

Year: 2009

Vol.: 75

Fasc.: 1-2

Title: On continuous solutions of a class of conditional equations

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Let X be a real linear topological space and $M : \mathbb{R} \rightarrow \mathbb{R}$ be continuous and multiplicative. We determine the continuous solutions $f : X \rightarrow \mathbb{R}$ of the functional equation

$$f(x + M(f(x))y)f(x)f(y)[f(x + M(f(x))y) - f(x)f(y)] = 0.$$

In this way we generalize in particular a result of Z. DARÓCZY published in 1966, concerning the continuous solutions of the Gołąb–Schinzel functional equation.

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