

INTISARI

INTEGRAL RIEMANN DI RUANG RIESZ

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Dalam skripsi ini, akan dibahas konsep integral Riemann untuk fungsi yang didefinisikan pada suatu interval di suatu ruang Riesz ke ruang Riesz lainnya yang dihubungkan oleh suatu struktur *product*. Kemudian, dibahas sifat-sifat serupa pada kasus di \mathbb{R} seperti linearitas dan kemonotonan. Selanjutnya, didefinisikan kriteria Cauchy integral Riemann di ruang Riesz dan diberikan aplikasinya seperti teorema apit integral Riemann di ruang Riesz. Lebih lanjut, didefinisikan konsep turunan di ruang Riesz dan kaitannya dengan integral Riemann.

ABSTRACT

THE RIEMANN INTEGRAL IN RIESZ SPACES

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In this undergraduate thesis, the concept of the Riemann integral for functions defined on an interval in a Riesz space to another Riesz space and connected by a product structure will be discussed. Afterward, similar properties in the case of \mathbb{R} such as linearity and monotonicity are examined. Subsequently, the Cauchy criterion for the Riemann integral in Riesz spaces is defined, and its applications, such as the squeeze theorem for the Riemann integral in Riesz spaces, are provided. Furthermore, the concept of differentiation in Riesz spaces and its relationship with the Riemann integral is defined.