The Karatsuba's Multiplication Algorithm

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1 Introduction

There are many ways to realize the multiplication between two numbers. Most of us are used to (and probably only to) the algorithm that the third grade teacher taught us. Indeed, that seems to be the easies way, but it's not the most efficient. In this text I aim to present the karatsuba's algorithm for multiplication. The method is actually an optimization to the recursive multiplication algorithm, in terms that the recursive algorithm requires four multiplications, whilst karatsuba's exchange the cost of one multiplication for the burden of a bunch of sums.

2 Methodology

Explain computational methods, algorithms, formulas used.

3 Results

Present results, graphs, tables, etc.

4 Discussion

Interpret results, compare with expected outcomes.

5 Conclusion

Summarize findings, future work, etc.

A Additional Data

Any supplementary material, code snippets, detailed tables.