

ON THE DIFFERENCE SET OF A CENTRAL CANTOR SET

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We consider central Cantor sets in $[0, 1]$. Each central Cantor set (denoted by $C(a)$) is uniquely determined by a sequence $a = (a_n)$ belonging to $(0, 1)^{\mathbb{N}}$. We examine the algebraic difference $C(a) - C(a)$ called the difference set of $C(a)$. We give some conditions for a sequence a which imply that the difference set of $C(a)$ is a Cantorval or a Cantor-type set. We also use these conditions in a case of some specific central Cantor sets.

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