Answer on Question #42642 – Math - Other

What is Ramsey number?

Answer:

Definition. A complete graph G is a graph in which each pair of vertices is connected by one edge (no loops). The complete graph with n vertices is denoted as K_n.

The **Ramsey Number** $R(m, l)$ is defined as the minimum number n such that for any coloring in two colors (red and blue) the set of edges of K_n, K_n contains a red K_m or a blue K_l as a subgraph.

For example, $R(1, 1) = 1, R(2, 3) = 3, R(3, 3) = 6, R(2, 5) = 5$.