Tibor Šalát; Štefan Znám Correction to our paper 'On the average order of an arithmetical function'

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ideals belonging to J. The proof will be completed by showing that if a is an element of S not in N(J), then there is a minimal completely prime ideal belonging to J which does not contain a. If a is such an element, then consider the set M of all elements of the form a^i , $i = 1, 2, \ldots, M$ is a subsemigroup which does not meet J and, by a standard application of Zorn's Lemma, is contained in a maximal subsemigroup M' which does not meet J. Since $a \in M'$, $a \notin S - M'$ which, by (5), is a minimal completely prime ideal which belongs to J. Hence, a is not in the intersection of all the minimal completely prime ideals belonging to J, and this concludes the proof.

The main result follows as a consequence of parts (3) and (6).

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ERRATA

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The correct formulation of the Theorem (p. 233) is as follows: Thcorem.

$$\lim_{N \to \infty} \frac{1}{N} [f(1) + f(2) + \ldots + f(N)] \frac{\log N}{N} = \frac{\pi^2}{12}$$