

## ON THE UNRECOGNIZABILITY BY PRIME GRAPH FOR THE ALMOST SIMPLE GROUP $\text{PGL}(2, 9)$

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### Abstract

The prime graph of a finite group  $G$  is denoted by  $\Gamma(G)$ . Also  $G$  is called recognizable by prime graph if and only if each finite group  $H$  with  $\Gamma(H) = \Gamma(G)$ , is isomorphic to  $G$ . In this paper, we classify all finite groups with the same prime graph as  $\text{PGL}(2, 9)$ . In particular, we present some solvable groups with the same prime graph as  $\text{PGL}(2, 9)$ .

**Keywords:** projective general linear group, prime graph, recognition.

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