

ABSOLUTE NORMALIZED NORMS IN \mathbb{R}^2 AND HEINZ MEANS CONSTANT

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ABSTRACT. In this paper, we calculate the precise values of the Heinz means constant under the absolute normalized norms in \mathbb{R}^2 . The conclusions do not only contain some previous results, but also give the exact values of the Heinz means constant for some new concrete Banach spaces.

1. Introduction

Let X be a Banach space with the unit ball B_X and the unit sphere S_X . Some geometric constants for the space X have been investigated, for instance the *Baronti* constant $A_2(X)$ and the *Alonso* constant $T(X)$ etc. (see [1], [3]). The relationship between these constants and the important geometric properties of the Banach space, for example, uniformly non-squareness and normal structure have been extensively studied (see [9], [10], [18]–[20]). Therefore, the calculation of the geometric constants for some concrete spaces is very important in studying geometric properties of Banach spaces. Recently, M. Dinarvand [6] introduced

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