The Ramsey Number for a Cycle of Length Five vs. a Complete Graph of Order Six

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Received 18 January 1998

Abstract: It has been conjectured that $r(C_m, K_n) = (m-1)(n-1) + 1$ for all $m \ge n \ge 4$. This has been proved recently for n = 4 and n = 5. In this paper, we prove that $r(C_5, K_6) = 21$. This raises the possibility that $r(C_m, K_6) = 5m - 4$ for all $m \ge 5$. © 2000 John Wiley & Sons, Inc. J Graph Theory 35: 99–108, 2000

Keywords: Ramsey numbers; cycles

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