

k -Parent Aliquot Numbers: Counting Pre-Images Under the Sum-of-Proper-Divisors Function

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1 Pollack-Pomerance Heuristics: Estimating the Density of Even k -Parent Numbers

Suppos

Conjecture 1.1. Heuristic Model for the Density of Non-Aliquot

$$\Delta = \lim_{y \rightarrow \infty} \frac{1}{\log y} \sum_{\substack{a \leq y \\ 2|a}} \frac{1}{a} e^{-a/s(a)}$$

2 Pomerance-Yang Algorithm: Tabulation of Even k -Parent Numbers

[Pomerance and Yang, 2014]

References

[Pomerance and Yang, 2014] Pomerance, C. and Yang, H.-S. (2014). Variant of a theorem of erdős on the sum-of-proper-divisors function. *Mathematics of Computation*, 83(288):1903–1913.