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The size function h^0 for quadratic number fields. (English) Zbl 1060.11076
J. Théor. Nombres Bordx. 13, No. 1, 125-135 (2001).

Summary: We study the quadratic case of a conjecture made by *G. van der Geer* and *R. Schoof* [Sel. Math., New Ser. 6, No. 4, 377–398 (2000; [Zbl 1030.11063](#))] about the behaviour of certain functions which are defined over the group of Arakelov divisors of a number field. These functions correspond to the standard function h^0 for divisors of algebraic curves and we prove that they reach their maximum value for principal Arakelov divisors and nowhere else. Moreover, we consider a function \widetilde{k}^0 , which is an analogue of $\exp h^0$ defined on the class group, and we show it also assumes its maximum at the trivial class.

MSC:

[11R47](#) Other analytic theory

[11R04](#) Algebraic numbers; rings of algebraic integers

Cited in **2** Reviews
Cited in **4** Documents

Full Text: [DOI](#) [Numdam](#) [EuDML](#) [EMIS](#)

References:

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