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Esenin-Vol'pin, A. S.

On Hilbert's second problem. (Russian) 1969

Hilbert's Problems (Russian) pp. 83–91 Izdat. “Nauka”, Moscow

This is the second article in the book which describes the status of Hilbert's 23 famous problems.

The second problem is: Interdependence and consistency of Peano axioms for arithmetics. The paper is in fact divided into two parts.

The first part contains a very short description of how Hilbert's second problem was solved with particular attention to Soviet authors. One should note that the author considers only the second half of Hilbert's problem (i.e., consistency of arithmetics) and he restricts himself to facts proved before 1941.

The second part contains a description of an ultraintuitionistic system of foundations of arithmetics of the author [cf. *Infinitistic methods* (Proc. Sympos. Foundations of Math., Warsaw, 1959), pp. 201–223, Pergamon, Oxford, 1961; [MR0147389 \(26 #4905\)](#)].

Reviewed by *W. Marek*

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