



INTISARI

KEKOMUTATIFAN RING KUOSIEN TERHADAP *SEMIDERIVATION* DAN IDEAL PRIMA

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Suatu ring R disebut ring komutatif jika ring tersebut bersifat komutatif terhadap operasi perkalian. Pada suatu ring R , pemetaan aditif $s : R \rightarrow R$ disebut *semiderivation* yang berasosiasi dengan fungsi $g : R \rightarrow R$ jika berlaku $s(xy) = s(x)g(y) + xs(y) = s(x)y + g(x)s(y)$ dan $s(g(x)) = g(s(x))$ untuk setiap $x, y \in R$. Pada skripsi ini diselidiki kekomutatifan ring kuosien R/P dengan P merupakan ideal prima dari R jika diketahui beberapa kondisi yang melibatkan *semiderivation* dan ideal prima P .



ABSTRACT

COMMUTATIVITY OF QUOTIENT RING RELATIVE TO *SEMIDERIVATION* AND PRIME IDEALS

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A ring R is called commutative ring if the ring is commutative to the multiplication operation. In a ring R , an additive mapping $s : R \rightarrow R$ is called a semiderivation associated with a function $g : R \rightarrow R$ if it satisfies $s(xy) = s(x)g(y) + xs(y) = s(x)y + g(x)s(y)$ and $s(g(x)) = g(s(x))$ for all $x, y \in R$. This undergraduate thesis investigates the commutativity of the quotient ring R/P , where P is a prime ideal of R , under some conditions involving the semiderivation and the prime ideal P .