

INTISARI

KEKOMUTATIFAN RING PRIMA TERHADAP *MULTIPLICATIVE* (*GENERALIZED*)-*REVERSE DERIVATION* DAN IDEAL

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Suatu ring R disebut ring komutatif jika ring tersebut bersifat komutatif terhadap operasi perkalian. Selanjutnya, suatu ring R disebut ring prima jika untuk setiap $a, b \in R$ dengan sifat $aRb = \{0\}$ mengakibatkan $a = 0$ atau $b = 0$. Pada suatu ring R , Pemetaan $F : R \rightarrow R$ disebut *multiplicative (generalized)-reverse derivation* yang berasosiasi dengan pemetaan d jika berlaku $F(xy) = F(y)x + yd(x)$ untuk setiap $x, y \in R$. Pada skripsi ini diselidiki kekomutatifan ring prima jika diketahui beberapa kondisi yang melibatkan *multiplicative (generalized)-reverse derivation* dan suatu ideal.

ABSTRACT

COMMUTATIVITY OF PRIME RING RELATIVE TO *MULTIPLICATIVE (GENERALIZED)-REVERSE DERIVATION* AND IDEALS

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A ring R is called commutative ring if the ring is commutative to the multiplication operation. Furthermore, the ring R is called prime ring if for any $a, b \in R$ such that $aRb = \{0\}$ implies $a = 0$ or $b = 0$. In a ring R , the mapping F is said to be a multiplicative (generalized)-reverse derivation associated with a mapping d if $F(xy) = F(y)x + yd(x)$ for all $x, y \in R$. In this undergraduate thesis, commutativity of a prime ring R is investigated if some conditions that involving multiplicative (generalized)-reverse derivation and an ideal are known.