

عنوان مقاله:

On Palais method in b-metric like spaces

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خلاصه مقاله:

This paper aims to prove that the Lipschitz constant in the Banach contraction principle belongs to the whole interval $[0, 1)$ for all the six classes of spaces viz. metric spaces, b-metric spaces, partial metric spaces, partial b-metric spaces, metric like space, and finally for more general spaces called b-metric like spaces. For the proof, the idea of Palais is used and applied in a more general setting. However, the current approach is a bit more general, because the present result is applied to spaces, where the condition $d(x, y) = 0$ yields $x = y$ but not conversely. Accordingly, the outcome of the paper sums up, complements and binds together known results available in the current research literature.

کلمات کلیدی:

Palais method, Banach contraction principle, fixed point

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