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On McCoy condition and semicommutative rings

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Abstract: Let R be a ring and σ an endomorphism of R . We give a generalization of McCoy's Theorem [*Annihilators in polynomial rings*, Amer. Math. Monthly **64** (1957), 28–29] to the setting of skew polynomial rings of the form $R[x; \sigma]$. As a consequence, we will show some results on semicommutative and σ -skew McCoy rings. Also, several relations among McCoyness, Nagata extensions and Armendariz rings and modules are studied.

Keywords: Armendariz rings; McCoy rings; Nagata extension; semicommutative rings; σ -skew McCoy

AMS Subject Classification: 16S36, 16U80

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