Abstract
Cantor came out with the Cantor Ternary Set. In this study another idea has been developed by deleting the middle 713\textsuperscript{th}.

Keywords:
Cantor set, extension, middle 713\textsuperscript{th} set, general formula

1 Introduction
If \( B_0 = [0, 1] \), then the general formula for the middle 713\textsuperscript{th} can be derived as depicted in the section on Main Result which took the signal from the Cantor set which was obtained by deleting the middle third (Obeng-Denteh, Amoako-Yirenyi & Asare, 2016).
2 Main Results

Let $B_0 = [0, 1]$. Then,

For $B_1$,

$$B_1 = \left[ 0, \frac{356}{713} \right] \cup \left[ \frac{357}{713}, 1 \right]$$

For $B_2$,

$$B_2 = \left[ 0, \frac{126736}{508369} \right] \cup \left[ \frac{127092}{508369}, \frac{356}{713} \right] \cup \left[ \frac{357}{713}, \frac{381277}{508369} \right] \cup \left[ \frac{381633}{508369}, 1 \right]$$

For $B_3$,

$$B_3 = \left[ 0, \frac{45118016}{362467097} \right] \cup \left[ \frac{45244752}{362467097}, \frac{126736}{508369} \right] \cup \left[ \frac{127092}{508369}, \frac{135734612}{362467097} \right] \cup \left[ \frac{135861348}{362467097}, \frac{356}{713} \right] \cup \left[ \frac{357}{713}, \frac{226605749}{362467097} \right] \cup \left[ \frac{226732485}{362467097}, \frac{381277}{508369} \right] \cup \left[ \frac{381633}{508369}, \frac{317349081}{362467097} \right] \cup \left[ \frac{317349081}{362467097}, 1 \right]$$

Culminating into

$$B_n = \frac{356}{713} B_{n-1} \cup \left[ \frac{357}{713} + \frac{356}{713} B_{n-1} \right], \ n \in \mathbb{N}$$

3 Concluding Remarks

Thus the formula for the middle $713^{th}$ is given by

$$B_n = \frac{356}{713} B_{n-1} \cup \left[ \frac{357}{713} + \frac{356}{713} B_{n-1} \right], \ n \in \mathbb{N}$$

REFERENCE