Zbl 822.05036
Erdős, Paul; Füredi, Z.; Gould, R.J.; Gunderson, D.S.
Extremal graphs for intersecting triangles. (In English)
J. Comb. Theory, Ser. B 64, No.1, 89-100 (1995). [0095-8956]

A k-fan is a graph with $2k + 1$ vertices consisting of k 3-cycles having one vertex in common. The authors show that if $n \geq 50k^2$ and the graph G_n has more than $[n^2/4] + k^2 - ck$ edges, where c equals 1 or 3/2 according as k is odd or even, then G_n contains a k-fan; furthermore, the bound for the number of edges is best possible.

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Classification:
05C35 Extremal problems (graph theory)
05C38 Paths and cycles

Keywords:
intersecting triangles; extremal graphs; fan; 3-cycles