithm are investigated. A remark on hypergraphs is added.

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Classification:

05C99 Graph theory

60C05 Combinatorial probability

05C35 Extremal problems (graph theory)