Size in Independence Number 2 Graphs

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Mantel's famous theorem is often regarded as the first theorem in extremal combinatorics: the size of a triangle-free graph with n vertices is at most $\lfloor \frac{n^2}{4} \rfloor$ Can it be improved? Here we consider the complementary problem: What is the largest size of a graph with independence number 2? We prove bounds that are improvements (for some graphs) on the complementary Mantel bound.