CORRECTION TO MY PAPER "CHARACTERIZATION OF THE IDENTITY FUNCTION WITH AN EQUATION FUNCTION"

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The above mentioned paper was published in the same journal **52** (2021) 195–216. The Conjecture 1 on page 196 is not correct. We would like to correct this as follows:

Conjecture 1. Assume that an arithmetical function $f : \mathbb{N} \to \mathbb{C}$ and $D \in \mathbb{N}$ satisfy the following equation

$$f(n^2 + Dnm + m^2) = f^2(n) + Df(n)f(m) + f^2(m)$$
 for every $n, m \in \mathbb{N}$.

Then one of the following assertions holds:

$$\circ \quad f(n) = 0 \quad for \ every \quad n \in \mathbb{N},$$

$$\circ f(n) = \frac{1}{D+2} \quad \text{for every} \quad n \in \mathbb{N},$$

$$\circ$$
 $f(n) = n$ for every $n \in \mathbb{N}$.

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