
Summary: In this note, we consider the self similarity of a class of generalized Cantor sets

\[ \Gamma_{\beta,D} = \left\{ \sum_{n=1}^{\infty} d_n \beta^n : d_n \in D_n, \ n \geq 1 \right\}, \]

where \(0 < \beta < 1\) and \(D_n, n \geq 1\), are nonempty and finite subsets of \(\mathbb{Z}\). We give a necessary and sufficient condition for \(\Gamma_{\beta,D}\) to be a homogeneously generated self similar set. An application to the self similarity of intersections of generalized Cantor sets is given.

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