

**FINITE GROUPS WHOSE PRIME GRAPHS DO NOT
CONTAIN TRIANGLES. II**

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The study of finite groups whose prime graphs do not contain triangles is continued. The main result of the given part of the work is the following theorem: if G is a finite non-solvable group whose prime graph does not contain triangles and $S(G)$ is the greatest solvable normal subgroup in G then $|\pi(G)| \leq 8$ and $|\pi(S(G))| \leq 3$. Furthermore, a detailed description of the structure of a group G satisfying the conditions of the theorem in the case when $\pi(S(G))$ contains a number which does not divide the order of the group $G/S(G)$. It is also constructed an example of a finite solvable group with the Fitting length 5 whose prime graph is 4-cycle. This completes the determination of exact bound for the Fitting length of finite solvable groups whose prime graphs do not contain triangles.

Keywords: finite group, non-solvable group, solvable group, Fitting length, prime graph.

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