

عنوان مقاله:

A note on derivations in rings and Banach algebras

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خلاصه مقاله:

Let R be a prime ring with U the Utumi quotient ring and Q be the Martindale quotient ring of R , respectively. Let d be a derivation of R and m, n be fixed positive integers. In this paper, we study the case when one of the following holds: (i) $d(x)^{\circ n} d(y) = x^{\circ m} y$ (ii) $d(x)^{\circ m} d(y) = (d(x)^{\circ} y)^n$ for all x, y in some appropriate subset of R . We also examine the case where R is a semiprime ring. Finally, as an application we apply our result to the continuous derivations on Banach algebras.

کلمات کلیدی:

Prime and semiprime rings, Derivations, Martindale ring of quotients, Banach algebras, Radical

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