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MATHEMATICAL ASSOCIATION OF AMERICA, INC.
ABSTRACT OF PAPER

Title of Paper: Number Theoretic Densities for the Gaussian Integers

Time_____minutes.

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ABSTRACT

The abstract should be in the form of a brief and concise statement of the main results or points of view of the paper, without demonstrations and with a minimum of formulae. It should not exceed 100 words and should be compressed if possible into a single paragraph. It should be written in the third person. The abstract should be typewritten and in a form suitable for immediate publication in the MONTHLY.

Some of the standard number theoretic densities are defined for the Gaussian integers; and for these are established results analagous to corresponding cases for the rational integers. For example, one possible asymptotic density is given by $\lim \inf A(n)/N(n)$, where $A(n)$ is the number of elements of A' in the half-open square determined by o, n, and ni, and $N(n)$ is the norm of the Gaussian integer n.