

Maltsev Conditions

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Let Σ be a set of equations and P a property that a variety might have such as congruence semidistributivity. When is it the case that, if a variety \mathcal{V} satisfies the Maltsev condition associated with Σ , then \mathcal{V} satisfies P ? This problem was investigated for congruence modularity and for having a nontrivial congruence identity by T. Dent, K. Kearnes and Á. Szendrei. We investigate this for other properties such as n -permutability and congruence semidistributivity. When Σ is idempotent and linear (no nested compositions), the problem can be shown to be decidable in several cases.

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