

Komatsu, Hiroaki

A commutativity theorem for rings. (English) Zbl 0568.16017
Math. J. Okayama Univ. 26, 109-111 (1984).

The aim of this short paper is to prove the following theorem: "Let m, n be fixed non-negative integers. Suppose that R satisfies the polynomial identity: $x^n[x, y] - [x, y^m] = 0$, R being a ring. (i) If R is left s-unital (that is for every $x \in R$, $x \in Rx$), then R is commutative except the case $m = 1$ and $n = 0$. (ii) If R is right s-unital, then R is commutative except the case $m = 1$ and $n = 0$; $m = 0$ and $n > 0$."

Reviewer: [M.Ștefănescu](#)

MSC:

[16U70](#) Center, normalizer (invariant elements) (associative rings and algebras)

Cited in **1** Review
Cited in **4** Documents

Keywords:

polynomial identity; left s-unital