The Ramsey number for a quadrilateral vs. a complete graph on six vertices.

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Let $r(C_4, K_n)$ be the smallest integer N such that if a graph on N vertices contains no C_4, then its independence number is at least n. It has been shown by G. Exoo using computer techniques that $r(C_4, K_6) \geq 18$ (Congressus Numerantium, 59 (1987) 31-36). First we will show that that there exists exactly one graph on 13 vertices containing no C_4 and having independence number 5. Next using this result it will be shown that $r(C_4, K_6) \leq 18$. Finally we will give six graphs of order 17 containing no C_4 and having independence number 5, all of which would give the same lower bound obtained by Exoo.