A note on Ramsey numbers for fans.

Summary: For two given graphs $G_1$ and $G_2$, the Ramsey number $R(G_1, G_2)$ is the smallest integer $N$ such that, for any graph $G$ of order $N$, either $G$ contains $G_1$ as a subgraph or the complement of $G$ contains $G_2$ as a subgraph. A fan $F_l$ is $l$ triangles sharing exactly one vertex. In this note, it is shown that $R(F_n, F_m) = 4n + 1$ for $n \geq \max\{m^2 - m/2, 11m/2 - 4\}$.

Keywords: Ramsey number; fan; goodness

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