96e:05114 05C55

McKay, Brendan D. (5-ANU-CS);
Radziszowski, Stanisław P. (1-RIT-CS)

$R(4,5)=25$. **(English. English summary)**

J. Graph Theory **19** (1995), *no.* 3, 309–322.

The Ramsey number $R(k,l)$ is defined to be the least positive integer n such that every graph of order n contains either a clique of order k or an independent set of order l. To find a nontrivial Ramsey number is a very hard problem. In this paper, with the help of a long computation by computer, the authors prove that $R(4,5)=25$. So it is an important result.

Up to date, 9 nontrivial Ramsey numbers $R(k,l)$ have been obtained as follows:

$l \backslash k$	3	4	5	6	7	8	9
3	6	9	14	18	23	28	36
4		18	25				

Ke Min Zhang (PRC-NAN)