The cardinality of $n^2 + 1$. (English summary)


11A41

The author of this note attempts to apply the Dirichlet theorem and the Schröder-Bernstein theorem in order to give a proof of the famous conjecture asserting the existence of infinitely many primes of the form $x^2 + 1$, where $x \in \mathbb{N}$. The argument he presents is elementary, but defective in several places. Proposition 2.2 and the comments preceding it are false.

The best up-to-date result concerning this difficult problem remains the well-known theorem of Iwaniec: $x^2 + 1$ is a product of at most two primes infinitely often.

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